
UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Form 10-K

For Annual and Transition Reports Pursuant to Section 13 or #15D of the Securities and Exchange Act of 1934

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended March 31, 2003

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934

Commission file number: 0-26824

Tegal Corporation

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation or organization)

68-0370244
(I.R.S. Employer Identification No.)

2201 South McDowell Boulevard
Petaluma, California
(Address of principal executive offices)

94954
(Zip Code)

Registrant's Telephone Number, Including Area Code: (707) 763-5600

Securities Registered Pursuant to Section 12(b) of the Act: None

Securities Registered Pursuant to Section 12(g) of the Act:

Common Stock, \$0.01 Par Value

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file reports) and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark if the registrant is an accelerated filer (as defined in Exchange Act Rule 12b-2) Yes No

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant as of June 10, 2003, based on the closing sale price of the common stock on September 30, 2002 as reported on the Nasdaq National Market, was \$6,275,787. As of June 10, 2003, 16,091,762 shares of the registrant's common stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for registrant's 2003 Annual Meeting of Stockholders to be held August 26, 2003 will be filed with the Commission within 120 days after the close of the registrant's fiscal year and are incorporated by reference in Part III.

TABLE OF CONTENTS

	Page
PART I	
Item 1. Business	3
Item 2. Properties	15
Item 3. Legal Proceedings	16
Item 4. Submission of Matters to a Vote of Security Holders	16
Executive Officers	16
PART II	
Item 5. Market for Registrant's Common Equity and Related Stockholder Matters	17
Item 6. Selected Financial Data	18
Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations	19
Item 7A. Quantitative and Qualitative Disclosure about Market Risks	24
Item 8. Financial Statements and Supplementary Data	25
Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	43
PART III	
Item 10. Directors and Executive Officers of the Registrant	43
Item 11. Executive Compensation	43
Item 12. Security Ownership of Certain Beneficial Owners and Management	43
Item 13. Certain Relationships and Related Transactions	43
Item 14. Controls and Procedures	
PART IV	
Item 16. Exhibits, Financial Statement Schedules and Reports on Form 8-K	44
Signatures	46

PART I

Item 1. Business

Information contained or incorporated by reference herein contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, which can be identified by the use of forward-looking terminology such as “may,” “will,” “expect,” “anticipate,” “estimate” or “continue” or the negative thereof or other variations thereon or comparable terminology or which constitute projected financial information. The following contains cautionary statements identifying important factors with respect to such forward-looking statements, including certain risks and uncertainties, that could cause actual results to differ materially from those in such forward-looking statements. See “Risk Factors.”

The Company

Tegal Corporation, a Delaware corporation (“Tegal”), designs, manufactures, markets and services plasma etch and deposition systems that enable the production of integrated circuits (“ICs”), memory and related microelectronics devices used in personal computers, wireless voice and data telecommunications, contact-less transaction devices, radio frequency identification devices (“RFID’s”), smart cards, data storage and micro-level actuators. Etching and deposition constitute two of the principal IC and related device production process steps and each must be performed numerous times in the production of such devices.

We were formed in December 1989 to acquire the operations of the former Tegal Corporation, a division of Motorola, Inc. (“Motorola”). Our predecessor company was founded in 1972 and acquired by Motorola in 1978. We completed our initial public offering in October 1995.

On August 30, 2002, we acquired all of the outstanding common stock of Sputtered Films, Incorporated (“SFI”), a privately held California corporation pursuant to an Agreement and Plan of Merger dated August 13, 2002. Sputtered Films is a leader in the design, manufacture and service of high performance physical vapor deposition sputtering systems for the semiconductor and semiconductor packaging industry. SFI was founded in 1967 with the development of the S-Gun, core technology of the acquired company.

Semiconductor Industry Background

Growth of Semiconductor and Semiconductor Equipment Industries

The semiconductor industry has experienced significant growth over the last 20 years. This growth has resulted from the increasing demand for ICs from traditional IC markets, such as personal computers, telecommunications, consumer electronics, automotive electronics and office equipment, as well as developing markets, such as wireless communications, multimedia and portable and network computing. As a result of this increased demand, semiconductor device manufacturers have periodically expended significant amounts of capital to build new semiconductor fabrication facilities (“fabs”) and to expand existing fabs. In spite of the continuing growth in demand for semiconductors, the industry periodically experiences cycles of excess supply and excess capacity as additions to capacity are brought online in large increments which exceed the short-term growth in demand for ICs. The industry periodically experiences such fluctuations, and is currently experiencing a significant slowdown in the purchase of equipment for the manufacture of ICs.

Growth in the semiconductor industry has been driven, in large part, by advances in semiconductor performance at a decreasing cost per function. Advanced semiconductor processing technologies increasingly allow semiconductor manufacturers to produce ICs with smaller features, thereby increasing processing speed and expanding device functionality and memory capacity. As ICs have become more complex, however, both the number and price of state of the art process tools required to manufacture ICs have increased significantly. As a result, the cost of semiconductor manufacturing equipment has become an increasingly large part of the total cost of producing advanced ICs. Today, a typical 200 millimeter wafer fab may cost as much as \$1.5 to \$2.0 billion, with semiconductor manufacturing equipment costs representing the majority of total fab costs.

Semiconductor Production Processes

To create an IC, semiconductor wafers are subjected to a large number of complex process steps. The three primary steps in manufacturing ICs are (1) deposition, in which a layer of insulating or conducting material is deposited on the wafer surface, (2) photolithography, in which the circuit pattern is projected onto a light sensitive material (the photoresist), and (3) etch, in which the unmasked parts of the deposited material on the wafer are selectively removed to form the IC circuit pattern.

Each step of the manufacturing process for ICs requires specialized manufacturing equipment. Today, plasma-based systems are used for the great majority of both deposition and etching processes. During physical vapor deposition (also known as “PVD”), the semiconductor wafer is exposed to a plasma environment that forms continuous thin films of electrically insulating or electrically conductive layers on the semiconductor wafer. During a plasma etch process (also known as “dry etch”), a semiconductor wafer is exposed to a plasma composed of a reactive gas, such as chlorine, which etches away selected portions of the layer underlying the patterned photoresist layer.

Segmentation of the Deposition and Etch Markets

The deposition market is generally divided into the following market segments, defined according to the underlying technology used to create the deposited thin film: electrochemical deposition (also known as “electroplating”), chemical vapor deposition (also known as “CVD”, of which plasma-enhanced chemical vapor deposition “PECVD” is a major sub-segment), atomic layer deposition (also known as “ALD”), and physical vapor deposition (also known as “PVD”).

Certain deposition technologies or processes are better suited than others for depositing different types of materials (films). In silicon-based microelectronic fabrication, electrochemical deposition of copper is the essential basis for creating the multi-level metal electrical interconnects found in advanced logic and memory ICs. CVD and PECVD deposition of dielectric materials like silicon dioxide and silicon nitride is used to create layers of electrical insulation between active circuit elements in the integrated circuit. CVD and PECVD are also used for polysilicon and silicide deposition, to create the electrically conductive thin films used in the active circuit elements. ALD is a technique whereby, in a process repeated many times, a monolayer of chemical reactant adsorbed on the IC wafer surface forms a single atomic layer of a dielectric or a metallic film. Physical vapor deposition is used for both metallic thin film deposition and, in reactive PVD processes, for dielectric thin film deposition.

Further segmentation occurs within the PVD market according to specific applications. One important application for PVD is the deposition of thin films where residual film stress must be closely controlled in order to create specific desired electrical results, as in precision thin film resistor fabrication, or to avoid physically deforming the substrate, as in the fabrication of power MOS devices on ultra-thin silicon wafers. The ability to control film stress is also critical for the deposition of multi-layer thin film stacks on photomasks used in advanced microelectronic photolithography applications such as extreme ultraviolet lithography (also known as “EUVL”) for development of 45nm and 32nm fabrication processes. If stress is not low and controlled in this step, the masks can become distorted.

We believe that enabling tight control of stress and other process parameters, along with minimizing overall contamination levels during PVD thin film deposition processes, will be increasingly recognized by IC makers as key features that differentiate PVD tool products and PVD tool makers. We also believe these capabilities will be important to device makers in the related industries of compound semiconductor device fabrication, LED fabrication, optical communication device manufacturing, in micro electromechanical systems (also known as “MEMS”) fabrication, and in the field of advanced packaging processes for microelectronic devices.

The dry etch market is generally segmented into the following market segments, defined according to the class of film being etched: polysilicon, oxide (dielectric) and metal. New films are continually being developed in each of these three market segments.

Certain dry etch technologies or processes are better suited for etching different types of materials (films) and, as a result, the dry etch market may be segmented according to the type of film being etched. In addition, as ICs become increasingly complex, certain etch steps required to manufacture a state of the art IC demand leading edge (or “critical”) etch performance. For example, to produce a 64-megabit DRAM device, semiconductor manufacturers are required to etch certain device features at dimensions as small as 0.13 micron. Nonetheless, even in the most advanced ICs, production steps can be performed with less demanding (or “non-critical”) etch performance. As a result, we believe the etch market has also begun to segment according to the required level of etch performance — critical or non-critical.

Today, the semiconductor industry is faced with the need to develop and adopt an unprecedented number of new materials as conventional films are running out of the physical properties needed to support continuing shrinks in die size and to provide improved performance. Certain of these new materials present unique etch production problems. For example, the use of certain films, such as platinum, iridium and Lead Zirconium Titanate (“PZT”), currently being used in the development of non-volatile, ferroelectric random access memory (“FRAM”) devices, is presenting new challenges to semiconductor manufacturers. While these new films contribute to improved IC performance and reduced die size, their unique properties make them particularly difficult to etch and, therefore, require more advanced etch process technologies. Similarly, customers seek to achieve zero corrosion of metal etched wafers within 48 to 72 hours after completion of the etch process, regardless of the line geometries involved. The reaction byproducts of a chlorine based metal etch process tend to redeposit on the wafer and corrode when exposed to water in the atmosphere. Removal of these contaminants from the wafer is essential to prevent this corrosion.

Market Segmentation and Tool Costs

PVD systems have become one of the most expensive pieces of capital equipment found in modern IC wafer fabs. PVD tool system architecture is generally of modular, or cluster-tool style, with as many as six active process chambers placed around a central robotic handling system, plus separate loadlocks for the entry and exit of wafers. Each active chamber, the system loadlocks, and the central core wafer handler must be configured for high vacuum operation. Average selling prices for a typical fully-configured PVD system have increased from an estimated \$2,600,000 in 1994 to an estimated \$7,000,000 today.

Over time, the disparity in relative prices for etch systems capable of etching at non-critical versus critical dimensions has grown significantly. We believe that in 1993, the cost of an eight-inch wafer-capable system ranged from approximately \$500,000 to \$700,000. Given the relatively modest price differential among etchers, manufacturers of ICs and similar devices tended to purchase one system (the one they believed provided the most technologically advanced solution for their particular etch requirements) to perform all of their etching. In contrast, the cost today of an eight inch capable etch system ranges from approximately \$500,000, for reliable, non-critical etchers, to more than \$2.5 million, for advanced, state of the art critical etchers. Consequently, in periods of high equipment utilization we believe it is no longer cost effective to use state of the art etchers to perform both critical and non-critical etching. When critical etching is required in the production process, we believe that the leading purchasing factor for a semiconductor manufacturer will continue to be, ultimately, the product's etch performance. However, when non-critical etching is required in the production process, we believe the leading purchasing factor for a semiconductor manufacturer will be the overall product cost, with particular emphasis on the system's sale price. In either case, however, the semiconductor manufacturer is driven to make a value-oriented purchasing decision which minimizes the overall etch system costs, while meeting the required etch process performance. We believe that a well-implemented "mix and match" purchasing philosophy could allow a semiconductor manufacturer to realize significant etch system savings.

Business Strategy

We have a large installed base of etch and deposition equipment exceeding 1,700 systems and we believe that over the years we have earned a reputation as a supplier of reliable, value-oriented systems along with systems incorporating unique, advanced process technologies. Our systems are sold throughout the world to both domestic and international customers. In our fiscal year ended March 31, 2003, approximately 66% of our revenues resulted from international sales. To support our systems sales, we maintain local service and support in every major geographic market in which we have an installed base, backed up by a spares logistics system designed to provide delivery within 24 hours anywhere in the world.

Tegal's strategy is to become the leading provider of integrated etch and deposition process solutions for a defined set of new and emerging materials central to the production of a broad array of advanced semiconductor devices. Incorporation of these new, exotic materials is essential to achieving the higher device densities, lower power consumption and novel functions exhibited by the newest generation of cell phones, computer memories, fiber optic switches and remote sensors. Currently, Tegal is the leading supplier of etch solutions to makers of advanced "non-volatile" ferro-electric ("FeRAM") and magnetic ("MRAM") devices. FeRAM is just now entering commercial production with chips for the newest generation of cell phones, PDA's, smart cards and radio-frequency identification devices ("RFID's"), used for applications such as inventory tracking and cashier-less transaction processing. Rounding out Tegal's portfolio of new materials expertise are so-called "compound-semi" materials, such as GaAs, GaN and InP, widely used in telecom device production.

Our long-term growth strategy is to build on the Company's technical knowledge, experience and reputation in semiconductor capital equipment, both through organic growth in the markets in which it specializes and through selective acquisitions of complementary technologies. Through its recent acquisition of Sputtered Films, Inc., Tegal secured a source for a complementary deposition technology for its new materials strategy and gained a key foothold in the advanced EUV mask market.

Products

6500 Series "Critical Etch" Products

We offer several models of our 6500 series critical etch products configured to address film types and applications desired by our customers. We introduced the 6500 series tool in 1994 and since that time have expanded the product line to address new applications including:

- new high K dielectrics and associated materials used in capacitors at sub-0.5 micron for FRAMs, high-density DRAM and magnetic memory (MRAM) devices;
- shallow trench isolation used to isolate transistors driven by increased packing densities used in memory devices employing design rules at or below 0.25 micron;
- sub-0.5 micron multi-layer metal films composed of aluminum/copper/silicon/titanium alloys;
- sub-0.5 micron polysilicon;
- compound semiconductor III-V materials; and
- leading edge thin film head materials.

All 6500 series models offer one and two-chamber configurations and a rinse/strip option. Prices for 6500 series systems typically range between \$1.8 million and \$3.0 million.

Our 6500 series systems have been engineered to provide process flexibility and competitive throughput for wafers and substrates up to eight inches in diameter, while minimizing cost and space requirements. The 6550 Spectra chamber is 300mm capable and is currently being used on the 200mm 6500 platform. Customer demand for new materials is at the 200mm node. However, having 300mm capability is important for future customer needs. A dual chamber platform design allows for either parallel or integrated etch processes. We seek to maximize the 6500 series systems' average throughput by incorporating a process chamber technology and system architecture designed to minimize processing down-time required for cleaning and maintenance. Each 6500 series system has a central wafer handling system with full cassette vacuum loadlocks, non-contact optical wafer alignment and a vacuum transport system. Individual process module servicing is possible without shutting down the system or other chambers. Contamination control features in the 6500 series systems include pick and place wafer handling with no moving parts above the wafer, four-level vacuum isolation from the atmosphere to the etch chamber, and individual high-throughput, turbo-pumped vacuum systems for the cassettes, wafer handling platform and each process module. These and other features of the 6500 series are designed to enable a semiconductor manufacturer to reduce wafer particle contamination to a level that we believe exceeds industry standards and to improve etch results and process flexibility.

In addition, our 6500 series systems incorporate a software system that has been designed and tested to minimize the risk of the system operator "crashing" the system or interrupting wafer fabrication, while being easy to use. This software system incorporates a software architecture designed to operate in multiple interface modes, including operator, maintenance engineer, process engineer and diagnostic modes. Features include icon-based touch screen menus for ease of use. In addition, the software provides a quick-response interface which allows the semiconductor manufacturer access to all necessary system information for factory automation. The system includes data in-situ process manufacturing archiving and remote, real time diagnostics.

900 Series "Non-Critical Etch" Products

We introduced our 900 series family of etch systems in 1984 as a critical etch tool of that era. Over the years, we have enhanced the 900 series family as non-critical etch systems capable of performing the etch steps required in the production of silicon-based IC devices and, more recently, as critical etch tools for new specialty devices such as gallium arsenide for high-speed telecommunications devices. In 1994, we introduced an eight-inch wafer capable 900 series system (capable of etching five inch to eight-inch wafers). The 900 series non-critical etch systems are aimed at pad, zero layer, non-selective nitride, backside, planarization and small flat panel display applications, thin film etch applications used in the manufacture of read-write heads for the disk drive industry and gallium arsenide and other III-V materials used in high-speed digital wireless telecommunications applications. Our 900 series systems typically sell for a price of \$250,000 to \$600,000.

The 900 series systems incorporate a single process chamber on a non-loadlocked modular platform for reliability and ease of maintenance, which we believe results in higher average throughput and lower operating costs. Continued improvements in both reliability and performance have enabled us to offer the 900 series systems as a solution for a broad range of applications involving line widths down to 0.8 microns.

The #900 was introduced in July 2000. This system has enhanced the functionality of the 900 series with added features such as user-friendly GUI (graphical user interface) touch screens, better process control and an improved transport system that will increase efficiency, while preserving the durability for which the tool is known.

Endeavor Series Critical Deposition Products

We offer several models of our Endeavor series critical deposition products configured to address film types and applications desired by the customer. We introduced the Endeavor series tool in 1992 and since that time have expanded the product line to address new applications. Deposition applications addressed by the Endeavor series system include:

- chip packaging technologies requiring stress control in multi-layer under bump metallization (UBM), including deposition onto polyimide;
- IC front side interconnect metallization;
- Ohmic contact formation and metallization of thinned wafers for high power transistors;
- deposition of thin film resistors with fine tuning of thermal capacitance of resistance (TCR);
- barrier and seed layer deposition in deep vias;
- encapsulating films for light emitting diodes (LED);
- dielectric layers for sound acoustic wave (SAW) and integrated gate bipolar transistors (IGBT);
- automobile electronics requiring high adhesion properties of the backside metal film stacks;
- high precision, ultra clean deposition of films used in photolithography and extreme ultraviolet (EUV) masks.

All Endeavor series models offer one to five process modules, and can be configured as single or dual cassette module systems. The system is fully field upgradeable. Prices for Endeavor series systems typically range between \$1.8 million and \$3.0 million.

Our Endeavor series systems have been engineered to provide process flexibility and competitive throughput for wafers and substrates up to eight inches in diameter, or six inches square while minimizing cost and space requirements. The Endeavor cassette module is SMIF compatible. Fast and efficient, the system's capability is enhanced by parallel processing and scheduled downtime is minimized by its modularity. Each Endeavor series system has a central wafer handling system with full vacuum loadlocks, non-contact optical wafer alignment and a vacuum transport system. Individual process module servicing is possible without shutting down the system or other chambers. Contamination control features in the Endeavor series systems include sputter-up processing, and a gentle and reliable handling system that allows the transport and process of wafers without clamping or mechanical pressure, and no backside contact of the wafer or substrate at any time. All processing is done under high vacuum, using individual high-throughput, turbo-pumped vacuum systems for the cassette module and transfer module and each process module. These and other features of the Endeavor series are designed to enable a semiconductor manufacturer to reduce wafer particle contamination to a level that we believe exceeds industry standards and to improve deposition results and process flexibility.

In addition, our Endeavor series systems employs a user-friendly software system that is equipped with full safety interlocks and is four-level password protected. This software system incorporates a graphical user interface with software architecture designed to operate in multiple interface modes, including operator, maintenance engineer, process engineer and diagnostic modes. The software provides a quick-response interface which allows the semiconductor manufacturer access to all necessary system information for factory automation. The software and automation are completely functional from remote locations via ISDN line. This remote access can be used to download software upgrades, or as a powerful diagnostic tool, providing our customers with immediate factory support.

Customers

We sell our systems to semiconductor and related electronic device component manufacturers throughout the world. Major customers over the last three fiscal years have included the following:

Alcatel Microelectronics	Motorola	Sumitomo
Analog Devises	NEC	Tesla Sezam,S.A.
AMS	Nortel Technology	United Microelectronics
Compound Semiconductor	OKI	University Francois Rabelais
Fairchild	RF Microdevices	Walsin Lihwa Corp.
Fuji Microdevice	Sony	Winbond Electronics Corp.
International Rectifier	ST Microelectronics	

Of these 20 customers, five ordered one or more systems in fiscal 2003. The composition of our top five customers has changed from year to year, but net system sales to our top five customers in each of fiscal 2003, 2002 and 2001 accounted for 88.2%, 54.4% and 42.0%, respectively, of our total net system sales. International Rectifier, University Francois, ST Microelectronics and OKI represented 32.2%, 22.7%, 12.5% and 12.0%, respectively, of our net system sales in 2003. STMicroelectronics, Nortel, Analog and NEC represented 24.2%, 17.1%, 10.1% and 13.1%, respectively, of our net system sales in 2002. Nortel and Sony represented 17.6% and 13.0%, respectively, of our net system sales in 2001. Other than the above customers, no single customer represented more than 10% of our net system sales in fiscal 2003, 2002 or 2001. Although the composition of the group comprising our largest customers may vary from year to year, the loss of a significant customer or any reduction in orders by any significant customer, including reductions due to market, economic or competitive conditions in the semiconductor and related device manufacturing industry, may have a material adverse effect on us.

Backlog

We schedule production of our systems based upon order backlog and customer commitments. We include in our backlog only orders for which written purchase orders have been accepted and shipment dates within the next 12 months have been assigned. As of May 30, 2003 and 2002, our order backlog was approximately \$6.0 million and \$2.0 million, respectively. Booked system orders are subject to cancellation by the customer, but with substantial penalties except in the case of orders for evaluation systems or for systems that have not yet incurred production costs. Orders may be subject to rescheduling with limited or no penalty. Some orders are received for systems to be shipped in the same quarter as the order is received. As a result, our backlog at any particular date is not necessarily indicative of actual sales for any succeeding period.

Marketing, Sales and Service

We sell our systems worldwide through a network of eight direct sales personnel and three independent sales representatives in sales offices located throughout the world. In the United States of America, we market our systems through direct sales personnel located in two regional sales offices and at our Petaluma, California headquarters. In addition, we provide field service and applications engineers out of our regional locations and our Petaluma headquarters in order to ensure dedicated technical and field process support throughout the United States of America on short notice.

We maintain sales, service and process support capabilities in Japan, Taiwan, Germany, Italy and the United Kingdom and service/support operations in Austria and China. In addition to our international direct sales and support organizations, we also market our systems through independent sales representatives in China, Israel, South Korea and Singapore and selected markets in Japan.

International sales, which consist of export sales from the United States of America either directly to the end user or to one of our foreign subsidiaries, accounted for approximately 66%, 67% and 61% of total revenue for fiscal 2003, 2002 and 2001, respectively. Revenues by region for each of the last three fiscal years were as follows:

	Years Ended March 31,		
	2003	2002	2001
United States	\$ 4,864	\$ 7,168	\$15,087
Asia, excluding Japan	1,537	3,903	5,612
Japan	2,934	4,094	6,862
Germany	1,851	731	3,998
Italy	353	2,617	2,219
Europe, excluding Germany and Italy	2,561	3,093	4,427
Total sales	\$14,100	\$21,606	\$38,205

We generally sell our systems on 30-to-60 day credit terms to our domestic and European customers. Customers in the Pacific Rim countries, other than Japan, are generally required to deliver a letter of credit payable in U.S. dollars upon system shipment. Sales to other international customers, including Japan, are billed either in local currency or U.S. dollars. We anticipate that international sales will continue to account for a significant portion of revenue in the foreseeable future.

We generally warrant our new systems for 12 months and our refurbished systems for six months from shipment. Our field engineers provide customers with call-out repair and maintenance services for a fee. Customers may also enter into repair and maintenance service contracts covering our systems. We train customer service engineers to perform routine service for a fee and provide telephone consultation services generally free of charge.

The sales cycles for our systems vary depending upon whether the system is an initial design-in, reorder or used equipment. Initial design-in sales cycles are typically 12 to 18 months, particularly for 6500 and Endeavor series systems. In contrast, reorder sales cycles are typically four to six months, and used system sales cycles are generally one to three months. The initial design-in sales cycle begins with the generation of a sales lead, which is followed by qualification of the lead, an analysis of the customer's particular applications needs and problems, one or more presentations to the customer (frequently including extensive participation by our senior management), two to three wafer sample demonstrations, followed by customer testing of the results and extensive negotiations regarding the equipment's process and reliability specifications. Initial design-in sales cycles are monitored by senior management for correct strategic approach and resource prioritization. We may, in some rare instances, need to provide the customer with an evaluation system for three to six months prior to the receipt of a firm purchase order.

Research and Development

The market for semiconductor capital equipment is characterized by rapid technological change. We believe that continued and timely development of new systems and enhancements to existing systems is necessary for us to maintain our competitive position. Accordingly, we devote a significant portion of our personnel and financial resources to research and development programs and seek to maintain close relationships with our customers in order to be responsive to their system needs.

Our research and development encompasses the following areas: plasma and sputtering technology, process characterization and development, material sciences applicable to etch and deposition environments, systems design and architecture, electro-mechanical design and software engineering. Management emphasizes advanced plasma and reactor chamber modeling capabilities in order to accelerate bringing advanced chamber designs to market. We employ multi-discipline teams to facilitate short engineering cycle times and rapid product development.

As of March 31, 2003, we had 28 full-time employees dedicated to equipment design engineering, process support and research and development. Research and development expenses for fiscal 2003, 2002 and 2001 were \$4.8 million, \$5.9 million and \$8.9 million, respectively, and represented 34.2%, 27.4% and 23.4% of total revenue, respectively. Such expenditures were primarily used for the development of new processes, continued enhancement and customization of existing systems, processing customer samples in our demonstration labs and providing process engineering support at customer sites.

Manufacturing

Our etch systems are produced at our headquarters in Petaluma, California. Deposition systems are currently produced at our facility in Santa Barbara, California. Our manufacturing activities consist of assembling and testing components and sub-assemblies, which are then integrated into finished systems. We have structured our production facilities to be driven either by orders or by forecasts and have adopted a modular system architecture to increase assembly efficiency and design flexibility. We have also implemented "just-in-time" manufacturing techniques in our assembly processes. Through the use of such techniques, 900 series system manufacturing cycle times take approximately 14 days and cycle times for our Endeavor systems and our 6500 series products take two to three months.

Competition

The semiconductor capital equipment industry is highly competitive. We believe that the principal competitive factor in the critical segments of the etch industry is technical performance of the system, followed closely by the existence of customer relationships, the system price, the ability to provide service and technical support on a global basis and other related cost factors. We believe that the principal competitive factor in the non-critical segments of the etch industry is system price, followed closely by the technical performance of the system, the existence of established customer relationships, the ability to provide service and technical support on a global basis and other related cost factors.

Intellectual Property

We hold an exclusive license or ownership of 54 United States of America patents, including our dual frequency tri-electrode control system, and 27 corresponding foreign patents covering various aspects of our systems. We have also applied for seven additional United States of America patents and 52 additional foreign patents. Of these patents, a few expire as early as 2003, others expire as late as 2021 with the average expiration occurring in approximately 2013. We believe that the duration of such patents generally exceeds the life cycles of the technologies disclosed and claimed therein. We believe that although the patents we have exclusively licensed or hold directly will be of value, they will not determine our success, which depends principally upon our engineering, marketing, service and manufacturing skills. However, in the absence of patent protection, we may be vulnerable to competitors who attempt to imitate our systems, processes and manufacturing techniques. We have signed a non-exclusive field of use license to two of our patents, relating to our strategic application sets. In addition, other companies and inventors may receive patents that contain claims applicable to our systems and processes. The sale of our systems covered by such patents could require licenses that may not be available on acceptable terms, if at all. We also rely on trade secrets and other proprietary technology that we seek to protect, in part, through confidentiality agreements with employees, vendors, consultants and other parties. There can be no assurance that these agreements will not be breached, that we will have adequate remedies for any breach or that our trade secrets will not otherwise become known to or independently developed by others.

The original version of the system software for our 6500 series systems was jointly developed by us and Realtime Performance, Inc., a third party software vendor. We hold a perpetual, non-exclusive, non-royalty bearing license to use and enhance this software. The enhanced version of the software currently used on our 6500 series systems has undergone multiple releases of the original software, and such enhancements were developed exclusively by us. Neither the software vendor nor any other party has any right to use our current release of the system software. However we cannot make any assurances that this software will not be illegally copied or reversed-engineered by either customers or third-parties.

Employees

As of March 31, 2003, we had a total of 81 regular employees and two part-time contract personnel. Of our regular employees, eight are in engineering, 10 are in research and development, 21 are in manufacturing and operations, 31 are in marketing, sales and customer service and support and 11 are in executive and administrative positions. Many of our employees are highly skilled, and our success will depend in part upon our ability to attract, retain and develop such employees. Skilled employees, especially employees with extensive technological backgrounds, remain in demand. There can be no assurance we will be able to attract or retain the skilled employees that may be necessary to continue our research and development, manufacturing or marketing programs. The loss of any such persons, as well as the failure to recruit additional key personnel in a timely manner, could have a material adverse effect on us.

None of our employees is represented by a labor union or covered by a collective bargaining agreement. We consider our employee relations to be good.

Risk Factors

We have incurred operating losses and may not be profitable in the future; Our plans to maintain and increase liquidity may not be successful.

We incurred net losses of \$12.6 million and \$8.7 million for the years ended March 31, 2003 and 2002, respectively, and generated negative cash flows from operations of \$6.0 million and \$3.6 million in these years. These factors raise substantial doubt as to our ability to continue as a going concern, and our auditors have included a going concern uncertainty in their opinion. Our plans to maintain and increase liquidity include the restructuring executed during fiscal 2002, which reduced headcount from 155 employees to 81 employees and has reduced our cost structure entering fiscal 2004. We believe the cost reduction and a projected increase in sales during fiscal 2004 will generate sufficient cash flows to fund our operations through March 31, 2004. However, these projected sales are to a limited number of new and existing customers and are based, for the most part, on internal and customer provided estimates of future demand, not firm customer orders. If the projected sales do not materialize, we will need to reduce expenses further and raise additional capital through the issuance of debt or equity securities. If additional funds are raised through the issuance of preferred stock or debt, these securities could have rights, privileges or preferences senior to those of our common stock, and debt covenants could impose restrictions on our operations. The sale of equity or debt could result in additional dilution to current stockholders, and such financing may not be available to us on acceptable terms, if at all. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amount or classification of liabilities or any other adjustments that might be necessary should we be unable to continue as a going concern.

The semiconductor industry is cyclical and may experience periodic downturns that may negatively affect customer demand for our products and result in losses such as those experienced in the past.

Our business depends upon the capital expenditures of semiconductor manufacturers, which in turn depend on the current and anticipated market demand for integrated circuits. The semiconductor industry is highly cyclical and historically has experienced periodic downturns, which often have had a material adverse effect on the semiconductor industry's demand for semiconductor capital equipment, including etch and deposition systems manufactured by us. In response to the current prolonged industry slow-down, we have initiated a substantial cost containment program and a corporate-wide restructuring to preserve our cash. However, the need for continued investment in research and development, possible capital equipment requirements and extensive ongoing customer service and support requirements worldwide will continue to limit our ability to reduce expenses in response to the current downturn.

Our competitors have greater financial resources and greater name recognition than we do and therefore may compete more successfully in the semiconductor capital equipment industry than we can.

We believe that to be competitive, we will require significant financial resources in order to offer a broad range of systems, to maintain customer service and support centers worldwide and to invest in research and development. Many of our existing and potential competitors, including, among others, Applied Materials, Inc., Lam Research Corporation, Novellus and Tokyo Electron Limited, have substantially greater financial resources, more extensive engineering, manufacturing, marketing and customer service and support capabilities, larger installed bases of current generation etch, deposition and other production equipment and broader process equipment offerings, as well as greater name recognition than we do. We cannot assure you that we will be able to compete successfully against these companies in the United States of America or worldwide.

If we fail to meet the continued listing requirements of the Nasdaq Stock Market, our stock could be delisted.

Our stock is currently listed on The Nasdaq SmallCap Market. The Nasdaq Stock Market's Marketplace Rules impose certain minimum financial requirements on us for the continued listing of our stock. One such requirement is the minimum bid price on our stock of \$1.00 per share. Beginning in 2002, there have been periods of time during which we have been out of compliance with the \$1.00 minimum bid requirements of the Nasdaq SmallCap Market.

On September 6, 2002, we received notification from Nasdaq that for the 30 days prior to the notice, the price of our common stock had closed below the minimum \$1.00 per share bid price requirement for continued inclusion under Marketplace Rule 4450(a)(5) (the "Rule"), and were provided 90 calendar days, or until December 5, 2002, to regain compliance. Our bid price did not close above the minimum during that period. On December 6, 2002, we received notification from Nasdaq that our securities would be delisted from The Nasdaq National Market, the exchange on which our stock was listed prior to May 6, 2003, on December 16, 2002 unless we either (i) applied to transfer our securities to The Nasdaq SmallCap Market, in which case we would be afforded additional time to come into compliance with the minimum \$1.00 bid price requirement; or (ii) appealed the Nasdaq staff's determination to the Nasdaq's Listing Qualifications Panel (the "Panel"). On December 12, 2002 we requested an oral hearing before the Panel and such hearing took place on January 16, 2003 in Washington, D.C. Our appeal was based, among other things, on our intention to seek stockholder approval for a reverse split of our outstanding common stock. On April 28, 2003 at a special meeting of our stockholders, our board of directors was granted the authority to effect a reverse split of our common stock within a range of two-for-one to fifteen-for-one. The timing and ratio of a reverse split, if any, is at the sole discretion of our board of directors. On May 6, 2003, we transferred the listing of our common stock to the Nasdaq SmallCap Market. In connection with this transfer, Nasdaq granted us an extension until December 1, 2003, to regain compliance with the Rule's minimum \$1.00 per share bid price requirement for continued inclusion on the Nasdaq SmallCap Market.

If we are out of compliance in the future with Nasdaq listing requirements, we may take actions in order to achieve compliance, which actions may include a reverse split of our common stock. If an initial delisting decision is made by the Nasdaq's staff, we may appeal the decision as permitted by Nasdaq rules. If we are delisted and cannot obtain listing on another major market or exchange, our stock's liquidity would suffer, and we would likely experience reduced investor interest. Such factors may result in a decrease in our stock's trading price. Delisting also may restrict us from issuing additional securities or securing additional financing.

We depend on sales of our advanced products to customers that may not fully adopt our product for production use.

We have designed our advanced etch and deposition products for customer applications in emerging new films, polysilicon and metal which we believe to be the leading edge of critical applications for the production of advanced semiconductor and other microelectronic devices. Revenues from the sale of our advanced etch and deposition systems accounted for 25% and 36% of total revenues in fiscal 2003 and 2002, respectively. Our advanced systems are currently being used primarily for research and development activities or low volume production. For our advanced systems to achieve full market adoption, our customers must utilize these systems for volume production. There can be no assurance that the market for devices incorporating emerging films, polysilicon or metal will develop as quickly or to the degree we expect.

If our advanced systems do not achieve significant sales or volume production due to a lack of full customer adoption, our business, financial condition, results of operations and cash flows will be materially adversely affected.

Our potential customers may not adopt our products because of their significant cost or because our potential customers are already using a competitor's tool.

A substantial investment is required to install and integrate capital equipment into a semiconductor production line. Additionally, we believe that once a device manufacturer has selected a particular vendor's capital equipment, that manufacturer generally relies upon that vendor's equipment for that specific production line application and, to the extent possible, subsequent generations of that vendor's systems. Accordingly, it may be extremely difficult to achieve significant sales to a particular customer once that customer has selected another vendor's capital equipment unless there are compelling reasons to do so, such as significant performance or cost advantages. Any failure to gain access and achieve sales to new customers will adversely affect the successful commercial adoption of our products and could have a material adverse effect on us.

Our quarterly operating results may continue to fluctuate.

Our revenue and operating results have fluctuated and are likely to continue to fluctuate significantly from quarter to quarter, and there can be no assurance as to future profitability.

Our 900 series etch systems typically sell for prices ranging between \$250,000 and \$600,000, while prices of our 6500 series critical etch systems and our Endeavor deposition system typically range between \$1.8 million and \$3.0 million. To the extent we are successful in selling our 6500 and Endeavor series systems, the sale of a small number of these systems will probably account for a substantial portion of revenue in future quarters, and a transaction for a single system could have a substantial impact on revenue and gross margin for a given quarter.

Other factors that could affect our quarterly operating results include:

- [X] our timing of new systems and technology announcements and releases and ability to transition between product versions;
- [X] product returns upon the introduction of new product versions and pricing adjustments for our distributors;
- [X] seasonal fluctuations in sales;
- [X] anticipated declines in selling prices of our products to original equipment manufacturers and potential declines in selling prices to other parties as a result of competitive pressures;
- [X] changes in the mix of our revenues represented by our various products and customers;
- [X] adverse changes in the level of economic activity in the United States or other major economies in which we do business;
- [X] foreign currency exchange rate fluctuations;
- [X] expenses related to, and the financial impact of, possible acquisitions of other businesses;
- changes in the timing of product orders due to unexpected delays in the introduction of our customers' products, due to lifecycles of our customers' products ending earlier than expected or due to market acceptance of our customers' products;
- and
- timely and accurate reporting to us by our original equipment manufacturer customers of units shipped.

Additionally, potential acquisitions may result in significant expenses, including amortization of purchased software, which is reflected in cost of revenues, as well as charges for in-process research and development and amortization of acquired identifiable intangible assets, which are reflected in operating expenses.

Because technology changes rapidly, we may not be able to introduce our products in a timely enough fashion.

The semiconductor manufacturing industry is subject to rapid technological change and new system introductions and enhancements. We believe that our future success depends on our ability to continue to enhance our existing systems and their process capabilities, and to develop and manufacture in a timely manner new systems with improved process capabilities. We may incur substantial unanticipated costs to ensure product functionality and reliability early in our products' life cycles. There can be no assurance that we will be successful in the introduction and volume manufacture of new systems or that we will be able to develop and introduce, in a timely manner, new systems or enhancements to our existing systems and processes which satisfy customer needs or achieve market adoption.

Some of our sales cycles are lengthy, exposing us to the risks of inventory obsolescence and fluctuations in operating results.

Sales of our systems depend, in significant part, upon the decision of a prospective customer to add new manufacturing capacity or to expand existing manufacturing capacity, both of which typically involve a significant capital commitment. We often experience delays in finalizing system sales following initial system qualification while the customer evaluates and receives approvals for the purchase of our systems and completes a new or expanded facility. Due to these and other factors, our systems typically have a lengthy sales cycle (often 12 to 18 months in the case of critical etch and deposition systems) during which we may expend substantial funds and management effort. Lengthy sales cycles subject us to a number of significant risks, including inventory obsolescence and fluctuations in operating results over which we have little or no control.

We may not be able to protect our intellectual property or obtain licenses for third parties' intellectual property and therefore we may be exposed to liability for infringement or the risk that our operations may be adversely affected.

Although we attempt to protect our intellectual property rights through patents, copyrights, trade secrets and other measures, we may not be able to protect our technology adequately and competitors may be able to develop similar technology independently. Additionally, patent applications that we may file may not be issued and foreign intellectual property laws may not protect our intellectual property rights. There is also a risk that patents licensed by or issued to us will be challenged, invalidated or circumvented and that the rights granted thereunder will not provide competitive advantages to us. Furthermore, others may independently develop similar systems, duplicate our systems or design around the patents licensed by or issued to us.

Existing litigation and any future litigation could result in substantial cost and diversion of effort by us, which by itself could have a material adverse effect on our financial condition, operating results and cash flows. Further, adverse determinations in such litigation could result in our loss of proprietary rights, subject us to significant liabilities to third parties, require us to seek licenses from third parties or prevent us from manufacturing or selling our systems. In addition, licenses under third parties' intellectual property rights may not be available on reasonable terms, if at all.

Our customers are concentrated and therefore the loss of a significant customer may harm our business.

Our top five customers accounted for 88.2%, 54.4% and 42.0% of our systems revenues in fiscal 2003, 2002 and 2001, respectively. Four customers accounted for more than 10% of net systems sales in fiscal 2003. Although the composition of the group comprising our largest customers may vary from year to year, the loss of a significant customer or any reduction in orders by any significant customer, including reductions due to market, economic or competitive conditions in the semiconductor manufacturing industry, may have a material adverse effect on our business, financial condition, results of operations and cash flows. Our ability to increase our sales in the future will depend, in part, upon our ability to obtain orders from new customers, as well as the financial condition and success of our existing customers and the general economy, which is largely beyond our ability to control.

We are exposed to additional risks associated with international sales and operations.

International sales accounted for 66%, 67% and 61% of total revenue for fiscal 2003, 2002 and 2001, respectively. International sales are subject to certain risks, including the imposition of government controls, fluctuations in the U.S. dollar (which could increase the sales price in local currencies of our systems in foreign markets), changes in export license and other regulatory requirements, tariffs and other market barriers, political and economic instability, potential hostilities, restrictions on the export or import of technology, difficulties in accounts receivable collection, difficulties in managing distributors or representatives, difficulties in staffing and managing international operations and potentially adverse tax consequences. There can be no assurance that any of these factors will not have a material adverse effect on our operations and financial results.

Sales of our systems in certain countries are billed in local currency, and we have a line of credit denominated in Japanese Yen. We generally attempt to offset a portion of our U.S. dollar denominated balance sheet exposures subject to foreign exchange rate remeasurement by purchasing forward currency contracts for future delivery. There can be no assurance that our future results of operations and cash flows will not be adversely affected by foreign currency fluctuations. In addition, the laws of certain countries in which our products are sold may not provide our products and intellectual property rights with the same degree of protection as the laws of the United States of America.

We must integrate our recent acquisition of Sputtered Films and we may need to make additional future acquisitions to remain competitive. The process of identifying, acquiring and integrating future acquisitions may constrain valuable management resources, and our failure to effectively integrate future acquisitions may result in the loss of key employees and the dilution of stockholder value and have an adverse effect on our operating results.

We acquired Sputtered Films, Inc. in August 2002. We may in the future seek to acquire or invest in additional businesses, products or technologies that we believe could complement or expand our business, augment our market coverage, enhance our technical capabilities or that may otherwise offer growth opportunities. We may encounter problems with the assimilation of Sputtered Films or businesses, products or technologies acquired in the future including:

- [X] difficulties in assimilation of acquired personnel, operations, technologies or products;
- [X] unanticipated costs associated with acquisitions;
- [X] diversion of management's attention from other business concerns and potential disruption of our ongoing business;
- [X] adverse effects on our existing business relationships with our customers;
- [X] potential patent or trademark infringement from acquired technologies;
- [X] adverse effects on our current employees and the inability to retain employees of acquired companies;
- [X] use of substantial portions of our available cash as all or a portion of the purchase price; and
- [X] dilution of our current stockholders due to issuances of additional securities as consideration for acquisitions.

If we are unable to successfully integrate our acquired companies or to create new or enhanced products and services, we may not achieve the anticipated benefits from our acquisitions. If we fail to achieve the anticipated benefits from the acquisitions, we may incur increased expenses and experience a shortfall in our anticipated revenues and we may not obtain a satisfactory return on our investment. In addition, if a significant number of employees of acquired companies fail to remain employed with us, we may experience difficulties in achieving the expected benefits of the acquisitions.

Completing any potential future acquisitions could cause significant diversions of management time and resources. Financing for future acquisitions may not be available on favorable terms, or at all. If we identify an appropriate acquisition candidate for any of our businesses, we may not be able to negotiate the terms of the acquisition successfully, finance the acquisition or integrate the acquired business, products, technologies or employees into our existing business and operations. Future acquisitions may not be well-received by the investment community, which may cause our stock price to fall. We have not entered into any agreements or understanding regarding any future acquisitions and cannot ensure that we will be able to identify or complete any acquisition in the future.

If we acquire businesses, new products or technologies in the future, we may be required to amortize significant amounts of identifiable intangible assets and we may record significant amounts of goodwill that will be subject to annual testing for impairment. If we consummate one or more significant future acquisitions in which the consideration consists of stock or other securities, our existing stockholders' ownership could be significantly diluted. If we were to proceed with one or more significant future acquisitions in which the consideration included cash, we could be required to use a substantial portion of our available cash.

Our workforce reductions and financial performance may adversely affect the morale and performance of our personnel and our ability to hire new personnel.

We have made reductions in our workforce in order to reduce costs and bring staffing in line with our anticipated requirements. There were costs associated with the workforce reductions related to severance and other employee-related costs, and our restructuring may yield unanticipated costs and consequences, such as attrition beyond our planned reduction in staff. In addition, our common stock has declined in value below the exercise price of many options granted to employees pursuant to our stock option plans. Thus, the intended benefits of the stock options granted to our employees, the creation of performance and retention incentives, may not be realized. In addition, workforce reductions and management changes create anxiety and uncertainty and may adversely affect employee morale. As a result, we may lose employees whom we would prefer to retain. As a result of these factors, our remaining personnel may seek employment with larger, more established companies or companies perceived as having less volatile stock prices.

Provisions in our agreements, charter documents, stockholder rights plan and Delaware law may deter takeover attempts, which could decrease the value of your shares

Our certificate of incorporation and bylaws and Delaware law contain provisions that could make it more difficult for a third party to acquire us without the consent of our board of directors. Our board of directors has the right to issue preferred stock without stockholder approval, which could be used to dilute the stock ownership of a potential hostile acquirer. Delaware law imposes some restrictions on mergers and other business combinations between us and any holder of 15% or more of our outstanding common stock. In addition, we have adopted a stockholder rights plan that makes it more difficult for a third party to acquire us without the approval of our board of directors. These provisions apply even if the offer may be considered beneficial by some stockholders.

Our stock price is volatile and could result in a material decline in the value of your investment in Tegal.

We believe that factors such as announcements of developments related to our business, fluctuations in our operating results, sales of our common stock into the marketplace, failure to meet or changes in analysts' expectations, general conditions in the semiconductor industry or the worldwide economy, announcements of technological innovations or new products or enhancements by us or our competitors, developments in patents or other intellectual property rights, developments in our relationships with our customers and suppliers, natural disasters and outbreaks of hostilities could cause the price of our common stock to fluctuate substantially. In addition, in recent years the stock market in general, and the market for shares of small capitalization stocks in particular, have experienced extreme price fluctuations, which have often been unrelated to the operating performance of affected companies. There can be no assurance that the market price of our common stock will not experience significant fluctuations in the future, including fluctuations that are unrelated to our performance.

Potential disruption of our supply of materials required to build our systems could have a negative effect on our operations and damage our customer relationships.

Materials delays have not been significant in recent years. Nevertheless, we procure certain components and sub-assemblies included in our systems from a limited group of suppliers, and occasionally from a single source supplier. For example, we depend on MECS Corporation, a robotic equipment supplier, as the sole source for the robotic arm used in all of our 6500 series systems. We currently have no existing supply contract with MECS Corporation, and we currently purchase all robotic assemblies from MECS Corporation on a purchase order basis. Disruption or termination of certain of these sources, including our robotic sub-assembly source, could have an adverse effect on our operations and damage our relationship with our customers.

Any failure by us to comply with environmental regulations imposed on us could subject us to future liabilities.

We are subject to a variety of governmental regulations related to the use, storage, handling, discharge or disposal of toxic, volatile or otherwise hazardous chemicals used in our manufacturing process. We believe that we are currently in compliance in all material respects with these regulations and that we have obtained all necessary environmental permits generally relating to the discharge of hazardous wastes to conduct our business. Nevertheless, our failure to comply with present or future regulations could result in additional or corrective operating costs, suspension of production, alteration of our manufacturing processes or cessation of our operations.

Special Note Regarding Forward Looking Statements

This Form 10-K includes or incorporates by reference forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. Forward-looking statements, which are based on assumptions and describe our future plans, strategies and expectations, are generally identifiable by the use of the words "anticipate," "believe," "estimate," "expect," "intend," "project," or similar expressions. These forward-looking statements are subject to risks, uncertainties and assumptions about us. Important factors that could cause actual results to differ materially from the forward-looking statements we make in this Form 10-K are set forth under the caption "Risk Factors" and elsewhere in this prospectus and the documents incorporated by reference in this Form 10-K. If one or more of these risks or uncertainties materialize, or if any underlying assumptions prove incorrect, our actual results, performance or achievements may vary materially from any future results, performance or achievements expressed or implied by these forward-looking statements. All forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the cautionary statements in this paragraph.

Item 2. Properties

We maintain our headquarters, encompassing our executive office, manufacturing, engineering and research and development operations, in one leased 45,064 square foot facility in Petaluma, California. The lease, which was entered into on June 9, 2003, and is filed as an exhibit to this Form 10-K, expires on December 31, 2009. The prior lease for the same facility was due to expire in March 2004. The Company was leasing 120,000 sq. ft. and occupying 80,000 sq. ft. with the balance subleased or available for sublease. The new lease for 45,064 sq. ft. is for the occupied space only and the sub-tenants' leases have been assigned to the landlord. Other than certain large pieces of capital equipment leased by us, we own substantially all of the machinery and equipment used in our facilities. We believe that our existing facilities are adequate to meet our requirements for several years.

We lease an 18,000 square foot facility in Santa Barbara, California for manufacturing and support of Sputtered Films tools. We currently occupy about 10,700 sq. ft. with the remaining portion being sublet. The lease expires in September 2005 with an option to extend for three additional years.

We lease sales, service and process support space in Munich, Germany; Kawasaki, Japan; Catania, Italy; and Hsin Chu City, Taiwan.

Item 3. Legal Proceedings

On September 1, 1999, we filed a patent infringement action against Lam Research Corporation (the 'Lam' case), asserting infringement of two of our patents directed to dual frequency plasma processing technologies (the '618 and the '223 patents). We sought injunctive relief barring Lam from manufacturing, selling and supporting products that incorporate our patented technology. We further sought enhanced damages for willful infringement of our patents. The suit was initially filed in United States District Court for the Eastern District of Virginia, but was transferred by that court to the United States District Court of the Northern District of California.

Following an adverse decision from the United States Court of Appeals for the Federal Circuit in a prior case against Tokyo Electron Limited, Tegal voluntarily dismissed the '223 patent from the Lam case. A Markman hearing was held on the '618 patent in July 2002, and in September 2002 the Court issued a claim interpretation ruling in which it determined that the claim term "low frequency" means "less than approximately 1Mhz." In October 2002, Lam filed a motion for summary judgment of non-infringement of the '618 patent. On January 14, 2003, after modifying its original Markman ruling and further interpreting "low frequency" to have an upper limit of 1.4 Mhz, the Court granted Lam's motion for summary judgment of noninfringement of the '618 patent. Following the disposition of all of Tegal's claims of infringement, Lam sought an award of attorney's fees based on the allegation that Tegal's pursuit of the case should be deemed "exceptional." On June 5, 2003, the Court granted Tegal's motion for entry of judgment and request for a determination that the case is not exceptional (effectively denying Lam's demand for attorneys fees). Tegal is considering whether or not to appeal the summary judgment ruling of noninfringement of the '618 patent. At the present time we cannot assure you of the outcome of any such appeal may have on our business.

Item 4. Submission of Matters to a Vote of Security Holders

No matters were submitted to a vote of security holders during the fiscal fourth quarter ended March 31, 2003.

On April 28, 2003 at a special meeting of our stockholders, our board of directors was granted the authority to effect a reverse split of our common stock within a range of two-for-one to fifteen-for-one. The timing and ratio of a reverse split, if any, is at the sole discretion of our board of directors.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information regarding our executive officers as of March 31, 2003:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Michael L. Parodi	54	Chairman of the Board of Directors, President and Chief Executive Officer
Thomas R. Mika	51	Executive Vice President and Chief Financial Officer
Carole Anne Demachkie	40	Vice President, General Manager, Sputtered Films, Inc.
Stephen P. DeOrnellas	48	Vice President, Technology and Corporate Development and Chief Technical Officer
George B. Landreth	48	Vice President, Product Development
James D. McKibben	52	Vice President, Worldwide Sales and Marketing

Michael L. Parodi joined us as Director, President and Chief Executive Officer in December 1997 and assumed the additional role of Chairman of the Board in March 1999. From 1991 to 1996, Mr. Parodi was Chairman of the Board, President and Chief Executive Officer of Semiconductor Systems, Inc. ("SSI"), a manufacturer of photolithography processing equipment sold to the semiconductor and thin film head markets until SSI was merged with FSI International ("FSI"). Mr. Parodi remained with FSI as Executive Vice President and General Manager of SSI from the time of the merger to December 1997, integrating SSI into FSI. In 1990, Mr. Parodi led the acquisition of SSI from General Signal Corporation. Prior to 1990, Mr. Parodi held various senior engineering and operations management positions with General Signal Corporation, Signetics Corporation, Raytheon Company, Fairchild Semiconductor Corporation and National Semiconductor Corporation. Mr. Parodi currently is a member of the Semiconductor Equipment and Materials International Board of Directors.

Thomas R. Mika joined us in August 2002 as Executive Vice President and Chief Financial Officer. Mr. Mika has served as a director of Tegal since June 1992. From January 1982 until December 2001, he was the Managing Director of IMTEC, a private investment firm. During his tenure at IMTEC, Mr. Mika served as President and Chief Executive Officer of Soupmasters International, Inc., which filed for Chapter 11 protection in April 2000. On July 12, 2001, that company's plan of reorganization was confirmed by the Federal Bankruptcy Court and the bankruptcy proceedings were closed on October 19, 2001. Mr. Mika was also Managing Director of DISC International, Inc., a software company headquartered in England, and President of its U.S.-based subsidiary. While at IMTEC, he was involved in the financing and start-up of several companies, and acted as a financial advisor to several companies in merger and acquisition activities. Prior to founding IMTEC, Mr. Mika was a managing consultant with Cresap, McCormick & Paget and a science policy analyst for the National Science Foundation. He received a Masters in Business Administration from the Harvard Graduate School of Business.

Carole Anne Demachkie joined Sputtered Films in January of 1997 as Director of Corporate Communications. In 1999, Ms. Demachkie assumed the additional role of Manager of Customer Service and in 2001 was asked to increase her responsibilities to include general management of the day-to-day operations of the Company, reporting directly to the President, Peter Clarke. When the Company merged with Tegal Corporation in August of 2002, Ms. Demachkie became Vice President of Tegal, and General Manager of Sputtered Films. From 1986 to 1996, Ms. Demachkie owned and operated Clarke Design, a full service advertising and design agency in Santa Barbara, serving a variety of high-tech and development firms, including Sputtered Films.

Stephen P. Deornellas joined us in July 1990 as Vice President of Marketing and Technology, served as Vice President of Process Technology from April 1995 until June 1996, at which time he was appointed Vice President, Technology and Corporate Development and Chief Technical Officer. From 1989 to 1990 he was Vice President of Marketing for the Wafer Inspection Systems Division of KLA Instruments Corporation ("KLA"). From 1981 to 1989 he held a variety of product development and marketing management positions, including Vice President Marketing from 1987 to 1989, Vice President of Process Engineering from 1983 to 1987, and Senior Process Engineer from 1981 to 1983, with Lam Research Corporation where he had responsibility for the development and introduction of the Lam Autoetch and Rainbow product lines.

George B. Landreth joined us in November 1992 as Manager of Mechanical Engineering where he was responsible for directing the development of our 6500 series critical etch systems platform. From June 1996 until April 1997 he served as Director of Program Development, at which time he was promoted to Vice President, Product Development. Prior to joining us, Mr. Landreth held product development engineering management and design engineering positions with KLA, Silicon Valley Group, Inc., Optoscan Corporation, Eaton Corporation, Siltec Corporation and Peterbilt Motors.

James D. McKibben joined us in June 1996 as Vice President, Worldwide Sales. In November 1998, he assumed the additional role of Vice President, Marketing. Prior to joining us, from 1995 to 1996 and from 1988 to 1992, Mr. McKibben was Vice President, Marketing, Sales and Customer Support for MRS Technology, Inc., a lithography equipment manufacturer for flat panel displays. From 1993 to 1995, he served as Director of Marketing and Sales for SSI. From 1992 to 1993, he was Regional Manager for Kulicke and Soffa Industries, Inc., a maker of wire bonders and other back-end assembly equipment for the IC industry. Prior to 1988, Mr. McKibben held several sales and service management positions with Wild/Lietz, Inc., GCA Corporation and J.T. Baker Chemical Company.

There are no family relationships between any director, executive officer or person nominated to become a director or executive officer.

PART II

Item 5. Market for the Registrant's Common Equity and Related Stockholder Matters

Since May 6, 2003, our common stock has traded on the Nasdaq SmallCap Market under the symbol TGAL. Prior to this date, our common stock traded on the Nasdaq National Market since October 19, 1995. The following table sets forth the range of high and low sales prices for our common stock for each quarter during the prior two fiscal years.

FISCAL YEAR 2002	High	Low
First Quarter	\$3.450	\$2.031
Second Quarter	3.000	1.000
Third Quarter	1.810	1.100
Fourth Quarter	2.000	1.050
FISCAL YEAR 2003		
First Quarter	1.420	0.130
Second Quarter	1.300	0.330
Third Quarter	0.880	0.130
Fourth Quarter	0.790	0.250

The approximate number of record holders of our common stock as of March 31, 2003 was 297. We have not paid any cash dividends since our inception and do not anticipate paying cash dividends in the foreseeable future. Further, our domestic line of credit restricts the declaration and payment of cash dividends.

Equity Compensation Plan Information

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation Plans approved by security holders			
Equity Incentive Plan	1,396,345	\$ 4.03	--
1990 Stock Option Plan	192,516	5.88	--
1998 Equity Participation Plan	1,042,075	2.621,357,925	
Directors Stock Option Plan	495,000	2.53	90,000
Equity Compensation Plans not approved by security holders	--	--	--
Total	3,125,936	\$15,061,447,925	

Item 6. Selected Financial Data

	Year Ended March 31,				
	2003	2002	2001	2000	1999
	(In thousands, except per share data)				
Consolidated Statements of Operations Data:					
Revenue	\$ 14,100	\$ 21,606	\$ 38,205	\$ 26,438	\$ 29,035
Gross profit (loss)	(66)	6,676	13,915	9,231	8,161
Operating loss	(12,617)	(8,235)	(7,226)	(12,932)	(15,402)
Income (loss) before provision for income taxes and cumulative effect of change in accounting principle	(12,625)	(8,730)	1,096	(12,571)	(14,997)
Net income (loss)	(12,625)	(8,730)	699	(12,571)	(15,132)
Net income (loss) per share: (1)					
Basic	(0.82)	(0.67)	0.06	(1.15)	(1.42)
Diluted	(0.82)	(0.67)	0.05	(1.15)	(1.42)
Shares used in per share computation:					
Basic	15,311	13,030	12,499	10,964	10,630
Diluted	15,311	13,030	12,838	10,964	10,630
	March 31,				
	2003	2002	2001	2000	1999
	(In thousands, except per share data)				
Consolidated Balance Sheet Data:					
Cash and cash equivalents	\$ 912	\$ 8,100	\$12,649	\$12,627	\$17,569
Working capital	5,041	20,816	26,551	24,993	27,298
Total assets	17,209	29,227	42,252	35,573	39,652
Notes payable to banks and others	426	922	3,884	560	253
Stockholders' equity	11,123	22,286	28,609	27,431	30,816

(1) See Note 3 of our Consolidated Financial Statements for an explanation of the computation of earnings per share.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Information contained herein contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995, which can be identified by the use of forward-looking terminology such as "may," "will," "expect," "anticipate," "estimate" or "continue" or the negative thereof or other variations thereon or comparable terminology or which constitute projected financial information. The following contains cautionary statements identifying important factors with respect to such forward-looking statements, including certain risks and uncertainties, that could cause actual results to differ materially from those in such forward-looking statements. See "Risk Factors."

Company Overview

Tegal Corporation, a Delaware corporation ("Tegal"), designs, manufactures, markets and services plasma etch and deposition systems that enable the production of integrated circuits ("ICs"), memory and related microelectronics devices used in personal computers, wireless voice and data telecommunications, contact-less transaction devices, radio frequency identification devices ("RFID's"), smart cards, data storage and micro-level actuators. Etching and deposition constitute two of the principal IC and related device production process steps and each must be performed numerous times in the production of such devices.

We were formed in December 1989 to acquire the operations of the former Tegal Corporation, a division of Motorola, Inc. ("Motorola"). Our predecessor company was founded in 1972 and acquired by Motorola in 1978. We completed our initial public offering in October 1995.

On August 30, 2002, we acquired Sputtered Films, Incorporated ("SFI"), a privately held California corporation, pursuant to an Agreement and Plan of Merger dated August 13, 2002. SFI is a leader in the design, manufacture and service of high performance physical vapor deposition sputtering systems for the semiconductor and semiconductor packaging industry. SFI was founded in 1967 with the development of the S-Gun, a core technology of the acquired company.

Critical Accounting Policies and Estimates

Our discussion and analysis of the financial condition and results of operations are based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. On an on-going basis, we evaluate our estimates, including those related to inventory, warranty obligations, purchase order commitments, bad debts, income taxes, intangible assets, restructuring and contingencies and litigation. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We believe the following critical accounting policies affect our more significant judgments and estimates used in the preparation of our consolidated financial statements:

Revenue Recognition

Revenue is only recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the sales price is fixed or determinable, and collectibility is reasonably assured. We defer revenue recognition for new product sales until both installation and customer acceptance have occurred. For sales of existing products, upon the transfer of title and risk of loss, revenue is recorded at the lesser of the fair value of the equipment or the contractual amount billable upon shipment. The remainder is recorded as deferred revenue and recognized as revenue upon installation and customer acceptance. Revenue for spare part sales is generally recognized upon shipment. Services revenue is recognized as the related services are provided, unless services are paid for in advance according to service contracts, in which case revenue is deferred and recognized over the service period using the straight-line method.

Accounts Receivable – Allowance for Doubtful Accounts

We maintain an allowance for doubtful accounts receivable for estimated losses resulting from the inability of our customers to make required payments. If the financial condition of our customers were to deteriorate, or even a single customer was otherwise unable to make payments, additional allowances may be required. Given the average selling prices of our systems, a single customer default could have a material adverse effect on our consolidated financial position, results of operations, and cash flows.

Inventory

We estimate the effects of excess and obsolescence on the carrying values of our inventories based upon estimates of future demand and market conditions. We reserve inventories in excess of production demand. Should actual production demand differ from our estimates, additional inventory write-downs may be required, as was the case in the second quarter of fiscal 2003.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If undiscounted expected future cash flows are less than the carrying value of the assets, an impairment loss is recognized based on the excess of the carrying amount over the fair value of the assets.

Warranty Obligations

We provide for the estimated cost of our product warranties at the time revenue is recognized. Our warranty obligation is affected by product failure rates, material usage rates and the efficiency by which the product failure is corrected. Should actual product failure rates, material usage rates and labor efficiencies differ from our estimates, revisions to the estimated warranty liability may be required.

Deferred Taxes

We record a valuation allowance to reduce our deferred tax assets to the amount that is more likely than not to be realized. Based on the uncertainty of future pre-tax income, we have fully reserved our deferred tax assets as of March 31, 2003. In the event we were to determine that we would be able to realize our deferred tax assets in the future, an adjustment to the deferred tax asset would increase income in the period such determination was made.

Results of Operations

Tegal designs, manufactures, markets and services plasma etch and deposition systems that enable the production of integrated circuits ("ICs"), memory and related microelectronics devices used in personal computers, wireless voice and data telecommunications, contact-less transaction devices, radio frequency identification devices ("RFID's"), smart cards, data storage and micro-level actuators. With the acquisition of Sputtered Films on August 30, 2002 for stock consideration and assumed liabilities of approximately \$1.6 million, we now also provide deposition capabilities. The acquisition of Sputtered Films secured a source for a complementary deposition technology for our new materials strategy.

The following table sets forth certain financial data for the years indicated as a percentage of revenue:

	Year ended March 31,		
	2003	2002	2001
Revenue	100.0%	100.0%	100.0%
Cost of revenue	100.5	69.1	63.6
Gross profit (loss)	(0.5)	30.9	36.4
Operating expenses:			
Research and development expenses	34.2	27.4	23.4
Sales and marketing expenses	20.7	18.5	13.5
General and administrative expenses	34.1	23.1	18.4
Total operating expenses	89.0	69.0	55.3
Operating loss	(89.5)	(38.1)	(18.9)
Other income (expense), net	--	(2.3)	21.8
Income (loss) before provision for income taxes and cumulative effect of change in accounting principle	(89.5)	(40.4)	2.9
Provision for income taxes	--	--	0.1
Income (loss) before cumulative effect of change in accounting principle	(89.5)	(40.4)	2.8
Cumulative effect of change in accounting principle	--	--	(1.0)
Net income (loss)	(89.5)%	(40.4)%	1.8%

Years Ended March 31, 2003, 2002 and 2001

Revenue

Our revenue is derived from sales of new and refurbished systems, spare parts and non-warranty service. Revenue decreased 35 percent in fiscal 2003 from fiscal 2002 (to \$14.1 million from \$21.6 million). The revenue decrease in fiscal 2003 compared to fiscal 2002 was principally attributable to a sharp decrease in the sale of our 900 series systems during the economic slow down and two fewer 6500 series system sales, offset in part by the sale of one Endeavor system, in addition to lower spares and service sales. We believe the lower spares and service sales is the result of lower usage of the systems previously installed, occurring naturally as a result of lower capacity utilization by our customers. We believe that we have seen a "bottoming-out" of spares and service revenues, indicating higher utilization of our equipment. Revenue decreased 43 percent in fiscal 2002 from fiscal 2001 (to \$21.6 million from \$38.2 million). The revenue decrease in fiscal 2002 compared to fiscal 2001 was principally attributable to a sharp decrease in the sale of our 900 series systems during the economic slow down and lower spares sales.

International sales accounted for approximately 66, 67 and 61 percent of total revenue in fiscal 2003, 2002 and 2001, respectively. We expect that international sales will continue to account for a significant portion of our revenue.

Gross Profit (Loss)

Our gross profit (loss) as a percentage of revenue (gross margin) decreased to (0.5) percent in fiscal 2003 compared to 31 percent in fiscal 2002. The gross margin decrease in fiscal 2003 as compared to fiscal 2002 was principally due to an inventory write down of approximately \$1.9 million in the second quarter, accompanied by lower gross margins for systems because of lower volumes and continued high overhead costs. Our gross profit as a percentage of revenue (gross margin) decreased to 31 percent in fiscal 2002 compared to 36 percent in fiscal 2001. The gross margin decrease in fiscal 2002 as compared to fiscal 2001 was principally due to lower gross margins for systems because of lower volumes offset slightly by increased margins in spares and service.

Our gross profit as a percentage of revenue has been, and will continue to be, affected by a variety of factors, including the mix and average selling prices of systems sold and the costs to manufacture, service and support new product introductions and enhancements. Gross margins for our 6500 series systems are typically lower than those of our more mature 900 series systems due to the inefficiencies and lower vendor discounts associated with lower order volumes and increased service, installation and warranty support. However, gross profit improvement is one of our highest priorities. We believe that the results of our overhead reductions, along with a reclassification of certain assets will begin to exhibit themselves in gross profit improvements, especially as our sales volume increases.

Research and Development

Research and development expenses consist primarily of salaries, prototype material and other costs associated with our research and product development efforts. In absolute dollars, research and development expenses decreased to \$4.8 million in fiscal 2003 from \$5.9 million in fiscal 2002. The absolute dollar decrease in fiscal 2003 expenses from fiscal year 2002 was due primarily to cuts in expenses within non-essential programs. As a percentage of revenue, research and development increased to 34.2 percent in fiscal 2003 from 27.4 percent in fiscal 2002. In absolute dollars, research and development expenses decreased to \$5.9 million in fiscal 2002 from \$8.9 million in fiscal 2001. Research and development as a percentage of revenue increased to 27.4 percent in fiscal 2002 from 23.4 percent in fiscal 2001. The absolute dollar decrease in fiscal 2002 expenses from fiscal year 2001 was due primarily to strategic cuts in expenses. Although our R&D expense in absolute dollars is decreasing year over year, we continue to maintain active process development efforts in support of our new materials strategy. For several years, our research and development efforts have been focused primarily on customer needs for process solutions rather than hardware developments, which typically require substantially more investment.

Sales and Marketing

Sales and marketing expenses primarily consist of salaries, commissions, trade show promotion and advertising expenses. In absolute dollars, sales and marketing expenses decreased to \$2.9 million in fiscal year 2003 from \$4.0 million in fiscal 2002. As a percentage of revenue, sales and marketing expenses increased to 20.7 percent in fiscal year 2003 from 18.5 percent in fiscal 2002. The absolute dollar decrease in fiscal 2003 from fiscal year 2002 was primarily due to our cuts in expenses, such as a reduced presence at regional trade shows and conferences and lower advertising expenses. We naturally have lower commission expense due to reduced system sales, and have converted from direct sales to manufacturer's representatives in some foreign markets where business is very soft. Nevertheless, we believe that we have sufficient coverage in all markets to ensure that we are under consideration by customers who are in a position to commit funds to capital equipment purchases. In absolute dollars, sales and marketing expenses decreased to \$4.0 million in fiscal year 2002 from \$5.1 million in fiscal 2001. As a percentage of revenue, sales and marketing expenses increased to 18.5 percent in fiscal year 2002 from 13.5 percent in fiscal 2001. The absolute dollar decrease in fiscal 2002 from fiscal year 2001 was primarily due to our strategic cuts in expenses.

General and Administrative

General and administrative expenses consist of salaries, legal, accounting and related administrative services and expenses associated with general management, finance, information systems, human resources and investor relations activities. General and administrative expenses in absolute dollars decreased slightly to \$4.8 million in fiscal 2003 from \$5.0 million in fiscal 2002. The absolute dollar decreases in spending were related to continued strategic expense cuts, offset in part by the cost of the acquisition of Sputtered Films and their operations in August 2002. As a percentage of revenues, general and administrative expenses increased to 34.1 percent, up from 23.1 percent in fiscal 2002. General and administrative expenses in absolute dollars decreased to \$5.0 million in fiscal 2002 from \$7.1 million in fiscal 2001. As a percentage of revenues, general and administrative expenses increased to 23.1 percent, up from 18.4 percent in fiscal 2001. We continue to seek improvements in productivity in all general and administrative expense areas through reduction and cross-training of personnel, tighter management of outside service providers and the lowering of costs associated with being a public company.

Other Income (Expense), Net

Other income (expense), net, consists principally of royalty income, interest income, interest expense, gains and losses on foreign exchange and the sale of fixed assets. We recorded net non-operating expense of \$8 thousand in fiscal 2003 and \$0.5 million in fiscal 2002. In 2003, interest expense was greatly reduced due to reduced borrowings on both the Japanese and domestic lines of credit. We recorded net non-operating expense of \$0.5 million in fiscal 2002 and income of \$8.3 million in fiscal 2001. In 2002, net non-operating expense was primarily due to interest expense while in 2001, net non-operating income was primarily due to licensing fees received for non-exclusive patent rights.

Provision for Income Taxes

Our effective tax rate was zero percent in fiscal 2003 and 2002 and 2.3 percent in fiscal 2001. We recorded a small provision for federal alternative minimum tax in fiscal year 2001. No tax benefit was recorded for the losses incurred in fiscal 2003 and 2002 due to uncertainty related to the realization of such benefits.

Cumulative Effect of Change in Accounting Principle

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB 101"). SAB 101 summarizes certain areas of the Staff's views in applying generally accepted accounting principles to revenue recognition. Prior to the adoption of SAB 101, we recognized revenue from the sales of our products when title passed to the customer, and accrued for the costs of installation and estimated warranty costs. Under the new accounting method adopted retroactively to April 1, 2000, no revenues are recognized until both title and risk of loss have passed to the customer and we defer revenue recognition for new product sales until installation and customer acceptance have occurred. For sales of existing products, upon the transfer of title and risk of loss, revenue is recorded at the lesser of the fair value of the equipment or the contractual amount billable upon shipment. The remainder is recorded as deferred revenue and recognized as revenue upon installation and customer acceptance. Revenue recognition for spare part sales has generally not changed under the provisions of SAB 101. Services revenue recognition is also unchanged, with such revenue recognized as the related services are provided, unless services are paid for in advance according to service contracts, in which case revenue is deferred and recognized over the service period using the straight-line method. In all cases, revenue is only recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, our price is fixed or determinable, and collectibility is reasonably assured.

During the fourth quarter of fiscal 2001, we implemented SAB 101, retroactive to the beginning of the fiscal year. This was reported as a cumulative effect of a change in accounting principle as of April 1, 2000. The cumulative effect of the change in accounting principle on prior years resulted in a charge to income of \$372,000 (net of income taxes of \$0), which has been included in income for the year ended March 31, 2001. For fiscal 2001, we recognized \$478,000 in revenue that is included in the cumulative effect of the change in accounting principle.

Liquidity and Capital Resources

Net cash used in operations was \$6.0 million in fiscal 2003, due principally to a loss of \$11.6 million (after adjusting for depreciation and amortization) and a decrease in accounts payable, accrued liabilities, and deferred revenue, offset in part by a decrease in accounts receivable, inventory and prepaid assets. Net cash used in operations was \$3.6 million in fiscal 2002 due principally to a loss of \$7.8 million (after adjusting for depreciation and amortization) and a decrease in accounts payable and other current liabilities, offset in part by a decrease in accounts receivable, inventory and prepaid expenses. Net cash used in operations was \$2.9 million in fiscal 2001 due principally to income of \$2.1 million (after adjusting for depreciation and amortization) and an increase in accounts payable and other accrued liabilities, offset by an increase in accounts receivable, inventory and prepaid expenses.

Net capital expenditures totaled \$0.5 million, \$0.5 million and \$0.9 million, in fiscal 2003, 2002 and 2001, respectively. Capital expenditures in all three years were incurred principally for demonstration equipment, leasehold improvements and to acquire design tools, analytical equipment and computers. Fiscal 2003 investing activities also included \$0.2 million of cash transaction costs related to the SFI acquisition, net of cash acquired.

Net cash used in financing activities totaled \$0.8 million for fiscal 2003 due principally to decreased borrowings against the domestic line of credit. Net cash used in financing activities totaled \$0.7 million for fiscal 2002 due principally to decreased borrowings against the domestic line of credit, partially offset by the \$2.2 million of net proceeds from the sale of common stock and warrants. Net cash provided by financing activities totaled \$3.6 million for fiscal 2001 due principally to increased borrowings against the domestic line of credit.

As of March 31, 2003, we had \$0.9 million of cash and cash equivalents. In addition to cash and cash equivalents, our other principal sources of liquidity consist of unused portions of several bank borrowing facilities. As of March 31, 2003, we had available \$10.0 million of unused domestic credit line availability based on borrowing ratios with no borrowing against that line. The domestic credit line bears interest at prime plus 1 percent, or 5.25% as of March 31, 2003. The domestic line of credit has a \$10 million maximum borrowing capacity secured by substantially all of our assets and is limited by the amounts of eligible accounts receivable and inventory on the balance sheet. This facility will be available until July 24, 2004. In addition to the foregoing facility, as of March 31, 2003, our Japanese subsidiary had a line of credit available for a total of 150 million Yen (approximately \$1.3 million at exchange rates prevailing on March 31, 2003) collateralized by Japanese customer promissory notes held by such subsidiary in advance of payment on customers' accounts receivable with 8.4 million yen borrowed (approximately \$0.07 million at exchange rates prevailing on March 31, 2003). The Japanese bank line bears interest at Japanese prime (1.375 percent as of March 31, 2003) plus 1.0 percent.

The Company incurred net losses of \$12.6 million and \$8.7 million for the years ended March 31, 2003 and 2002, respectively, generated negative cash flows from operations of \$6.2 million and \$3.6 million in these years, and has a cash balance of \$912 at March 31, 2003, which raises substantial doubt about its ability to continue as a going concern. The Company's plans with respect to this matter include (1) the restructuring executed in the third and fourth quarters of fiscal 2003, which further reduced employee headcount, (2) the restructuring of the Company's Petaluma facility lease which reduced both available square footage and expected fiscal 2004 payments to the lessor (see note 6) and (3) ongoing negotiations to raise debt financing. The Company believes the cost reductions and a projected increase in sales during fiscal 2004 will generate sufficient cash flows to fund its operations through March 31, 2004. However, the projected sales are to a limited number of new and existing customers and are based on internal and customer provided estimates of future demand, not firm customer orders. If the projected sales do not materialize, the Company will need to reduce expenses further and raise additional capital through the issuance of debt or equity securities. If additional funds are raised through the issuance of preferred stock or debt, these securities could have rights, privileges or preferences senior to those of common stock, and debt covenants could impose restrictions on the Company's operations. The sale of equity or debt could result in additional dilution to current stockholders, and such financing may not be available to the Company on acceptable terms, if at all.

The following summarizes our contractual obligations at March 31, 2003, and the effect such obligations are expected to have on our liquidity and cash flows in future periods (in thousands):

Contractual obligations:	Less than		After	
	Total	1 Year	1-3 Years	3 Years
Non-cancelable capital lease obligations	\$ 47.0	\$ 9.7	\$ 23.6	\$ 13.7
Non-cancelable operating lease obligations	5,687.4	1,031.7	1,808.1	2,847.6
Notes payable	308.0	308.0	--	--
Total contractual cash obligations	\$6,042.4	\$1,349.4	\$1,831.7	\$2,861.3

Certain sales contracts of the Company include provisions under which customers would be indemnified by the Company in the event of, among other things, a third-party claim against the customer for intellectual property rights infringement related to the Company's products. There are no limitations on the maximum potential future payments under these guarantees. The Company has accrued no amounts in relation to these provisions as no such claims have been made and the Company believes it has valid, enforceable rights to the intellectual property embedded in its products.

Item 7A. Quantitative and Qualitative Disclosure about Market Risk

Market Risk Disclosure

We are exposed to financial market risks, including changes in foreign currency exchange ("FX") rates and interest rates. To mitigate the risks associated with FX rates, we utilize derivative financial instruments. We do not use derivative financial instruments for speculative or trading purposes.

We manufacture the majority of our products in the United States of America; however, we service customers worldwide and thus have a cost base that is diversified over a number of European and Asian currencies as well as the U.S. dollar. This diverse base of local currency costs serves to mitigate partially the earnings effect of potential changes in value of our local currency denominated revenue. Additionally, we denominate our export sales in U.S. dollars, whenever possible.

We manage short-term exposures to changing FX rates with financial market transactions, principally through the purchase of forward FX contracts to offset the earnings and cash-flow impact of the nonfunctional currency-denominated receivables. Forward FX contracts are denominated in the same currency as the receivable being hedged, and the term of the forward FX contract matches the term of the underlying receivable. The receivables being hedged arise from trade transactions and other firm commitments affecting us.

We do not hedge our foreign currency exposures in a manner that would entirely eliminate the effects of changes in FX rates on our operations. Accordingly, our reported revenue and results of operations have been, and may in the future be, affected by changes in the FX rates. We have utilized a sensitivity analysis for the purpose of identifying market risk in relation to underlying transactions that are sensitive to FX rates including foreign currency forward exchange contracts and nonfunctional currency denominated receivables. The net amount that is exposed to changes in foreign currency rates was evaluated against a 10% change in the value of the foreign currency versus the U.S. dollar. Based on this analysis, we believe that we are not materially sensitive to changes in foreign currency rates on our net exposed FX position.

A 49 basis-point move in the weighted average interest rates (10% of our weighted average interest rates in 2003) affecting our floating rate financial instruments as of March 31, 2003 would have an immaterial effect on our pretax results of operations over the next fiscal year.

All of the potential changes noted above are based on sensitivity analyses performed on our balances as of March 31, 2003.

TEGAL CORPORATION
CONSOLIDATED BALANCE SHEETS

	March 31,	
	2003	2002
	(In thousands, except share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 912	\$ 8,100
Accounts receivable, net of allowances for sale returns and doubtful accounts of \$213 and \$399 at March 31, 2003 and 2002, respectively	2,681	2,579
Inventory	7,032	15,577
Prepaid expenses and other current assets	465	1,492
	11,090	27,748
Property and equipment, net	4,916	1,382
Intangible assets, net	959	--
Other assets	244	97
	\$ 17,209	\$ 29,227
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Notes payable	\$ 389	\$ 913
Accounts payable	1,923	1,166
Deferred revenue	324	932
Accrued expenses and other current liabilities	3,413	3,921
	6,049	6,932
Long term portion of capital lease obligations	37	9
	6,086	6,941
Commitments and contingencies (Note 6)		
Stockholders' equity:		
Preferred stock; \$0.01 par value; 5,000,000 shares authorized; none issued and outstanding	--	--
Common stock; \$0.01 par value; 35,000,000 shares authorized; 16,091,762 and 14,310,938 shares issued and outstanding at March 31, 2003 and 2002, respectively	161	143
Additional paid-in capital	68,806	67,315
Accumulated other comprehensive income	465	512
Accumulated deficit	(58,309)	(45,684)
	11,123	22,286
	\$ 17,209	\$ 29,227

See accompanying notes to consolidated financial statements.

TEGAL CORPORATION

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended March 31,		
	2003	2002	2001
	(In thousands, except share and per share data)		
Revenue	\$ 14,100	\$ 21,606	\$ 38,205
Cost of revenue	14,166	14,930	24,290
Gross profit (loss)	(66)	6,676	13,915
Operating expenses:			
Research and development expenses	4,815	5,928	8,939
Sales and marketing expenses	2,922	3,996	5,140
General and administrative expenses	4,814	4,987	7,062
Total operating expenses	12,551	14,911	21,141
Operating loss	(12,617)	(8,235)	(7,226)
Other income (expense), net	(8)	(495)	8,322
Income (loss) before provision for income taxes and cumulative effect of change in accounting principle	(12,625)	(8,730)	1,096
Provision for income taxes	--	--	25
Income (loss) before cumulative effect of change in accounting principle	(12,625)	(8,730)	1,071
Cumulative effect of change in accounting principle, net of tax of \$0	--	--	(372)
Net income (loss)	\$(12,625)	\$(8,730)	\$ 699
Income (loss) per share before cumulative effect of change in accounting principle:			
Basic	\$ (0.82)	\$ (0.67)	\$ 0.09
Diluted	(0.82)	(0.67)	0.08
Cumulative effect of change in accounting principle per share:			
Basic	\$ --	\$ --	\$ (0.03)
Diluted	--	--	(0.03)
Net income (loss) per share:			
Basic	\$ (0.82)	\$ (0.67)	\$ 0.06
Diluted	(0.82)	(0.67)	0.05
Weighted average shares used in per share computations:			
Basic	15,311	13,030	12,499
Diluted	15,311	13,030	12,838

See accompanying notes to consolidated financial statements.

TEGAL CORPORATION

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Common Stock		Additional Paid-in Capital	Accumulated Other Comprehensive Income	Accumulated Deficit	Total Stockholders' Equity	Comprehensive Income (Loss)
	Shares	Amount					
(In thousands, except share and per share data)							
Balances at March 31, 2000	12,452,744	\$124	\$64,699	\$ 261	\$(37,653)	\$ 27,431	
Common stock issued under option and stock purchase plans	119,508	2	388	--	--	390	
Net income	--	--	--	--	699	699	\$ 699
Cumulative translation adjustment	--	--	--	89	--	89	89
Total comprehensive income	--	--	--	--	--	--	\$ 788
Balances at March 31, 2001	12,572,252	126	65,087	350	(36,954)	28,609	
Common stock issued under option and stock purchase plans	77,681	1	97	--	--	98	
Common stock sold	1,661,005	16	2,131	--	--	2,147	
Net loss	--	--	--	--	(8,730)	(8,730)	\$(8,730)
Cumulative translation adjustment	--	--	--	162	--	162	162
Total comprehensive loss	--	--	--	--	--	--	\$(8,568)
Balances at March 31, 2002	14,310,938	\$143	\$67,315	\$ 512	\$(45,684)	\$ 22,286	
Common stock issued under option and stock purchase plans	55,412	1	25	--	--	26	
Common stock issued for acquisition	1,499,987	15	1,170	--	--	1,185	
Common stock issued for services rendered	225,425	2	102	--	--	104	
Warrants and options to purchase common stock issued for services rendered .	--	--	194	--	--	194	
Net loss	--	--	--	--	(12,625)	(12,625)	\$(12,625)
Cumulative translation adjustment	--	--	--	(47)	--	(47)	(47)
Total comprehensive loss	--	--	--	--	--	--	\$(12,672)
Balances at March 31, 2003	16,091,762	\$161	\$68,806	\$ 465	\$(58,309)	\$ 11,123	

See accompanying notes to consolidated financial statements.

TEGAL CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended March 31,		
	2003	2002	2001
(In thousands)			
Cash flows from operating activities:			
Net income (loss)	\$(12,625)	\$(8,730)	\$ 699
Adjustments to reconcile net income (loss) to net cash used in operating activities:			
Depreciation and amortization	1,043	891	1,362
Allowance for doubtful accounts and for sales return	(186)	272	(322)
Cumulative effect of change in accounting principle	--	--	372
Warrants and options issued for services rendered	143	--	--
Changes in operating assets and liabilities, net of acquisition:			
Accounts receivable	363	5,361	(1,232)
Inventory	5,328	1,927	(4,961)
Prepaid expenses and other assets	1,004	692	(1,102)
Accounts payable and other current liabilities	(1,054)	(4,016)	2,326
Net cash used in operating activities	(5,984)	(3,603)	(2,858)
Cash flows from investing activities:			
Purchases of property and equipment	(295)	(501)	(910)
Business acquisition, net of cash acquired	(184)	--	--
Net cash used in investing activities	(479)	(501)	(910)
Cash flows from financing activities:			
Net proceeds from issuance of common stock	21	2,245	390
Borrowings under notes payable	5,590	23,834	40,757
Repayment of notes payable	(6,386)	(26,722)	(37,433)
Repayment of capital lease obligations	(45)	(74)	(104)
Net cash provided by (used in) financing activities	(820)	(717)	3,610
Effect of exchange rates on cash and cash equivalents	95	272	180
Net increase (decrease) in cash and cash equivalents	(7,188)	(4,549)	22
Cash and cash equivalents at beginning of year	8,100	12,649	12,627
Cash and cash equivalents at end of year	\$ 912	\$ 8,100	\$ 12,649
Supplemental disclosures of cash paid during the year for:			
Income taxes	\$ --	\$ --	\$ 35
Interest	\$ 581	\$ 508	\$ 557

Supplemental Schedule of Non Cash Investing Activities (amounts in thousands, except shares):

The Company reclassified finished goods inventory of \$3,698 to property and equipment during the quarter ended September 30, 2002 as the systems are being used for customer testing, training and demonstration purposes and the Company does not believe such equipment will be sold in the upcoming twelve months.

On August 30, 2002, the Company acquired the outstanding capital stock of Sputtered Films, Inc. Consideration totaled \$1,560 and consisted of 1,499,987 shares of the Company's common stock valued at \$1,185 and transaction costs of \$375. The purchase price was allocated as follows:

Assets acquired:	
Current assets	\$ 708
Fixed assets	824
Technology	782
Trade name	253
Total assets	2,567
Liabilities assumed:	
Current liabilities	(1,007)
Net assets acquired	\$ 1,560

See accompanying notes to consolidated financial statements.

TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (All amounts in thousands, except per share data and share data, unless otherwise noted)

Note 1. Description of Business and Summary of Significant Accounting Policies

Description of Business

Tegal Corporation, a Delaware corporation ("Tegal"), designs, manufactures, markets and services plasma etch and deposition systems that enable the production of integrated circuits ("ICs"), memory and related microelectronics devices used in personal computers, wireless voice and data telecommunications, contact-less transaction devices, radio frequency identification devices ("RFID's"), smart cards, data storage and micro-level actuators. Etching and deposition constitute two of the principal IC and related device production process steps and each must be performed numerous times in the production of such devices.

On August 30, 2002, the Company acquired Sputtered Films, Incorporated ("SFI"), a privately held California corporation, pursuant to an Agreement and Plan of Merger dated August 13, 2002. SFI is a leader in the design, manufacture and service of high performance physical vapor deposition sputtering systems for the semiconductor and semiconductor packaging industry. SFI was founded in 1967 with the development of the S-Gun, a core technology of the acquired company (see Note 8).

Basis of Presentation

The consolidated financial statements contemplate the realization of assets and the satisfaction of liabilities in the normal course of business. The Company incurred net losses of \$12.6 million and \$8.7 million for the years ended March 31, 2003 and 2002, respectively, generated negative cash flows from operations of \$6.0 million and \$3.6 million in these years, and has a cash balance of \$0.9 million at March 31, 2003, which raises substantial doubt about its ability to continue as a going concern. The Company's plans with respect to this matter include (1) the restructuring executed in the third and fourth quarters of fiscal 2003, which further reduced employee headcount, and (2) the restructuring of the Company's Petaluma facility lease which reduced both available square footage and expected fiscal 2004 payments to the lessor (see note 6). The Company believes the cost reductions, and a projected increase in sales during fiscal 2004 will generate sufficient cash flows to fund its operations through March 31, 2004. However, the projected sales are to a limited number of new and existing customers and are based on internal and customer provided estimates of future demand, not firm customer orders. If the projected sales do not materialize, the Company will need to reduce expenses further and raise additional capital through the issuance of debt or equity securities. If additional funds are raised through the issuance of preferred stock or debt, these securities could have rights, privileges or preferences senior to those of common stock, and debt covenants could impose restrictions on the Company's operations. The sale of equity or debt could result in additional dilution to current stockholders, and such financing may not be available to the Company on acceptable terms, if at all. The consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amount or classification of liabilities or any other adjustments that might be necessary should the Company be unable to continue as a going concern.

The consolidated financial statements include the accounts of the Company and all of its subsidiaries. Intercompany transactions and balances are eliminated in consolidation. Accounts denominated in foreign currencies are translated using the foreign currencies as the functional currencies. Assets and liabilities of foreign operations are translated to U.S. dollars at current rates of exchange and revenues and expenses are translated using weighted average rates. The effects of translating the financial statements of foreign subsidiaries into U.S. dollars are reported as accumulated other comprehensive income, a separate component of stockholders' equity. Gains and losses from foreign currency transactions are included as a separate component of other income (expense).

The preparation of financial statements in conformity with generally accepted accounting principles in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Actual results could vary from those estimates.

Cash and Cash Equivalents

The Company considers all highly liquid debt instruments having a maturity of three months or less on the date of purchase to be cash equivalents.

At March 31, 2003 and 2002, all of the Company's investments are classified as cash equivalents on the consolidated balance sheet. The investment portfolio at March 31, 2003 and 2002 is comprised of money market funds. At March 31, 2003 and 2002, the fair value of the Company's investments approximated cost.

Financial Instruments Disclosures

The carrying amount of the Company's financial instruments, including cash and cash equivalents, accounts receivable and accounts payable, approximates fair value due to their relatively short maturity. The Company has foreign subsidiaries which operate and sell the Company's products in various global markets. As a result, the Company is exposed to changes in foreign currency exchange rates. The Company utilizes hedge instruments, primarily forward contracts, to manage its exposure associated with firm third-party transactions denominated in non-functional currencies. The Company does not hold derivative financial instruments for speculative purposes. Realized and unrealized gains and losses related to forward contracts considered to be effective hedges are deferred until settlement of the hedged items. They are recognized as other gains or losses when a hedged transaction is no longer expected to occur. Realized and unrealized gains and losses on ineffective hedges are recorded to other income (expense). Deferred gains and losses were not significant at March 31, 2003 or 2002. Foreign currency gains and losses included in other income (expense) were not significant for the years ended March 31, 2003, 2002 and 2001 (see note 2).

At March 31, 2003, the Company had forward exchange contracts maturing at various dates throughout fiscal 2004 to exchange 85.0 million Japanese Yen into \$0.7 million. At March 31, 2002, the Company had forward exchange contracts maturing at various dates throughout fiscal 2003 to exchange 255 million Japanese Yen into \$1.9 million. The fair value of these instruments was immaterial at March 31, 2003 and 2002.

Concentration of Credit Risk

Financial instruments that potentially subject the Company to significant concentrations of credit risk consist primarily of temporary cash investments and accounts receivable. Substantially all of the Company's temporary investments are invested in money market funds. The Company's accounts receivable are derived primarily from sales to customers located in the U.S., Europe, and Asia. The Company performs ongoing credit evaluations of its customers and generally requires no collateral. The Company maintains reserves for potential credit losses. Write-offs during the periods presented have been insignificant. As of March 31, 2003, one customer accounted for approximately 38 percent of the accounts receivable balance. As of March 31, 2002, two customers accounted for approximately 27 percent and 11 percent of the accounts receivable balance.

Inventory

Inventory is stated at the lower of cost or market, reduced by provision for excess and obsolescence. Cost is computed using standard cost, which approximates actual cost on a first-in, first-out basis and includes material, labor and manufacturing overhead costs.

Warranty Costs

A warranty is provided under the terms of our system contract. Typically, the warranty period is six to 12 months depending on the contract specifications. The Company provides for these costs at the time of revenue recognition based upon prior experience (see Note 2).

Property and Equipment

Property and equipment is recorded at cost. Depreciation is calculated using the straight-line method over the estimated useful lives of the assets, ranging from three to seven years. Leasehold improvements are stated at cost and are amortized using the straight-line method over the shorter of the estimated useful life of the improvements or the lease term. When assets are disposed of, the cost and related accumulated depreciation are removed from the accounts and the resulting gains or losses are included in the results of operations. The Company generally depreciates their assets over the following periods:

	<u>Years</u>
Furniture and machinery and equipment	7
Computer and software	3 - 5
Leasehold improvements	5 or remaining lease life

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. If undiscounted expected future cash flows are less than the carrying value of the assets, an impairment loss is recognized based on the excess of the carrying amount over the fair value of the assets.

Income Taxes

Deferred income taxes are recognized for the differences between the tax bases of assets and liabilities and their financial reporting amounts based on enacted tax rates. Valuation allowances are established when necessary to reduce deferred tax assets to the amount expected to be realized.

Revenue Recognition

In December 1999, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 101, "Revenue Recognition in Financial Statements" ("SAB 101"). SAB 101 summarizes certain areas of the Staff's views in applying generally accepted accounting principles to revenue recognition. Prior to the adoption of SAB 101, the Company recognized revenue from the sales of its products when title passed to the customer, and accrued for the costs of installation and estimated warranty costs. Under the new accounting method adopted retroactively to April 1, 2000, no revenues are recognized until both title and risk of loss have passed to the customer and we defer revenue recognition for new product sales until installation and customer acceptance have occurred. For sales of existing products, upon the transfer of title and risk of loss, revenue is recorded at the lesser of the fair value of the equipment or the contractual amount billable upon shipment. The remainder is recorded as deferred revenue and recognized as revenue upon installation and customer acceptance. Revenue recognition for spare part sales generally occurs upon shipment, which is unchanged under the provisions of SAB 101. Services revenue recognition is also unchanged, with such revenue recognized as the related services are provided, unless services are paid for in advance according to service contracts, in which case revenue is deferred and recognized over the service period using the straight-line method. In all cases, revenue is only recognized when persuasive evidence of an arrangement exists, delivery has occurred or services have been rendered, the sales price is fixed or determinable, and collectibility is reasonably assured.

During the fourth quarter of fiscal 2001, the Company implemented SAB 101, retroactive to the beginning of the fiscal year. This was reported as a cumulative effect of a change in accounting principle as of April 1, 2000. The cumulative effect of the change in accounting principle on prior years resulted in a charge to income of \$372 (net of income taxes of \$0), or \$0.03 per share, which has been included in income for the year ended March 31, 2001. For fiscal 2000, the Company recognized \$478 in revenue that is included in the cumulative effect of the change in accounting principle as of April 1, 2001. The results for the first three quarters of the year ended March 31, 2001 were restated in accordance with SAB 101.

Earnings Per Share

Basic earnings per share ("EPS") is computed by dividing net income (loss) available to common stockholders by the weighted average number of common shares outstanding during the period. Diluted EPS is computed using the weighted average number of common shares outstanding plus any potentially dilutive securities, except when antidilutive.

Stock-Based Compensation

The Company accounts for stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, "Accounting for Stock Issued to Employees," and related interpretations, including FASB Interpretation No. 44 ("FIN 44"), "Accounting for Certain Transactions Involving Stock Compensation — an interpretation of APB Opinion No. 25." The Company's policy is to grant options with an exercise price equal to the closing market price of the Company's stock on the grant date. Accordingly, no compensation cost for stock option grants has been recognized in the Company's statements of operations. Additional proforma disclosures assuming the Company applied the fair value method of accounting for employee stock compensation under Statement of Financial Accounting Standards ("SFAS") No. 123, "Accounting for Stock-Based Compensation" as amended by SFAS No. 148, "Accounting for Stock-Based Compensation – Transition and Disclosure" follows.

As required by SFAS No. 123 for proforma disclosure purposes only, the Company has calculated the estimated grant date fair value of its stock option awards using the Black-Scholes model. The Black-Scholes model, as well as other currently accepted option valuation models, was developed to estimate the fair value of freely tradable, fully transferable options without vesting restrictions. These models also require highly subjective assumptions, including future stock price volatility and expected time until exercise, which greatly affect the calculated grant date fair value.

The following assumptions are included in the estimated grant date fair value calculations for the Company's stock option awards and Employee Qualified Stock Purchase Plan ("Employee Plan"):

	2003	2002	2001
Expected life (years):			
Stock options	4.0	4.0	4.0
Employee plan	0.5	0.5	0.5
Volatility:			
Stock options	165%	85%	108%
Employee plan	165%	85%	115%
Risk-free interest rate	2.45%	4.3%	5.5%
Dividend yield	0%	0%	0%

The weighted average estimated grant date fair value, as defined by SFAS No. 123, for stock option awards granted during fiscal 2003, 2002 and 2001 was \$0.62, \$1.02 and \$2.23 per option, respectively.

The following table summarizes information with respect to stock options outstanding as of March 31, 2003 (number of shares in thousands):

Range of Exercise Prices	Outstanding Options as of March 31, 2003			Options in Which Underlying Shares No Longer Subject to Repurchase Rights		Exercisable at March 31, 2003	
	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Life	Number of Shares	Weighted Average Exercise Price	Number of Shares	Weighted Average Exercise Price
\$0.39 -- \$1.50	525	\$ 1.00	8.43	263	\$ 1.33	265	\$ 1.32
\$1.51 -- \$2.19	380	1.72	9.34	371	1.73	380	1.72
\$2.25 -- \$3.00	284	2.61	8.68	178	2.65	223	2.62
\$3.25 -- \$3.25	656	3.25	6.44	656	3.25	656	3.25
\$3.38 -- \$3.88	225	3.51	9.54	217	3.51	225	3.51
\$4.25 -- \$4.25	510	4.25	9.61	510	4.25	510	4.25
\$4.75 -- \$6.88	355	5.62	5.00	342	5.65	353	5.63
\$7.68 -- \$8.00	19	7.69	6.89	19	7.69	19	7.69
\$8.75 -- \$8.75	145	8.75	8.35	128	8.88	145	8.75
\$12.00 -- \$12.00	27	12.00	2.98	27	12	27	12.00
\$0.39 -- \$12.00	3,126	\$ 3.44	7.97	2,711	\$ 3.71	2,803	\$ 3.71

Compensation cost (included in proforma net income (loss) and net income (loss) per share amounts only) for the grant date fair value, as defined by SFAS No. 123, of the purchase rights granted under the Employee Plan was calculated using the Black-Scholes model and the assumptions outlined above. The weighted average estimated grant date fair values per share, as defined by SFAS No. 123, for rights granted under the employee stock purchase plan during fiscal 2003, 2002 and 2001 were \$0.29, \$0.47 and \$1.29, respectively.

Had the Company recorded compensation costs based on the estimated grant date fair value (as defined by SFAS 123) for awards granted under its stock option plans and Employee Plan, the Company's net loss and loss per share would have been increased to the proforma amounts below for the years ended March 31, 2003, 2002 and 2001:

	2003	2002	2001
Proforma net loss	\$ (12,910)	\$ (10,077)	\$ (1,124)
Proforma net loss per share:			
Basic and diluted	\$ (0.84)	\$ (0.78)	\$ (0.09)

Comprehensive Income (Loss)

Comprehensive income (loss) is defined as the change in equity of a company during a period from transactions and other events and circumstances excluding transactions resulting from investments by owners and distributions to owners. The primary difference between net income (loss) and comprehensive income (loss) for Tegal is attributable to foreign currency translation adjustments. Comprehensive income (loss) is shown in the statement of stockholders' equity.

New Accounting Pronouncements

On June 28, 2002, the Financial Accounting Standards Board (the "FASB") issued SFAS No. 146 ("SFAS No. 146"), "Accounting for Exit or Disposal Activities", effective for exit or disposal activities that are initiated after December 31, 2002. SFAS No. 146 addresses significant issues regarding the recognition, measurement, and reporting of costs that are associated with exit and disposal activities, including restructuring activities that are currently accounted for pursuant to the guidance that the Emerging Issues Task Force ("EITF") has set forth in EITF Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (including Certain Costs Incurred in a Restructuring)". A fundamental conclusion reached in SFAS No. 146 is that an entity's commitment to a plan, by itself, does not create a present obligation to others that meets the definition of a liability. Therefore, this Statement eliminates the definition and requirements for recognition of exit costs in EITF Issue 94-3. This Statement also establishes that fair value is the objective for initial measurement of the liability. The scope of SFAS No. 146 also includes (1) costs related to terminating a contract that is not a capital lease and (2) termination benefits that employees who are involuntarily terminated receive under the terms of a one-time benefit arrangement that is not an ongoing benefit arrangement or an individual deferred-compensation contract. The Company does not believe that the implementation of this pronouncement will have a material impact on its consolidated financial position, results of operations or cash flows.

In November 2002, the FASB issued FASB Interpretation No. 45 ("FIN 45"), "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others." FIN 45 requires that a liability be recorded in the guarantor's balance sheet upon issuance of a guarantee. In addition, FIN 45 requires disclosures about the guarantees that an entity has issued, including a rollforward of the entity's product warranty liabilities. At March 31, 2003, no guarantees were issued by the Company. The Company has accrued warranty costs and included additional disclosures in accordance with FIN 45 in note 2.

In November 2002, the Emerging Issues Task Force reached a consensus on Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables." This issue addresses how revenue arrangements with multiple deliverables should be divided into separate units of accounting and how the arrangement consideration should be allocated to the identified separate accounting units. EITF No. 00-21 is effective for fiscal periods beginning after June 15, 2003. The Company has not yet determined the impact of adopting EITF No. 00-21 on its consolidated financial statements.

In December 2002, the FASB issued SFAS No. 148, "Accounting for Stock-Based Compensation Costs—Transition and Disclosure". This statement amends SFAS No. 123, "Accounting for Stock-Based Compensation", and provides alternative methods of transition for an entity that voluntarily changes to the fair value based method of accounting for stock-based compensation. It also requires additional disclosures about the effects on reported net income of an entity's accounting policy with respect to stock-based employee compensation. The Company accounts for stock-based compensation in accordance with Accounting Principles Board (APB) Opinion No. 25, "Accounting for Stock Issued to Employees" and has adopted the disclosure-only alternative of FAS 123. The Company adopted the disclosure provisions of SFAS No. 148 in December 2002.

The FASB issued Interpretation No. 46, "Consolidation of Variable Interest Entities", ("FIN 46") in January 2003. FIN 46 provides accounting guidance for consolidation of variable interest entities ("VIE"), formerly referred to as special purpose entities. FIN 46 applies to enterprises that have a controlling interest or business or contractual relationship with a VIE. FIN 46 requires consolidation of existing, non-controlled affiliates if the VIE is unable to finance its operations without investor support, or where the other investors do not have exposure to the significant risks and rewards of ownership. The Company will adopt the provisions of FIN 46 in the quarter ending September 30, 2003. The Company does not expect this pronouncement to have an effect on the Company's consolidated financial position, results of operations or cash flows.

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity." SFAS No. 150 changes the accounting guidance for certain financial instruments that, under previous guidance, could be classified as equity or "mezzanine" equity by now requiring those instruments to be classified as liabilities (or assets in some circumstances) in the statement of financial position. Further, SFAS No. 150 requires disclosure regarding the terms of those instruments and settlement alternatives. SFAS No. 150 is generally effective for all financial instruments entered into or modified after May 31, 2003, and is otherwise effective at the beginning of the first interim period beginning after June 15, 2003. The Company is currently assessing the impact of SFAS No. 150 on its financial position and results of operations.

Note 2. Balance Sheet and Income Statement Detail

Inventory consisted of:

	March 31,	
	2003	2002
Raw materials	\$ 3,218	\$ 5,430
Work in process	1,937	2,542
Finished goods and spares	1,877	7,605
	<u>\$ 7,032</u>	<u>\$ 15,577</u>

Property and equipment, net, consisted of:

	March 31,	
	2003	2002
Machinery and equipment	\$ 4,994	\$ 4,460
Demo lab equipment	5,591	2,251
Computer and software	2,324	2,011
Leasehold improvements	3,509	3,188
	<u>16,418</u>	<u>11,910</u>
Less accumulated depreciation and amortization	(11,502)	(10,528)
	<u>\$ 4,916</u>	<u>\$ 1,382</u>

Machinery and equipment at March 31, 2003 and 2002, includes approximately \$56 and \$252, respectively, of assets under leases that have been capitalized. Accumulated amortization for such equipment approximated \$13 and \$199, respectively.

A summary of accrued expenses and other current liabilities follows:

	March 31,	
	2003	2002
Accrued compensation costs	\$ 756	\$ 686
Income taxes payable	504	512
Product warranty	734	1,205
Other	1,419	1,518
	<u>\$ 3,413</u>	<u>\$ 3,921</u>

Product warranty and guarantees:

The Company provides warranty on all system sales based on the estimated cost of product warranties at the time revenue is recognized. The warranty obligation is affected by product failure rates, material usage rates, and the efficiency by which the product failure is corrected. Warranty activity for the years ended March 31, 2003 and 2002 is as follows:

	Year ended March 31,	
	2003	2002
Balance at the beginning of the period	\$ 1,205	\$ 1,542
Additional warranty accruals for warranties issued during the year	427	1,511
Changes in accruals related to pre-existing warranties	(203)	--
Settlements made during the year	(695)	(1,848)
Balance at the end of the year	\$ 734	\$ 1,205

Certain of the Company's sales contracts include provisions under which customers would be indemnified by the Company in the event of, among other things, a third-party claim against the customer for intellectual property rights infringement related to the Company's products. There are no limitations on the maximum potential future payments under these guarantees. The Company has accrued no amounts in relation to these provisions as no such claims have been made and the Company believes it has valid, enforceable rights to the intellectual property embedded in its products

Other income (expense), net, consisted of the following:

	Year Ended March 31,		
	2003	2002	2001
Interest income	\$ 41	\$ 203	\$ 597
Interest expense	(370)	(617)	(731)
Foreign currency exchange gain (loss), net	178	(60)	276
Non-exclusive licensing fees	--	--	8,350
Other	143	(21)	(170)
	\$ (8)	\$ (495)	\$ 8,322

Note 3. Earnings Per Share

SFAS No. 128, "Earnings Per Share," requires dual presentation of basic and diluted net income (loss) per share on the face of the statement of operations. Basic EPS is computed by dividing income (loss) available to common stockholders (numerator) by the weighted average number of common shares outstanding (denominator) for the period. Diluted EPS gives effect to all dilutive potential common shares outstanding during the period. The computation of diluted EPS uses the average market prices during the period. All amounts in the following table are in thousands except per share data.

	Year Ended March 31,		
	2003	2002	2001
Basic net income (loss) per share:			
Income (loss) available to common stockholders	\$(12,625)	\$(8,730)	\$ 699
Weighted average common shares outstanding	15,311	13,030	12,499
Basic net income (loss) per share	\$ (0.82)	\$ (0.67)	\$ 0.06
Diluted net income (loss) per share:			
Income (loss) available to common stockholders	\$(12,625)	\$(8,730)	\$ 699
Weighted average common shares outstanding	15,311	13,030	12,499
Diluted potential common shares from stock options	--	--	339
Weighted average common shares and dilutive potential common shares	15,311	13,030	12,838
Diluted net income (loss) per share	\$ (0.82)	\$ (0.67)	\$ 0.05

Stock options and warrants outstanding at March 31, 2003 of 4,739,559 and at March 31, 2002 of 4,153,413 were excluded from the computations of diluted net income (loss) per share because of their anti-dilutive effect on diluted income (loss) per share.

Note 4. Notes Payable

In June 2002, the Company replaced its prior line of credit with a line of credit totaling \$10 million with a U.S. financial institution. This line of credit is available until July 2004. There was no borrowing on this line of credit as of March 31, 2003. The amount outstanding as of March 31, 2002, under the prior line of credit arrangement, was \$0.7 million. The current line bears interest at prime plus 1.0 percent (5.25 percent at March 31, 2003), is secured by a blanket security on all of the Company's assets, and further limited by the amounts of accounts receivable and inventories on the balance sheet. The line of credit restricts the declaration and payment of cash dividends and includes, among other terms and conditions, requirements that the Company maintain certain levels of tangible net worth. The Company was in compliance with the tangible net worth covenant as of March 31, 2003.

The Company's Japanese subsidiary has a line of credit available for a total of 150 million Yen (approximately \$1.3 million at exchange rates prevailing on March 31, 2003) collateralized by Japanese customer promissory notes held by such subsidiary in advance of payment on customers' accounts receivable. The Japanese bank line bears interest at Japanese prime (1.375 percent as of March 31, 2003) plus 1.0 percent. Outstanding balances on the lines in U.S. dollars as of March 31, 2003 and 2002 were \$0.07 and \$0.2 million.

Notes payable as of March 31, 2003 consisted of two outstanding notes to the California Trade and Commerce Agency and to a retiring officer of Sputtered Films, Inc. for \$233,000 and \$75,000, respectively. These two notes are payable on demand. The unsecured note from the California Trade and Commerce Agency carries an annual interest rate of 5.75 percent with monthly interest only payments of approximately \$4,200 per month. Although the payment deadlines are being met, the note is currently in technical default due to the acquisition of Sputtered Films by Tegal Corporation. The unsecured note from the retiring officer of Sputtered Films, Inc carries an annual interest rate of 10 percent.

Note 5. Income Taxes

The components of income (loss) before provision for income taxes and cumulative effect of change in accounting principle are as follows:

	Year Ended March 31,		
	2003	2002	2001
Domestic	\$ (12,090)	\$ (8,280)	\$ 1,447
Foreign	(535)	(450)	(351)
	<u>\$ (12,625)</u>	<u>\$ (8,730)</u>	<u>\$ 1,096</u>

The income tax provision differs from the amount computed by applying the statutory U.S. federal income tax rate as follows:

	Year Ended March 31,		
	2003	2002	2001
Income tax provision (benefit) at U.S. statutory rate	\$ (4,293)	\$ (2,968)	\$ 373
State taxes net of federal benefit	(419)	(283)	--
Utilization of foreign losses	182	--	209
Reversal of deferred tax assets previously reserved	--	--	160
Utilization of net operating losses and credits	--	--	(643)
Change in valuation allowance	4,042	3,146	(74)
Other	488	105	--
Income tax expense	<u>\$ --</u>	<u>\$ --</u>	<u>\$ 25</u>

The components of deferred taxes are as follows:

	March 31,	
	2003	2002
Revenue recognized for tax and deferred for book	\$ 246	\$ 308
Non-deductible accruals and reserves	3,834	3,220
Net operating loss carryforward	14,831	10,978
Credits	2,975	3,346
Uniform capitalization adjustment	644	565
Other	911	983
Total	<u>23,441</u>	<u>19,400</u>
Valuation allowance	<u>(23,441)</u>	<u>(19,400)</u>
Net deferred tax asset	<u>\$ --</u>	<u>\$ --</u>

We have recorded no net deferred tax assets at March 31, 2003 and 2002, respectively. The Company has provided a valuation allowance of \$23.4 million and \$19.4 million at March 31, 2003 and March 31, 2002, respectively. The valuation allowance is for the net operating loss carryforward, credits and non-deductible accruals and reserves, for which realization of future benefit is uncertain. The valuation allowance increased by \$4.0 million and \$3.1 million during the years ended March 31, 2003 and 2001 respectively.

At March 31, 2003, the Company had federal and state operating loss carryforwards of approximately \$40.6 million and \$17.7 million, respectively. These net operating loss carryforwards will begin to expire, if not utilized, in the year ending March 31, 2020 and 2006 for federal and state income tax purposes, respectively.

At March 31, 2003, the Company also had research and experimentation credit carryforwards of \$2.3 million and \$1.1 million for federal and state income tax purposes, respectively, which begin to expire, if not utilized in the year ending March 31, 2006.

Note 6. Commitments and Contingencies

The Company has several noncancelable operating leases and capital leases, primarily for general office, production and warehouse facilities, that expire over the next five years. Future minimum lease payments under these leases are as follows:

<u>Year Ending March 31</u>	Capital	Operating	Operating
	Leases	Leases	Leases
	As of March 31, 2003	As of March 31, 2003	As of June 9, 2003
2004	\$ 12	\$ 2,000	\$ 1,032
2005	14	326	1,011
2006	15	91	797
2007	16	8	734
2008	3	3	751
Thereafter	--	--	1,362
Total minimum lease payments	60	\$ 2,428	\$ 5,687
Less amount representing interest	(13)		
Present value of minimum lease payments	47		
Less current portion	10		
Long term capital lease obligation	\$ 37		

Most leases provide for the Company to pay real estate taxes and other maintenance expenses. Rent expense for operating leases, net of sublease income, was \$1.3 million, \$1.3 million, and \$1.7 million, during the years ended March 31, 2003, 2002 and 2001, respectively.

The Company signed a new lease agreement dated June 9, 2003 for the manufacturing and corporate office facility in Petaluma, California to occupy 45,064 square feet. The lease expires December 31, 2009. The prior lease for the same facility was due to expire in March 2004. The Company was leasing 120,000 sq. ft. and occupying 80,000 with the balance subleased or available for sublease. The new lease for 45,064 sq. ft. is for the occupied space only and the sub-tenants' leases have been assigned to the landlord.

Note 7. Restructuring

During the year ended March 31, 2003, the Company recorded a severance charge of approximately \$500 related to staff reductions of 74 employees, of which approximately \$300 was classified as cost of sales, \$100 as research and development, and \$100 as sales, marketing and general and administrative expenses. The Company had an outstanding severance liability of approximately \$75 as of March 31, 2003.

During the year ended March 31, 2002, the Company recorded a charge of approximately \$600 related to staff reductions of 55 employees, of which approximately \$86 was classified as cost of sales, \$231 as research and development, \$263 as sales and marketing and \$20 as general and administrative expenses. All amounts were paid to the terminated employees as of March 31, 2002.

Note 8. Acquisition and Intangible Assets

On August 30, 2002, the Company acquired Sputtered Films, Inc., a California corporation ("Sputtered Films") pursuant to an Agreement and Plan of Merger dated August 13, 2002. Sputtered Films is a leader in the design and manufacture of sputtering equipment for semiconductor, photomask, advanced packaging (including flip chip) and compound semiconductor applications. The acquisition of Sputtered Films secured a source for a complementary deposition technology for the Company's new materials strategy. The total acquisition cost was \$1,560,000, comprised of 1,499,987 shares of the Company's common stock valued at \$1,185,000 and transaction costs of \$375,000. The results of Sputtered Films' operations have been included in the Company's results commencing on August 31, 2002.

The purchase price of this acquisition has been allocated to the acquired assets and assumed liabilities on the basis of their fair values as of the date of the acquisition, as determined by an appraisal performed by an independent valuation specialist. The fair value of the assets acquired and liabilities assumed, based on the allocation of the purchase price, is summarized as follows:

Current assets	\$	708
Property and equipment		824
Technology		782
Trade name		253
		<u>2,567</u>
Total assets acquired		2,567
Current liabilities		(1,007)
		<u>1,560</u>
Net assets acquired	\$	1,560

The amounts allocated to technology and trade name are amortized on a straight-line basis over estimated useful lives of eight years.

As of March 31, 2003, intangible assets consisted of the following:

	<u>Gross</u>	<u>Accumulated Amortization</u>	<u>Net</u>
Technology	\$ 782	\$ 57	\$ 725
Trade name	253	19	234
	<u>1,035</u>	<u>76</u>	<u>959</u>
Total	\$ 1,035	\$ 76	\$ 959

The estimated future amortization expense of intangible assets as of March 31, 2003 is as follows:

2004	\$	130
2005		130
2006		130
2007		130
2008		130
Thereafter		309
		<u>959</u>
Total	\$	959

The following unaudited proforma financial results of Tegal Corporation and Sputtered Films for the year ended March 31, 2003, give effect to the acquisition of Sputtered Films as if the acquisition had occurred on the first day of the periods presented and includes adjustments such as amortization of intangible assets directly attributable to the acquisition, and expected to have a continuing impact on the combined company.

The unaudited proforma financial results are provided for comparative purposes only and are not necessarily indicative of what the Company's actual results would have been had the forgoing transaction been consummated on such date, nor does it give effect to the synergies, cost savings and other charges expected to result from the acquisition. Accordingly, the proforma financial results do not purport to be indicative of the Company's results of operations as of the date hereof or for any period ended on the date hereof or for any other future date or period.

Unaudited Proforma Financial Information (in thousands, except per share amounts):

	<u>Year ended March 31,</u>	
	<u>2003</u>	<u>2002</u>
Revenue	\$ 15,764	\$ 25,713
Net loss	\$ (13,257)	\$ (11,932)
Net loss per share, basic and diluted	\$ (0.80)	\$ (0.82)
Shares used in per share computations:		
Basic	16,547	14,530
Diluted	16,547	14,530

Note 9. Sale of Units of Common Stock and Warrants

In August 2002, the Company granted 62,650 options to purchase shares of the Company's common stock at an exercise price of \$0.83 to consultants for services rendered. The estimated fair value of the vested options for fiscal 2003 amounted to \$7 and was recorded as an operating expense. The following variables were used to determine the fair value of such instruments under the Black-Scholes option pricing model: volatility of 85%, term of four years, risk free interest of 3.40% and underlying stock price equal to fair market value at the time of grant.

During 2003, the Company granted 225,425 shares of common stock to consultants for services rendered. The fair value of such shares, which amounted to approximately \$104, was recorded as an operating expense.

In July 2002, the Company granted 125,000 warrants to purchase shares of the Company's common stock at an exercise price of \$2.00 to a financial institution. The fair value of such warrants, which amounted to approximately \$82, was recorded as a debt offering cost and is being amortized over the two-year life of the associated line of credit. The amortization for fiscal 2003 amounted to \$32 and was recorded as interest expense. The following variables were used to determine the fair value of such instruments under the Black-Scholes option pricing model: volatility of 85%, term of two years, risk free interest of 4.95% and underlying stock price equal to fair market value at the time of grant.

In September 2002, the Company granted 350,000 warrants to purchase shares of the Company's common stock at an exercise price of \$1.20 to consultants in lieu of cash payments. The fair value of such warrants, which amounted to approximately \$105, was capitalized as a transaction cost under purchase accounting. The following variables were used to determine the fair value of such instruments under the Black-Scholes option pricing model: volatility of 85%, term of four years, risk free interest of 4.95% and underlying stock price equal to fair market value at the time of grant.

On December 31, 2001, the Company closed a private placement in which it sold to accredited investors 1,661,005 units, each unit consisting of one share of common stock and one warrant to purchase one-half of a share of common stock, for proceeds of \$2.2 million, net of \$0.1 million in cash stock issuance costs. The Company also granted to the placement agent warrants to purchase 83,050 shares of the Company's common stock. The warrants have an exercise price of \$2.50 per share and expire on December 31, 2006.

Note 10. Employee Benefit Plans

Equity Incentive Plan

Pursuant to the Amended and Restated Equity Incentive Plan ("Equity Incentive Plan"), options and stock purchase rights to purchase 3,500,000 shares of common stock could be granted to management and consultants. The exercise price of options and the purchase price of stock purchase rights generally has been the fair value of the Company's common stock on the date of grant. At the date of issuance of the stock options, all options are exercisable; however the Company has the right to repurchase any stock acquired pursuant to the exercise of stock options upon termination of employment or consulting agreement at the original exercise price for up to four years from the date the options were granted, with the repurchase rights ratably expiring over that period of time. Incentive stock options are exercisable for up to ten years from the grant date of the option. Nonqualified stock options are exercisable for up to 15 years from the grant date of the option. The Equity Incentive Plan expired in December 1999. Consequently no shares were available for issuance under the Equity Incentive Plan as of March 31, 2003.

1990 Stock Option Plan

Pursuant to the terms of the Company's 1990 Stock Option Plan ("1990 Option Plan"), options and stock purchase rights to purchase 550,000 shares of common stock could be granted to employees of the Company or its affiliates. Incentive stock options are exercisable for a period of up to ten years from the date of grant of the option and nonqualified stock options are exercisable for a period of up to ten years and two days from the date of grant of the option. At the date of issuance of the stock options, all options are exercisable; however, the Company has the right to repurchase any stock acquired pursuant to the exercise of stock options upon termination of employment at the original exercise price for up to four years from the date the options were granted, with the repurchase rights ratably expiring over that period of time. The 1990 Option Plan expired on March 10, 2000. Consequently no shares were available for issuance under the 1990 Option Plan as of March 31, 2003.

1998 Equity Participation Plan

Pursuant to the terms of the Company's Amended 1998 Equity Participation Plan ("Equity Plan"), which was authorized as a successor plan to the Company's Equity Incentive Plan and 1990 Option Plan, 2,400,000 shares of common stock may be granted upon the exercise of options and stock appreciation rights or upon the vesting of restricted stock awards. The exercise price of options generally will be the fair value of the Company's common stock on the date of grant. Options are generally subject to vesting at the discretion of the Compensation Committee of the Board of Directors (the "Committee"). At the discretion of the Committee, vesting may be accelerated when the fair market value of the Company's stock equals a certain price established by the Committee on the date of grant. Incentive stock options will be exercisable for up to ten years from the grant date of the option. Non-qualified stock options will be exercisable for a maximum term to be set by the Committee upon grant. As of March 31, 2003, 1,042,075 shares were available for issuance under the Equity Plan.

Directors Stock Option Plan

Pursuant to the terms of the Stock Option Plan for Outside Directors, as amended, ("Directors Plan"), up to 600,000 shares of common stock may be granted to outside directors. Under the Directors Plan, each outside director who was elected or appointed to the Board on or after September 15, 1998 shall be granted an option to purchase 20,000 shares of common stock and on each second anniversary after the applicable election or appointment shall receive an additional option to purchase 20,000 shares, provided that such outside director continues to serve as an outside director on that date. For each outside director, 10,000 shares will vest on the first and second anniversaries of the option grant date, contingent upon continued service as a director. Vesting may be accelerated, at the discretion of the Board, when the fair market value of the Company's stock equals a certain price set by the Board on the date of grant of the option. The Directors Plan allows for additional grants at the discretion of the Compensation Committee. As of March 31, 2003, 495,000 shares were available for issuance under the Directors Plan.

The following table summarizes the Company's stock option activity for the four plans described above and weighted average exercise price within each transaction type for each of the years ended March 31, 2003, 2002 and 2001 (number of shares in thousands):

	2003		2002		2001	
	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price	Shares	Weighted Average Exercise Price
Options outstanding at beginning of year	2,962	\$ 3.69	2,656	\$ 3.95	3,099	\$ 4.19
Options canceled	(92)	3.76	(206)	4.90	(730)	4.68
Options granted	260	0.67	515	2.83	343	3.00
Options exercised	(4)	0.24	(3)	0.24	(56)	1.71
Options outstanding March 31	3,126	\$ 3.19	2,962	\$ 3.69	2,656	\$ 3.95

At March 31, 2003, the repurchase rights associated with 2,711,440 of the options outstanding had expired.

Employee Qualified Stock Purchase Plan

The Company has offered an Employee Plan under which rights are granted to purchase shares of common stock at 85% of the lesser of the market value of such shares at the beginning of a six month offering period or at the end of that six month period. Under the Employee Plan, the Company is authorized to issue up to 500,000 shares of common stock. 50,813 common stock shares were purchased in fiscal 2003 and 74,824 common shares were purchased in fiscal 2002. Shares available for future purchase under the Employee Plan were 91,260 at March 31, 2003.

Savings and Investment Plan

The Company has established a defined contribution plan that covers substantially all U.S. employees who are regularly scheduled to work 20 or more hours per week. Employee contributions of up to four percent of each covered employee's compensation will be matched by the Company based upon a percentage to be determined annually by the Board. Employees may contribute up to 15 percent of their compensation, not to exceed a prescribed maximum amount. The Company made contributions to the plan of \$10, \$17 and \$25 in the years ended March 31, 2003, 2002 and 2001, respectively.

Note 11. Stockholder Rights Plan

On June 11, 1996, the Board adopted a Preferred Shares Rights Agreement ("Rights Agreement") and pursuant to the Rights Agreement authorized and declared a dividend of one preferred share purchase right ("Right") for each common share of the Company's outstanding shares at the close of business on July 1, 1996. The Rights are designed to protect and maximize the value of the outstanding equity interests in the Company in the event of an unsolicited attempt by an acquirer to take over the Company in a manner or under terms not approved by the Board. Each Right becomes exercisable to purchase one one-hundredth of a share of Series A Junior Participating Preferred Stock at an exercise price of \$45.00 upon certain circumstances associated with an unsolicited takeover attempt and expires on June 11, 2006. The Company may redeem the Rights at a price of \$0.01 per Right. The Agreement was amended on January 15, 1999.

Note 12. Segment Information

The Company's business is completely focused on one industry segment, the design, manufacturing and servicing of plasma etch systems and deposition systems used in the manufacturing of integrated circuits and related devices.

The following is a summary of the Company's operations by geography:

Revenues:	Years Ended March 31,		
	2003	2002	2001
Sales to customers located in:			
United States	\$ 4,864	\$ 7,168	\$ 15,087
Asia, excluding Japan	1,537	3,903	5,612
Japan	2,934	4,094	6,862
Germany	1,851	731	3,998
Italy	353	2,617	2,219
Europe, excluding Germany and Italy	2,561	3,093	4,427
Total sales	\$ 14,100	\$ 21,606	\$ 38,205

	March 31,	
	2003	2002
Long-lived assets at year-end:		
United States	\$ 5,966	\$ 1,288
Europe	38	53
Japan	82	84
Asia, excluding Japan	33	54
Total long-lived assets	\$ 6,119	\$ 1,479

The Company's sales are primarily to domestic and international semiconductor manufacturers. The top five customers accounted for approximately 40 percent, 46 percent and 46 percent of the Company's total net revenues for the years ended March 31, 2003, 2002 and 2001, respectively. Two customers accounted for 15 percent and 10 percent of the Company's total net revenues for the year ended March 31, 2003. One customer accounted for 15 percent and two customers accounted for 12 percent each of the Company's total net revenues for the year ended March 31, 2002. One customer accounted for 13 percent and two customers accounted for 11 percent each of the Company's total net sales for the year ended March 31, 2001.

Quarterly Results of Operations (Unaudited)

The following table sets forth our unaudited selected financial data for each of the eight quarterly periods in the two year period ended March 31, 2003. The data for the eight quarterly periods for fiscal year 2003 and 2002 are under SAB 101.

	Three Months Ended							
	Mar. 31, 2003	Dec. 31, 2002	Sept. 30, 2002	June 30 2002	Mar. 31, 2002	Dec. 31, 2001	Sept. 30, 2001	June 30, 2001
	(In thousands, except per share data)							
Quarterly Financial Data:								
Revenue	\$ 4,002	\$ 3,701	\$ 2,675	\$ 3,722	\$ 6,969	\$ 2,369	\$ 4,379	\$ 7,889
Gross profit (loss)	1,275	88	(1,632)	203	1,944	966	1,484	2,282
Net loss	(1,695)	(3,262)	(4,822)	(2,846)	(1,225)	(2,542)	(2,468)	(2,495)
Net loss per share*								
Basic	(0.09)	(0.20)	(0.33)	(0.20)	(0.09)	(0.20)	(0.20)	(0.20)
Diluted	(0.09)	(0.20)	(0.33)	(0.20)	(0.09)	(0.20)	(0.20)	(0.20)

* Net loss per share is computed independently for each of the quarters presented. Therefore, the sum of the quarterly net loss per share may not equal the annual net loss per share.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders of Tegal Corporation:

In our opinion, the consolidated financial statements listed in the index appearing under Item 16(a)(1) present fairly, in all material respects, the financial position of Tegal Corporation and its subsidiaries at March 31, 2003 and 2002, and the results of their operations and their cash flows for each of the three years in the period ended March 31, 2003 in conformity with accounting principles generally accepted in the United States of America. In addition, in our opinion, the financial statement schedule listed in the index appearing under Item 16(a)(2) presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements. These financial statements and financial statement schedule are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements and financial statement schedule based on our audits. We conducted our audits of these statements in accordance with auditing standards generally accepted in the United States of America, which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has generated negative cash flows from operations that raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ PricewaterhouseCoopers LLP

San Francisco, California
June 10, 2003

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure None.

PART III

Certain information required by Part III is omitted from this Report in that we will file a definitive proxy statement pursuant to Regulation 14A (the "Proxy Statement") no later than 120 days after the end of the fiscal year covered by this Report, and certain information included therein is incorporated herein by reference. Only those sections of the Proxy Statement that specifically address the items set forth herein are incorporated by reference. Such incorporation does not include the Compensation Committee Report or the Performance Graph included in the Proxy Statement.

Item 10. Directors and Executive Officers of the Registrant

The information concerning our directors required by this Item is incorporated by reference to our Proxy Statement under the caption "Election of Directors."

The information required by this Item relating to our executive officers is included under the caption "Executive Officers of the Registrant" in Part I, Item 4 of this Form 10-K Report.

The information regarding compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, is incorporated by reference to the Company's Proxy Statement under the caption "Section 16(a) Beneficial Ownership Reporting Compliance."

Item 11. Executive Compensation

The information required by this Item is incorporated by reference to our Proxy Statement under the caption "Executive Compensation."

Item 12. Security Ownership of Certain Beneficial Owners and Management

The information required by this Item is incorporated by reference to our Proxy Statement under the captions "Principal Stockholders", "Ownership of Stock by Management."

Item 13. Certain Relationships and Related Transactions

The information required by this Item is incorporated by reference to our Proxy Statement under the caption "Certain Transactions."

Item 14. Controls and Procedures

- (a) *Evaluation of Disclosure Controls and Procedures.* Based on their evaluation as of a date within 90 days of the filing date of this annual report on Form 10-K, the Company's principal executive officer and principal financial officer have concluded that the Company's disclosure controls and procedures (as defined in Rules 13a-14(c) under the Securities Exchange Act of 1934) are effective.
 - (b) *Changes in Internal Controls.* There were no significant changes in the Company's internal controls or in other factors that could significantly affect these controls subsequent to the date of their evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.
-

PART IV

Item 16. Exhibits, Financial Statement Schedule and Reports on Form 8-K

(a) The following documents are filed as part of this Form 10-K:

(1) Financial Statements

The Company's Financial Statements and notes thereto appear in this Form 10-K according to the following Index of Consolidated Financial Statements:

	<u>Page</u>
Consolidated Balance Sheets as of March 31, 2003 and 2002	25
Consolidated Statements of Operations for the years ended March 31, 2003, 2002 and 2001	26
Consolidated Statements of Stockholders' Equity for the years ended March 31, 2003, 2002 and 2001	27
Consolidated Statements of Cash Flows for the years ended March 31, 2003, 2002 and 2001	28
Notes to Consolidated Financial Statements	29
Report of Independent Accountants	43

(2) Financial Statement Schedule

	<u>Page</u>
Schedule II-- Valuation and Qualifying Accounts	50

Schedules other than those listed above have been omitted since they are either not required, not applicable, or the required information is shown in the consolidated financial statements or related notes.

(3) Exhibits

The following exhibits are referenced or included in this report:

<u>Exhibit Number</u>	<u>Description</u>
2.1	Agreement and Plan of Merger by and among Tegal Corporation, SFI Acquisition Corp., Sputtered Films, Inc. and the Shareholder Agent dated as of August 13, 2002 (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report filed with the SEC on August 16, 2002)
3.1	Certificate of Incorporation of the Registrant, as amended (incorporated by reference to Exhibits 3(i).1 and 3(i).2 included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995)
3.2	By-laws of Registrant (incorporated by reference to Exhibit 3(ii) included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995)
*4.1	Form of Certificate for Common Stock
4.2	First Amendment to Rights Agreement between the registrant and ChaseMellon Shareholder Services, dated as of January 15, 1999 (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report filed with the SEC on January 1, 1999)
4.3	Rights Agreement between the Registrant and ChaseMellon Shareholder Services dated as of June 11, 1996 (incorporated by reference to Registrant's current report filed with the SEC on June 28, 1996)
**10.1	Employment Agreement between the Registrant and Stephen P. DeOrnellas dated December 16, 1997 (incorporated by reference to Exhibit 10.10 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998 (Commission File No. 0-26824))
**10.2	Employment Agreement between Registrant and Michael L. Parodi dated as of December 17, 1997 (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998)
10.3	Form of Unit Purchase Agreement dated December 31, 2001 (incorporated by reference to Exhibit (i) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)

<u>Exhibit Number</u>	<u>Description</u>
10.4	Form of Warrant (incorporated by reference to Exhibit (ii) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
**10.5	Third Amended and Restated Stock Option Plan for Outside Directors (incorporated by reference to Exhibit (iv) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
10.6	Security and Loan Agreement between Registrant and Silicon Valley Bank dated as of June 26, 2002
10.7	Lease between the Registrant and Jane Crocker, formerly Jane C. Jacobs, as Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990 ("Crocker") and Norman E. MacKay ("MacKay") dated as of June 9, 2003
10.8	Security and Loan Agreement [Exim] between Registrant and Silicon Valley Bank dated as of June 26, 2002
10.9	Intellectual Property Security Agreement between Registrant and Valley Bank dated as of June 26, 2002
10.10	Warrant to purchase stock Agreement between Registrant and Silicon Valley Bank dated as of June 26, 2002
10.11	Employment Agreement between the Registrant and Thomas Mika dated August 12, 2002
10.12	Employment Agreement between the Registrant and Carole Anne Demachkie dated August 30, 2002
21	List of Subsidiaries of the Registrant
23.1	Consent of Independent Accountants
24.1	Power of Attorney (incorporated by reference to the signature page to this Annual Report)
*	Incorporated by reference to identically numbered exhibits included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995.
**	Management contract for compensatory plan or arrangement.
	(c) Reports on Form 8-K.
	None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

TEGAL CORPORATION

By: /s/ MICHAEL L. PARODI

Michael L. Parodi

Chairman, President & Chief Executive Officer

Dated: June 27, 2003

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Michael L. Parodi, his or her attorney-in-fact, with the powers of substitution, for him or her in any and all capacities, to sign any amendments to this Report of Form 10-K, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming all that each of said attorneys-in-fact, or his substitute or substitutes, may do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ MICHAEL L. PARODI</u> Michael L. Parodi	Chairman, President, Chief Executive Officer and Director (Principal Executive Officer)	June 27, 2003
<u>/s/ THOMAS R. MIKA</u> Thomas R. Mika	Chief Financial Officer (Principal Financial and Accounting Officer)	June 27, 2003
<u>/s/ EDWARD A. DOHRING</u> Edward A. Dohring	Director	June 27, 2003
<u>/s/ JEFFREY KRAUSS</u> Jeffrey Krauss	Director	June 27, 2003
<u>/s/ DUANE WADSWORTH</u> Duane Wadsworth	Director	June 27, 2003

CERTIFICATIONS

I, Thomas R. Mika, certify that:

1. I have reviewed this annual report on Form 10-K of Tegal Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report; and
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - (a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this report (the "Evaluation Date"); and
 - (c) presented in this report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):
 - (a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this report whether or not there significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: June 27, 2003

/s/ Thomas R. Mika
Chief Financial Officer

I, Michael L. Parodi, certify that:

1. I have reviewed this annual report on Form 10-K of Tegal Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report; and
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report.
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:
 - (a) designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this report (the "Evaluation Date"); and
 - (c) presented in this report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent function):
 - (a) all significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and
 - (b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and
6. The registrant's other certifying officer and I have indicated in this report whether or not there significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: June 27, 2003

/s/ Michael L. Parodi
Chief Executive Officer and President

TEGAL CORPORATION

SCHEDULE II-- VALUATION AND QUALIFYING ACCOUNTS
 Years Ended March 31, 2001, 2002, 2003

<u>Description</u>	<u>Balance At Beginning of Year</u>	<u>Charged to Costs and Expenses</u>	<u>Charged to Other Accounts</u>	<u>Deductions</u>	<u>Balance At End of Year</u>
	(In thousands)				
Year ended March 31, 2001:					
Doubtful accounts	354	24	(11)	(253)	114
Sales returns and allowances	66	298	(51)	(305)	8
Cash discounts	29	25	(2)	(47)	5
Year ended March 31, 2002:					
Doubtful accounts	114	216	24	(15)	339
Sales returns and allowances	8	92	--	(57)	43
Cash discounts	5	20	--	(8)	17
Year ended March 31, 2003:					
Doubtful accounts	339	64	--	(238)	165
Sales returns and allowances	43	44	--	(65)	22
Cash discounts	17	16	--	(7)	26

INDEX TO EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
2.1	Agreement and Plan of Merger by and among Tegal Corporation, SFI Acquisition Corp., Sputtered Films, Inc. and the Shareholder Agent dated as of August 13, 2002 (incorporated by reference to Exhibit 2.1 to the Registrant's Current Report filed with the SEC on August 16, 2002)
3.1	Certificate of Incorporation of the Registrant, as amended (incorporated by reference to Exhibits 3(i).1 and 3(i).2 included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995)
3.2	By-laws of Registrant (incorporated by reference to Exhibit 3(ii) included in Registrant's Registration Statement on Form S-1 (File No. 33-84702) declared effective by the Securities and Exchange Commission on October 18, 1995)
*4.1	Form of Certificate for Common Stock
4.2	First Amendment to Rights Agreement between the registrant and ChaseMellon Shareholder Services, dated as of January 15, 1999 (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report filed with the SEC on January 1, 1999)
4.3	Rights Agreement between the Registrant and ChaseMellon Shareholder Services dated as of June 11, 1996 (incorporated by reference to Registrant's current report filed with the SEC on June 28, 1996)
**10.1	Employment Agreement between the Registrant and Stephen P. DeOrnellas dated December 16, 1997 (incorporated by reference to Exhibit 10.10 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998 (Commission File No. 0-26824))
**10.2	Employment Agreement between Registrant and Michael L. Parodi dated as of December 17, 1997 (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998)
10.3	Form of Unit Purchase Agreement dated December 31, 2001 (incorporated by reference to Exhibit (i) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
10.4	Form of Warrant (incorporated by reference to Exhibit (ii) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
**10.5	Third Amended and Restated Stock Option Plan for Outside Directors (incorporated by reference to Exhibit (iv) to the Registrant's Quarterly Report filed with the SEC on February 13, 2002)
10.6	Security and Loan Agreement between Registrant and Silicon Valley Bank dated as of June 26, 2002
10.7	Lease between the Registrant and Jane Crocker, formerly Jane C. Jacobs, as Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990 ("Crocker") and Norman E. MacKay ("MacKay") dated as of June 9, 2003
10.8	Security and Loan Agreement [Exim] between Registrant and Silicon Valley Bank dated as of June 26, 2002
10.9	Intellectual Property Security Agreement between Registrant and Valley Bank dated as of June 26, 2002
10.10	Warrant to purchase stock Agreement between Registrant and Silicon Valley Bank dated as of June 26, 2002
**10.11	Employment Agreement between the Registrant and Thomas Mika dated August 12, 2002
**10.12	Employment Agreement between the Registrant and Carole Anne Demachkie dated August 30, 2002
21	List of Subsidiaries of the Registrant
23.1	Consent of Independent Accountants
24.1	Power of Attorney (incorporated by reference to the signature page to this Annual Report)

Loan and Security Agreement

Borrower: Tegal Corporation
Address: 2201 South McDowell Blvd.
Petaluma, CA 94954

Date: June 26, 2002

THIS LOAN AND SECURITY AGREEMENT is entered into on the above date between SILICON VALLEY BANK ("Silicon"), whose address is 3003 Tasman Drive, Santa Clara, California 95054 and the borrower(s) named above (jointly and severally, the "Borrower"), whose chief executive office is located at the above address ("Borrower's Address"). The Schedule to this Agreement (the "Schedule") shall for all purposes be deemed to be a part of this Agreement, and the same is an integral part of this Agreement. (Definitions of certain terms used in this Agreement are set forth in Section 8 below.)

Silicon Valley Bank Loan and Security Agreement

1. LOANS.

1.1 Loans. Silicon will make loans to Borrower (the "Loans"), in amounts determined by Silicon in its good faith business judgment, up to the amounts (the "Credit Limit") shown on the Schedule, provided no Default or Event of Default has occurred and is continuing, and subject to deduction of Reserves for accrued interest and such other Reserves as Silicon deems proper from time to time in its good faith business judgment.

1.2 Interest. All Loans and all other monetary Obligations shall bear interest at the rate shown on the Schedule, except where expressly set forth to the contrary in this Agreement. Interest shall be payable monthly, on the last day of the month. Interest may, in Silicon's discretion, be charged to Borrower's loan account, and the same shall thereafter bear interest at the same rate as the other Loans. Silicon may, in its discretion, charge interest to Borrower's Deposit Accounts maintained with Silicon. Regardless of the amount of Obligations that may be outstanding from time to time, Borrower shall pay Silicon minimum monthly interest during the term of this Agreement in the amount set forth on the Schedule (the "Minimum Monthly Interest").

1.3 Overadvances. If at any time or for any reason the total of all outstanding Loans and all other monetary Obligations exceeds the Credit Limit (an "Overadvance"), Borrower shall immediately pay the amount of the excess to Silicon, without notice or demand. Without limiting Borrower's obligation to repay to Silicon the amount of any Overadvance, Borrower agrees to pay Silicon interest on the outstanding amount of any Overadvance, on demand, at the Default Rate.

1.4 Fees. Borrower shall pay Silicon the fees shown on the Schedule, which are in addition to all interest and other sums payable to Silicon and are not refundable.

1.5 Loan Requests. To obtain a Loan, Borrower shall make a request to Silicon by facsimile or telephone. Loan requests received after 12:00 Noon will not be considered by Silicon until the next Business Day. Silicon may rely on any telephone request for a Loan given by a person whom Silicon believes is an authorized representative of Borrower, and Borrower will indemnify Silicon for any loss Silicon suffers as a result of that reliance.

1.6 Letters of Credit. At the request of Borrower, Silicon may, in its good faith business judgment, issue or arrange for the issuance of letters of credit for the account of Borrower, in each case in form and substance satisfactory to Silicon in its sole discretion (collectively, "Letters of Credit"). The aggregate face amount of all Letters of Credit from time to time outstanding shall not exceed the amount shown on the Schedule (the "Letter of Credit Sublimit#148;"), and shall be reserved against Loans which would otherwise be available hereunder, and in the event at any time there are insufficient Loans available to Borrower for such reserve, Borrower shall deposit and maintain with Silicon cash collateral in an amount at all times equal to such deficiency, which shall be held as Collateral for all purposes of this Agreement. Borrower shall pay all bank charges (including charges of Silicon) for the issuance of Letters of Credit, together with such additional fee as Silicon's letter of credit department shall charge in connection with the issuance of the Letters of Credit. Any payment by Silicon

under or in connection with a Letter of Credit shall constitute a Loan hereunder on the date such payment is made. Each Letter of Credit shall have an expiry date no later than thirty days prior to the Maturity Date. Borrower hereby agrees to indemnify and hold Silicon harmless from any loss, cost, expense, or liability, including payments made by Silicon, expenses, and reasonable attorneys' fees incurred by Silicon arising out of or in connection with any Letters of Credit. Borrower agrees to be bound by the regulations and interpretations of the issuer of any Letters of Credit guaranteed by Silicon and opened for Borrower's account or by Silicon's interpretations of any Letter of Credit issued by Silicon for Borrower's account, and Borrower understands and agrees that Silicon shall not be liable for any error, negligence, or mistake, whether of omission or commission, in following Borrower's instructions or those contained in the Letters of Credit or any modifications, amendments, or supplements thereto. Borrower understands that Letters of Credit may require Silicon to indemnify the issuing bank for certain costs or liabilities arising out of claims by Borrower against such issuing bank. Borrower hereby agrees to indemnify and hold Silicon harmless with respect to any loss, cost, expense, or liability incurred by Silicon under any Letter of Credit as a result of Silicon's indemnification of any such issuing bank. The provisions of this Loan Agreement, as it pertains to Letters of Credit, and any other Loan Documents relating to Letters of Credit are cumulative.

2. SECURITY INTEREST. To secure the payment and performance of all of the Obligations when due, Borrower hereby grants to Silicon a security interest in all of the following (collectively, the "Collateral"): all right, title and interest of Borrower in and to all of the following, whether now owned or hereafter arising or acquired and wherever located: all Accounts; all Inventory; all Equipment; all Deposit Accounts; all General Intangibles (including without limitation all Intellectual Property); all Investment Property; all Other Property; and any and all claims, rights and interests in any of the above, and all guaranties and security for any of the above, and all substitutions and replacements for, additions, accessions, attachments, accessories, and improvements to, and proceeds (including proceeds of any insurance policies, proceeds of proceeds and claims against third parties) of, any and all of the above, and all Borrower's books relating to any and all of the above.

3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF BORROWER.

In order to induce Silicon to enter into this Agreement and to make Loans, Borrower represents and warrants to Silicon as follows, and Borrower covenants that the following representations will continue to be true, and that Borrower will at all times comply with all of the following covenants, throughout the term of this Agreement and until all Obligations have been paid and performed in full:

3.1 Corporate Existence and Authority. Borrower is and will continue to be, duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation. Borrower is and will continue to be qualified and licensed to do business in all jurisdictions in which any failure to do so would result in a Material Adverse Change. The execution, delivery and performance by Borrower of this Agreement, and all other documents contemplated hereby (i) have been duly and validly authorized, (ii) are enforceable against Borrower in accordance with their terms (except as enforcement may be limited by equitable principles and by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to creditors' rights generally), and (iii) do not violate Borrower's articles or certificate of incorporation, or Borrower's by-laws, or any law or any material agreement or instrument which is binding upon Borrower or its property, and (iv) do not constitute grounds for acceleration of any material indebtedness or obligation under any agreement or instrument which is binding upon Borrower or its property.

3.2 Name; Trade Names and Styles. The name of Borrower set forth in the heading to this Agreement is its correct name. Listed in the Representations are all prior names of Borrower and all of Borrower's present and prior trade names. Borrower shall give Silicon 30 days' prior written notice before changing its name or doing business under any other name. Borrower has complied, and will in the future comply, in all material respects, with all laws relating to the conduct of business under a fictitious business name, except where the failure to so comply would not reasonably be expected to result in a Material Adverse Change.

3.3 Place of Business; Location of Collateral. The address set forth in the heading to this Agreement is Borrower's chief executive office. In addition, Borrower has places of business and Collateral is located only at the locations set forth in the Representations. Borrower will give Silicon at least 30 days prior written notice before opening any additional place of business, changing its chief executive office, or moving any of the Collateral to a location other than Borrower's Address or one of the locations set forth in the Representations, except that Borrower may maintain sales offices in the ordinary course of business at which not more than a total of \$10,000 fair market value of Equipment is located.

3.4 Title to Collateral; Perfection; Permitted Liens.

(a) Borrower is now, and will at all times in the future be, the sole owner of all the Collateral, except for items of Equipment which are leased to Borrower. The Collateral now is and will remain free and clear of any and all liens, charges, security interests, encumbrances and adverse claims, except for Permitted Liens. Silicon now has, and will continue to have, a first-priority perfected and enforceable security interest in all of the Collateral, subject only to the Permitted Liens, and Borrower will at all times defend Silicon and the Collateral against all claims of others.

(b) Borrower has set forth in the Representations all of Borrower's Deposit Accounts, and Borrower will give Silicon five Business Days advance written notice before establishing any new Deposit Accounts and will cause the institution where any such new Deposit Account is maintained to execute and deliver to Silicon a control agreement in form sufficient to perfect Silicon's security interest in the Deposit Account and otherwise satisfactory to Silicon in its good faith business judgment. Nothing herein limits any requirements which may be set forth in the Schedule as to where Deposit Accounts will be maintained.

(c) In the event that Borrower shall at any time after the date hereof have any commercial tort claims against others, which it is asserting or intends to assert, and in which the potential recovery exceeds \$100,000, Borrower shall promptly notify Silicon thereof in writing and provide Silicon with such information regarding the same as Silicon shall request (unless providing such information would waive the Borrower's attorney-client privilege). Such notification to Silicon shall constitute a grant of a security interest in the commercial tort claim and all proceeds thereof to Silicon, and Borrower shall execute and deliver all such documents and take all such actions as Silicon shall request in connection therewith.

(d) None of the Collateral now is or will be affixed to any real property in such a manner, or with such intent, as to become a fixture. Borrower is not and will not become a lessee under any real property lease pursuant to which the lessor may obtain any rights in any of the Collateral and no such lease now prohibits, restrains, impairs or will prohibit, restrain or impair Borrower's right to remove any Collateral from the leased premises. Whenever any Collateral is located upon premises in which any third party has an interest, Borrower shall, whenever requested by Silicon, use its best efforts to cause such third party to execute and deliver to Silicon, in form acceptable to Silicon, such waivers and subordinations as Silicon shall specify in its good faith business judgment. Borrower will keep in full force and effect, and will comply with all material terms of, any lease of real property where any of the Collateral now or in the future may be located.

3.5 Maintenance of Collateral. Borrower will maintain the Collateral in good working condition (ordinary wear and tear excepted), and Borrower will not use the Collateral for any unlawful purpose. Borrower will immediately advise Silicon in writing of any material loss or damage to the Collateral.

3.6 Books and Records. Borrower has maintained and will maintain at Borrower's Address complete and accurate books and records, comprising an accounting system in accordance with GAAP.

3.7 Financial Condition, Statements and Reports. All financial statements now or in the future delivered to Silicon have been, and will be, prepared in conformity with GAAP and now and in the future will fairly present the results of operations and financial condition of Borrower, in accordance with GAAP, at the times and for the periods therein stated. Between the last date covered by any such statement provided to Silicon and the date hereof, there has been no Material Adverse Change.

3.8 Tax Returns and Payments; Pension Contributions. Borrower has timely filed, and will timely file, all required tax returns and reports, and Borrower has timely paid, and will timely pay, all foreign, federal, state and local taxes, assessments, deposits and contributions now or in the future owed by Borrower. Borrower may, however, defer payment of any contested taxes, provided that Borrower (i) in good faith contests Borrower's obligation to pay the taxes by appropriate proceedings promptly and diligently instituted and conducted, (ii) notifies Silicon in writing of the commencement of, and any material development in, the proceedings, and (iii) posts bonds or takes any other steps required to keep the contested taxes from becoming a lien upon any of the Collateral. Borrower is unaware of any claims or adjustments proposed for any of Borrower's prior tax years which could result in additional taxes becoming due and payable by Borrower. Borrower has paid, and shall continue to pay all amounts necessary to fund all present and future pension, profit sharing and deferred compensation plans in accordance with their terms, and Borrower has not and will not withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

3.9 Compliance with Law. Borrower has, to the best of its knowledge, complied, and will comply, in all material respects, with all provisions of all foreign, federal, state and local laws and regulations applicable to Borrower, including, but not limited to, those relating to Borrower's ownership of real or personal property, the conduct and licensing of Borrower's business, and all environmental matters.

3.10 Litigation. There is no claim, suit, litigation, proceeding or investigation pending or (to best of Borrower's knowledge) threatened against or affecting Borrower in any court or before any governmental agency (or any basis therefor known to Borrower) which could reasonably be expected to result, either separately or in the aggregate, in any Material Adverse Change. Borrower will promptly inform Silicon in writing of any claim, proceeding, litigation or investigation in the future threatened or instituted against Borrower involving any single claim of \$50,000 or more, or involving \$100,000 or more in the aggregate.

3.11 Use of Proceeds. All proceeds of all Loans shall be used solely for lawful business purposes. Borrower is not purchasing or carrying any "margin stock" (as defined in Regulation U of the Board of Governors of the Federal Reserve System) and no part of the proceeds of any Loan will be used to purchase or carry any "margin stock" or to extend credit to others for the purpose of purchasing or carrying any "margin stock."

4. ACCOUNTS.

4.1 Representations Relating to Accounts. Borrower represents and warrants to Silicon as follows: Each Account with respect to which Loans are requested by Borrower shall, on the date each Loan is requested and made, (i) represent an undisputed bona fide existing unconditional obligation of the Account Debtor created by the sale, delivery, and acceptance of goods or the rendition of services, or the non-exclusive licensing of Intellectual Property, in the ordinary course of Borrower's business, and (ii) meet the Minimum Eligibility Requirements set forth in Section 8 below.

4.2 Representations Relating to Documents and Legal Compliance. Borrower represents and warrants to Silicon as follows: All statements made and all unpaid balances appearing in all invoices, instruments and other documents evidencing the Accounts are and shall be true and correct and all such invoices, instruments and other documents and all of Borrower's books and records are and shall be genuine and in all respects what they purport to be. All sales and other transactions underlying or giving rise to each Account shall comply in all material respects with all applicable laws and governmental rules and regulations. To the best of Borrower's knowledge, all signatures and endorsements on all documents, instruments, and agreements relating to all Accounts are and shall be genuine, and all such documents, instruments and agreements are and shall be legally enforceable in accordance with their terms.

4.3 Schedules and Documents relating to Accounts. Borrower shall deliver to Silicon transaction reports and schedules of collections, as provided in the Schedule, on Silicon's standard forms; provided, however, that Borrower's failure to execute and deliver the same shall not affect or limit Silicon's security interest and other rights in all of Borrower's Accounts, nor shall Silicon's failure to advance or lend against a specific Account affect or limit Silicon's security interest and other rights therein. If requested by Silicon, Borrower shall furnish Silicon with copies (or, at Silicon's request, originals) of all contracts, orders, invoices, and other similar documents, and all shipping instructions, delivery receipts, bills of lading, and other evidence of delivery, for any goods the sale or disposition of which gave rise to such Accounts, and Borrower warrants the genuineness of all of the foregoing. Borrower shall also furnish to Silicon an aged accounts receivable trial balance as provided in the Schedule. In addition, Borrower shall deliver to Silicon, on its request, the originals of all instruments, chattel paper, security agreements, guarantees and other documents and property evidencing or securing any Accounts, in the same form as received, with all necessary endorsements, and copies of all credit memos.

4.4 Collection of Accounts. Borrower shall have the right to collect all Accounts, unless and until a Default or an Event of Default has occurred and is continuing. Whether or not an Event of Default has occurred and is continuing, Borrower shall hold all payments on, and proceeds of, Accounts in trust for Silicon, and Borrower shall immediately deliver all such payments and proceeds to Silicon in their original form, duly endorsed, to be applied to the Obligations in such order as Silicon shall determine. Silicon may, in its good faith business judgment, require that all proceeds of Collateral be deposited by Borrower into a lockbox account, or such other "blocked account" as Silicon may specify, pursuant to a blocked account agreement in such form as Silicon may specify in its good faith business judgment.

4.5 Remittance of Proceeds. All proceeds arising from the disposition of any Collateral shall be delivered, in kind, by Borrower to Silicon in the original form in which received by Borrower not later than the following Business Day after receipt by Borrower, to be applied to the Obligations in such order as Silicon shall determine; provided that, if no Default or Event of Default has occurred and is continuing, Borrower shall not be obligated to remit to Silicon the proceeds of the sale of worn out or obsolete Equipment disposed of by Borrower in good faith in an arm's length transaction for an aggregate purchase price of \$25,000 or less (for all such transactions in any fiscal year). Borrower agrees that it will not commingle proceeds of Collateral with any of Borrower's other funds or property, but will hold such proceeds separate and apart from such other funds and property and in an express trust for Silicon. Nothing in this Section limits the restrictions on disposition of Collateral set forth elsewhere in this Agreement.

4.6 Disputes. Borrower shall notify Silicon promptly of all disputes or claims relating to Accounts. Borrower shall not forgive (completely or partially), compromise or settle any Account for less than payment in full, or agree to do any of the foregoing, except that Borrower may do so, provided that: (i) Borrower does so in good faith, in a commercially reasonable manner, in the ordinary course of business, and in arm's length transactions, which are reported to Silicon on the regular reports provided to Silicon; (ii) no Default or Event of Default has occurred and is continuing; and (iii) taking into account all such discounts, settlements and forgiveness, the total outstanding Loans will not exceed the Credit Limit.

4.7 Returns. Provided no Event of Default has occurred and is continuing, if any Account Debtor returns any Inventory to Borrower, Borrower shall promptly determine the reason for such return and promptly issue a credit memorandum to the Account Debtor in the appropriate amount. In the event any attempted return occurs after the occurrence and during the continuance of any Event of Default, Borrower shall hold the returned Inventory in trust for Silicon, and immediately notify Silicon of the return of the Inventory.

4.8 Verification. Silicon may, from time to time, verify directly with the respective Account Debtors the validity, amount and other matters relating to the Accounts, by means of mail, telephone or otherwise, either in the name of Borrower or Silicon or such other name as Silicon may choose.

4.9 No Liability. Silicon shall not be responsible or liable for any shortage or discrepancy in, damage to, or loss or destruction of, any goods, the sale or other disposition of which gives rise to an Account, or for any error, act, omission, or delay of any kind occurring in the settlement, failure to settle, collection or failure to collect any Account, or for settling any Account in good faith for less than the full amount thereof, nor shall Silicon be deemed to be responsible for any of Borrower's obligations under any contract or agreement giving rise to an Account. Nothing herein shall, however, relieve Silicon from liability for its own gross negligence or willful misconduct.

5. ADDITIONAL DUTIES OF BORROWER.

5.1 Financial and Other Covenants. Borrower shall at all times comply with the financial and other covenants set forth in the Schedule.

5.2 Insurance. Borrower shall, at all times insure all of the tangible personal property Collateral and carry such other business insurance, with insurers reasonably acceptable to Silicon, in such form and amounts as Silicon may reasonably require and that are customary and in accordance with standard practices for Borrower's industry and locations, and Borrower shall provide evidence of such insurance to Silicon. All such insurance policies shall name Silicon as an additional loss payee, and shall contain a lenders loss payee endorsement in form reasonably acceptable to Silicon. Upon receipt of the proceeds of any such insurance, Silicon shall apply such proceeds in reduction of the Obligations as Silicon shall determine in its good faith business judgment, except that, provided no Default or Event of Default has occurred and is continuing, Silicon shall release to Borrower insurance proceeds with respect to Equipment totaling less than \$100,000, which shall be utilized by Borrower for the replacement of the Equipment with respect to which the insurance proceeds were paid. Silicon may require reasonable assurance that the insurance proceeds so released will be so used. If Borrower fails to provide or pay for any insurance, Silicon may, but is not obligated to, obtain the same at Borrower's expense. Borrower shall promptly deliver to Silicon copies of all material reports made to insurance companies.

5.3 Reports. Borrower, at its expense, shall provide Silicon with the written reports set forth in the Schedule, and such other written reports with respect to Borrower (including budgets, sales projections, operating plans and other financial documentation), as Silicon shall from time to time specify in its good faith business judgment.

5.4 Access to Collateral, Books and Records. At reasonable times, and on one Business Day's notice, Silicon, or its agents, shall have the right to inspect the Collateral, and the right to audit and copy Borrower's books and records. Silicon shall take reasonable steps to keep confidential all information obtained in any such inspection or audit, but Silicon shall have the right to disclose any such information to its auditors, regulatory agencies, and attorneys, and pursuant to any subpoena or other legal process. The foregoing inspections and audits shall be at Borrower's expense and the charge therefor shall be \$700 per person per day (or such higher amount as shall represent Silicon's then current standard charge for the same), plus reasonable out-of-pocket expenses. In the event Borrower and Silicon schedule an audit more than 10 days in advance, and Borrower seeks to reschedule the audit with less than 10 days written notice to Silicon, then (without limiting any of Silicon's rights or remedies), Borrower shall pay Silicon a cancellation fee of \$1,000 plus any out-of-pocket expenses incurred by Silicon, to compensate Silicon for the anticipated costs and expenses of the cancellation.

5.5 Negative Covenants. Except as may be permitted in the Schedule, Borrower shall not, without Silicon's prior written consent (which shall be a matter of its good faith business judgment), do any of the following: (i) merge or consolidate with another corporation or entity; (ii) acquire any assets, except in the ordinary course of business; (iii) enter into any other transaction outside the ordinary course of business; (iv) sell or transfer any Collateral, except for the sale of finished Inventory in the ordinary course of Borrower's business, and except for the sale of obsolete or unneeded Equipment in the ordinary course of business; (v) store any Inventory or other Collateral with any warehouseman or other third party; (vi) sell any Inventory on a sale-or-return, guaranteed sale, consignment, or other contingent basis; (vii) make any loans of any money or other assets*; (viii) incur any debts, outside the ordinary course of business, which would result in a Material Adverse Change; (ix) guarantee or otherwise become liable with respect to the obligations of another party or entity; (x) pay or declare any dividends on Borrower's stock (except for dividends payable solely in stock of Borrower); (xi) redeem, retire, purchase or otherwise acquire, directly or indirectly, any of Borrower's stock; (xii) make any change in Borrower's capital structure which would result in a Material Adverse Change; or (xiii) engage, directly or indirectly, in any business other than the businesses currently engaged in by Borrower or reasonably related thereto; or (xiv) dissolve or elect to dissolve. Transactions permitted by the foregoing provisions of this Section are only permitted if no Default or Event of Default would occur as a result of such transaction.

***, except that, provided that no Default or Event of Default has occurred and is continuing, Borrower make loans to employees of Borrower in an aggregate amount not exceeding \$150,000 outstanding at any time**

5.6 Litigation Cooperation. Should any third-party suit or proceeding be instituted by or against Silicon with respect to any Collateral or relating to Borrower, Borrower shall, without expense to Silicon, make available Borrower and its officers, employees and agents and Borrower's books and records, to the extent that Silicon may deem them reasonably necessary in order to prosecute or defend any such suit or proceeding.

5.7 Further Assurances. Borrower agrees, at its expense, on request by Silicon, to execute all documents and take all actions, as Silicon, may, in its good faith business judgment, deem necessary or useful in order to perfect and maintain Silicon's perfected first-priority security interest in the Collateral (subject to Permitted Liens), and in order to fully consummate the transactions contemplated by this Agreement.

6. TERM.

6.1 Maturity Date. This Agreement shall continue in effect until the maturity date set forth on the Schedule (the "Maturity Date"), subject to Section 6.3 below.

6.2 Early Termination. This Agreement may be terminated prior to the Maturity Date as follows: (i) by Borrower, effective three Business Days after written notice of termination is given to Silicon; or (ii) by Silicon at any time after the occurrence and during the continuance of an Event of Default, without notice, effective immediately. If this Agreement is terminated by Borrower or by Silicon under this Section 6.2, Borrower shall pay to Silicon a termination fee in an amount equal to* provided that no termination fee shall be charged if the credit facility hereunder is replaced with a new facility from another division of Silicon Valley Bank. The termination fee shall be due and payable on the effective date of termination and thereafter shall bear interest at a rate equal to the highest rate applicable to any of the Obligations.

***one percent (1%) of the Overall Credit Limit (as defined in the Schedule), provided that the total termination fee under this Loan Agreement and under the Exim Agreement (as defined in the Schedule) shall not exceed one percent (1%) of the Overall Credit Limit, and**

6.3 Payment of Obligations. On the Maturity Date or on any earlier effective date of termination, Borrower shall pay and perform in full all Obligations, whether evidenced by installment notes or otherwise, and whether or not all or any part of such Obligations are otherwise then due and payable. Without limiting the generality of the foregoing, if on the Maturity Date, or on any earlier effective date of termination, there are any outstanding Letters of Credit issued by Silicon or issued by another institution based upon an application, guarantee, indemnity or similar agreement on the part of Silicon, then on such date Borrower shall provide to Silicon cash collateral in an amount equal to 105% of the face amount of all such Letters of Credit plus all interest, fees and cost due or to become due in connection therewith (as estimated by Silicon in its good faith business judgment), to secure all of the Obligations relating to said Letters of Credit, pursuant to Silicon's then standard form cash pledge agreement. Notwithstanding any termination of this Agreement, all of Silicon's security interests in all of the Collateral and all of the terms and provisions of this Agreement shall continue in full force and effect until all Obligations have been paid and performed in full; provided that Silicon may, in its sole discretion, refuse to make any further Loans after termination. No termination shall in any way affect or impair any right or remedy of Silicon, nor shall any such termination relieve Borrower of any Obligation to Silicon, until all of the Obligations have been paid and performed in full. Upon payment and performance in full of all the Obligations and termination of this Agreement, Silicon shall promptly terminate its financing statements with respect to the Borrower and deliver to Borrower such other documents as may be required to fully terminate Silicon's security interests.

7. EVENTS OF DEFAULT AND REMEDIES.

7.1 Events of Default. The occurrence of any of the following events shall constitute an "Event of Default" under this Agreement, and Borrower shall give Silicon immediate written notice thereof: (a) Any warranty, representation, statement, report or certificate made or delivered to Silicon by Borrower or any of Borrower's officers, employees or agents, now or in the future, shall be untrue or misleading in a material respect when made or deemed to be made; or (b) Borrower shall fail to pay when due any Loan or any interest thereon or any other monetary Obligation; or (c) the total Loans and other Obligations outstanding at any time shall exceed the Credit Limit; or (d) Borrower shall fail to comply with any of the financial covenants set forth in the Schedule, or shall fail to perform any other non-monetary Obligation which by its nature cannot be cured, or

shall fail to permit Silicon to conduct an inspection or audit as specified in Section 5.4 hereof; or (e) Borrower shall fail to perform any other non-monetary Obligation, which failure is not cured within five Business Days after the date due; or (f) any levy, assessment, attachment, seizure, lien or encumbrance (other than a Permitted Lien) is made on all or any part of the Collateral which is not cured within 10 days after the occurrence of the same; or (g) any default or event of default occurs under any obligation secured by a Permitted Lien, which is not cured within any applicable cure period or waived in writing by the holder of the Permitted Lien; or (h) Borrower breaches any material contract or obligation, which has resulted or may reasonably be expected to result in a Material Adverse Change; or (i) Dissolution, termination of existence, insolvency or business failure of Borrower; or appointment of a receiver, trustee or custodian, for all or any part of the property of, assignment for the benefit of creditors by, or the commencement of any proceeding by Borrower under any reorganization, bankruptcy, insolvency, arrangement, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction, now or in the future in effect; or (j) the commencement of any proceeding against Borrower or any guarantor of any of the Obligations under any reorganization, bankruptcy, insolvency, arrangement, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction, now or in the future in effect, which is not cured by the dismissal thereof within 30 days after the date commenced; or (k) revocation or termination of, or limitation or denial of liability upon, any guaranty of the Obligations or any attempt to do any of the foregoing, or commencement of proceedings by any guarantor of any of the Obligations under any bankruptcy or insolvency law; or (l) revocation or termination of, or limitation or denial of liability upon, any pledge of any certificate of deposit, securities or other property or asset of any kind pledged by any third party to secure any or all of the Obligations, or any attempt to do any of the foregoing, or commencement of proceedings by or against any such third party under any bankruptcy or insolvency law; or (m) Borrower makes any payment on account of any indebtedness or obligation which has been subordinated to the Obligations other than as permitted in the applicable subordination agreement, or if any Person who has subordinated such indebtedness or obligations terminates or in any way limits his subordination agreement; or (n) there shall be a change in the record or beneficial ownership of the outstanding shares of stock of Borrower, in one or more transactions,* without the prior written consent of Silicon; or (o) Borrower shall generally not pay its debts as they become due, or Borrower shall conceal, remove or transfer any part of its property, with intent to hinder, delay or defraud its creditors, or make or suffer any transfer of any of its property which may be fraudulent under any bankruptcy, fraudulent conveyance or similar law; or (p) a Material Adverse Change shall occur; or (q) Silicon, acting in good faith and in a commercially reasonable manner, deems itself insecure because of the occurrence of an event prior to the effective date hereof of which Silicon had no knowledge on the effective date or because of the occurrence of an event on or subsequent to the effective date. Silicon may cease making any Loans hereunder during any of the above cure periods, and thereafter if an Event of Default has occurred and is continuing.

***the result of which is that any one Person owns at least 50% of the outstanding stock of Borrower,**

7.2 Remedies. Upon the occurrence and during the continuance of any Event of Default, and at any time thereafter, Silicon, at its option, and without notice or demand of any kind (all of which are hereby expressly waived by Borrower), may do any one or more of the following: (a) Cease making Loans or otherwise extending credit to Borrower under this Agreement or any other Loan Document; (b) Accelerate and declare all or any part of the Obligations to be immediately due, payable, and performable, notwithstanding any deferred or installment payments allowed by any instrument evidencing or relating to any Obligation; (c) Take possession of any or all of the Collateral wherever it may be found, and for that purpose Borrower hereby authorizes Silicon without judicial process to enter onto any of Borrower's premises without interference to search for, take possession of, keep, store, or remove any of the Collateral, and remain on the premises or cause a custodian to remain on the premises in exclusive control thereof, without charge for so long as Silicon deems it necessary, in its good faith business judgment, in order to complete the enforcement of its rights under this Agreement or any other agreement; provided, however, that should Silicon seek to take possession of any of the Collateral by court process, Borrower hereby irrevocably waives: (i) any bond and any surety or security relating thereto required by any statute, court rule or otherwise as an incident to such possession; (ii) any demand for possession prior to the commencement of any suit or action to recover possession thereof; and (iii) any requirement that Silicon retain possession of, and not dispose of, any such Collateral until after trial or final judgment; (d) Require Borrower to assemble any or all of the Collateral and make it available to Silicon at places designated by Silicon which are reasonably convenient to Silicon and Borrower, and to remove the Collateral to such locations as Silicon may deem advisable; (e) Complete the processing, manufacturing or repair of any Collateral prior to a disposition thereof and, for such purpose and for the purpose of removal, Silicon shall have the right to use Borrower's premises, vehicles, hoists, lifts, cranes, and other Equipment and all other property without charge; (f) Sell, lease or otherwise dispose of any of the Collateral, in its condition at the time Silicon obtains possession of it or after further manufacturing, processing or repair, at one or more public and/or private sales, in lots or in bulk, for cash, exchange or other property, or on credit, and to adjourn any such sale from time to time without notice other than oral announcement at the time scheduled for sale. Silicon shall have the right to conduct such disposition on Borrower's premises without charge, for such time or times as Silicon deems reasonable, or on Silicon's premises, or elsewhere and the Collateral need not be located at the place of disposition. Silicon

may directly or through any affiliated company purchase or lease any Collateral at any such public disposition, and if permissible under applicable law, at any private disposition. Any sale or other disposition of Collateral shall not relieve Borrower of any liability Borrower may have if any Collateral is defective as to title or physical condition or otherwise at the time of sale; (g) Demand payment of, and collect any Accounts and General Intangibles comprising Collateral and, in connection therewith, Borrower irrevocably authorizes Silicon to endorse or sign Borrower's name on all collections, receipts, instruments and other documents, to take possession of and open mail addressed to Borrower and remove therefrom payments made with respect to any item of the Collateral or proceeds thereof, and, in Silicon's good faith business judgment, to grant extensions of time to pay, compromise claims and settle Accounts and the like for less than face value; (h) Offset against any sums in any of Borrower's general, special or other Deposit Accounts with Silicon against any or all of the Obligations; and (i) Demand and receive possession of any of Borrower's federal and state income tax returns and the books and records utilized in the preparation thereof or referring thereto. All reasonable attorneys' fees, expenses, costs, liabilities and obligations incurred by Silicon with respect to the foregoing shall be added to and become part of the Obligations, shall be due on demand, and shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations. Without limiting any of Silicon's rights and remedies, from and after the occurrence and during the continuance of any Event of Default, the interest rate applicable to the Obligations shall be increased by an additional four percent per annum (the "Default Rate").

7.3 Standards for Determining Commercial Reasonableness. Borrower and Silicon agree that a sale or other disposition (collectively, "sale") of any Collateral which complies with the following standards will conclusively be deemed to be commercially reasonable: (i) Notice of the sale is given to Borrower at least ten days prior to the sale, and, in the case of a public sale, notice of the sale is published at least five days before the sale in a newspaper of general circulation in the county where the sale is to be conducted; (ii) Notice of the sale describes the collateral in general, non-specific terms; (iii) The sale is conducted at a place designated by Silicon, with or without the Collateral being present; (iv) The sale commences at any time between 8:00 a.m. and 6:00 p.m.; (v) Payment of the purchase price in cash or by cashier's check or wire transfer is required; (vi) With respect to any sale of any of the Collateral, Silicon may (but is not obligated to) direct any prospective purchaser to ascertain directly from Borrower any and all information concerning the same. Silicon shall be free to employ other methods of noticing and selling the Collateral, in its discretion, if they are commercially reasonable.

7.4 Power of Attorney. Upon the occurrence and during the continuance of any Event of Default, without limiting Silicon's other rights and remedies, Borrower grants to Silicon an irrevocable power of attorney coupled with an interest, authorizing and permitting Silicon (acting through any of its employees, attorneys or agents) at any time, at its option, but without obligation, with or without notice to Borrower, and at Borrower's expense, to do any or all of the following, in Borrower's name or otherwise, but Silicon agrees that if it exercises any right hereunder, it will do so in good faith and in a commercially reasonable manner: (a) Execute on behalf of Borrower any documents that Silicon may, in its good faith business judgment, deem advisable in order to perfect and maintain Silicon's security interest in the Collateral, or in order to exercise a right of Borrower or Silicon, or in order to fully consummate all the transactions contemplated under this Agreement, and all other Loan Documents; (b) Execute on behalf of Borrower, any invoices relating to any Account, any draft against any Account Debtor and any notice to any Account Debtor, any proof of claim in bankruptcy, any Notice of Lien, claim of mechanic's, materialman's or other lien, or assignment or satisfaction of mechanic's, materialman's or other lien; (c) Take control in any manner of any cash or non-cash items of payment or proceeds of Collateral; endorse the name of Borrower upon any instruments, or documents, evidence of payment or Collateral that may come into Silicon's possession; (d) Endorse all checks and other forms of remittances received by Silicon; (e) Pay, contest or settle any lien, charge, encumbrance, security interest and adverse claim in or to any of the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (f) Grant extensions of time to pay, compromise claims and settle Accounts and General Intangibles for less than face value and execute all releases and other documents in connection therewith; (g) Pay any sums required on account of Borrower's taxes or to secure the release of any liens therefor, or both; (h) Settle and adjust, and give releases of, any insurance claim that relates to any of the Collateral and obtain payment therefor; (i) Instruct any third party having custody or control of any books or records belonging to, or relating to, Borrower to give Silicon the same rights of access and other rights with respect thereto as Silicon has under this Agreement; and (j) Take any action or pay any sum required of Borrower pursuant to this Agreement and any other Loan Documents. Any and all reasonable sums paid and any and all reasonable costs, expenses, liabilities, obligations and attorneys' fees incurred by Silicon with respect to the foregoing shall be added to and become part of the Obligations, shall be payable on demand, and shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations. In no event shall Silicon's rights under the foregoing power of attorney or any of Silicon's other rights under this Agreement be deemed to indicate that Silicon is in control of the business, management or properties of Borrower.

7.5 Application of Proceeds. All proceeds realized as the result of any sale of the Collateral shall be applied by Silicon first to the reasonable costs, expenses, liabilities, obligations and attorneys' fees incurred by Silicon in the exercise of its

rights under this Agreement, second to the interest due upon any of the Obligations, and third to the principal of the Obligations, in such order as Silicon shall determine in its sole discretion. Any surplus shall be paid to Borrower or other persons legally entitled thereto; Borrower shall remain liable to Silicon for any deficiency. If, Silicon, in its good faith business judgment, directly or indirectly enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Silicon shall have the option, exercisable at any time, in its good faith business judgment, of either reducing the Obligations by the principal amount of purchase price or deferring the reduction of the Obligations until the actual receipt by Silicon of the cash therefor.

7.6 Remedies Cumulative. In addition to the rights and remedies set forth in this Agreement, Silicon shall have all the other rights and remedies accorded a secured party under the California Uniform Commercial Code and under all other applicable laws, and under any other instrument or agreement now or in the future entered into between Silicon and Borrower, and all of such rights and remedies are cumulative and none is exclusive. Exercise or partial exercise by Silicon of one or more of its rights or remedies shall not be deemed an election, nor bar Silicon from subsequent exercise or partial exercise of any other rights or remedies. The failure or delay of Silicon to exercise any rights or remedies shall not operate as a waiver thereof, but all rights and remedies shall continue in full force and effect until all of the Obligations have been fully paid and performed.

8. DEFINITIONS. As used in this Agreement, the following terms have the following meanings:

“Account Debtor” means the obligor on an Account.

“Accounts” means all present and future “accounts” as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all accounts receivable and other sums owing to Borrower.

“Affiliate” means, with respect to any Person, a relative, partner, shareholder, director, officer, or employee of such Person, or any parent or subsidiary of such Person, or any Person controlling, controlled by or under common control with such Person.

“Business Day” means a day on which Silicon is open for business.

“Code” means the Uniform Commercial Code as adopted and in effect in the State of California from time to time.

“Collateral” has the meaning set forth in Section 2 above.

“continuing” and “during the continuance of” when used with reference to a Default or Event of Default means that the Default or Event of Default has occurred and has not been either waived in writing by Silicon or cured within any applicable cure period.

“Default” means any event which with notice or passage of time or both, would constitute an Event of Default.

“Default Rate” has the meaning set forth in Section 7.2 above.

“Deposit Accounts” means all present and future “deposit accounts” as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all general and special bank accounts, demand accounts, checking accounts, savings accounts and certificates of deposit.

“Eligible Inventory” [*Not Applicable*]

“Eligible Accounts” means Accounts and General Intangibles arising in the ordinary course of Borrower’s business from the sale of goods or the rendition of services, or the non-exclusive licensing of Intellectual Property, which Silicon, in its good faith business judgment, shall deem eligible for borrowing. Without limiting the fact that the determination of which Accounts are eligible for borrowing is a matter of Silicon’s good faith business judgment, the following (the “Minimum Eligibility Requirements”) are the minimum requirements for a Account to be an Eligible Account: (i) the Account must not be outstanding for more than 90 days from its invoice date (the “Eligibility Period”), (ii) the Account must not represent progress billings, or be due under a fulfillment or requirements contract with the Account Debtor, (iii) the Account must not be subject to any contingencies (including Accounts arising from sales on consignment, guaranteed sale or other terms pursuant to which payment by the Account Debtor may be conditional), (iv) the Account must not be owing from an Account Debtor with whom Borrower has any dispute (whether or not relating to the particular Account), (v) the Account must not be owing from an Affiliate of Borrower, (vi) the Account must not be owing from an Account Debtor which is subject to any insolvency or bankruptcy proceeding, or whose financial condition is not acceptable to Silicon, or which, fails or goes out of a material portion of its business, (vii) the Account must not be owing from the United States or any department, agency or instrumentality thereof (unless there has been compliance, to Silicon’s satisfaction, with the United States Assignment of Claims Act), (viii) the Account must not be owing from an Account Debtor located outside the United States or Canada

(unless pre-approved by Silicon in its discretion in writing, or backed by a letter of credit satisfactory to Silicon, or FCIA insured satisfactory to Silicon), (ix) the Account must not be owing from an Account Debtor to whom Borrower is or may be liable for goods purchased from such Account Debtor or otherwise (but, in such case, the Account will be deemed not eligible only to the extent of any amounts owed by Borrower to such Account Debtor). Accounts owing from one Account Debtor will not be deemed Eligible Accounts to the extent they exceed 25% of the total Accounts outstanding. In addition, if more than 50% of the Accounts owing from an Account Debtor are outstanding for a period longer than their Eligibility Period (without regard to unapplied credits) or are otherwise not eligible Accounts, then all Accounts owing from that Account Debtor will be deemed ineligible for borrowing. Silicon may, from time to time, in its good faith business judgment, revise the Minimum Eligibility Requirements, upon written notice to Borrower.

“Equipment” means all present and future “equipment” as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

“Event of Default” means any of the events set forth in Section 7.1 of this Agreement.

“GAAP” means generally accepted accounting principles consistently applied.

“General Intangibles” means all present and future “general intangibles” as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all Intellectual Property, payment intangibles, royalties, contract rights, goodwill, franchise agreements, purchase orders, customer lists, route lists, telephone numbers, domain names, claims, income tax refunds, security and other deposits, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

“good faith business judgment” means honesty in fact and good faith (as defined in Section 1201 of the Code) in the exercise of Silicon’s business judgment.

“including” means including (but not limited to).

“Intellectual Property” means all present and future (a) copyrights, copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished, (b) trade secret rights, including all rights to unpatented inventions and know-how, and confidential information; (c) mask work or similar rights available for the protection of semiconductor chips; (d) patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same; (e) trademarks, servicemarks, trade styles, and trade names, whether or not any of the foregoing are registered, and all applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by any such trademarks; (f) computer software and computer software products; (g) designs and design rights; (h) technology; (i) all claims for damages by way of past, present and future infringement of any of the rights included above; (j) all licenses or other rights to use any property or rights of a type described above.

“Inventory” means all present and future “inventory” as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower’s custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

“Investment Property” means all present and future investment property, securities, stocks, bonds, debentures, debt securities, partnership interests, limited liability company interests, options, security entitlements, securities accounts, commodity contracts, commodity accounts, and all financial assets held in any securities account or otherwise, and all options and warrants to purchase any of the foregoing, wherever located, and all other securities of every kind, whether certificated or uncertificated.

“Loan Documents” means, collectively, this Agreement, the Representations, and all other present and future documents, instruments and agreements between Silicon and Borrower, including, but not limited to those relating to this Agreement, and all amendments and modifications thereto and replacements therefor.

“Material Adverse Change” means any of the following: (i) a material adverse change in the business, operations, or financial or other condition of the Borrower, or (ii) a material impairment of the prospect of repayment of any portion of the Obligations; or (iii) a material impairment of the value or priority of Silicon’s security interests in the Collateral.

“**Obligations**” means all present and future Loans, advances, debts, liabilities, obligations, guaranties, covenants, duties and indebtedness at any time owing by Borrower to Silicon, whether evidenced by this Agreement or any note or other instrument or document, or otherwise, whether arising from an extension of credit, opening of a letter of credit, banker’s acceptance, loan, guaranty, indemnification or otherwise, whether direct or indirect (including, without limitation, those acquired by assignment and any participation by Silicon in Borrower’s debts owing to others), absolute or contingent, due or to become due, including, without limitation, all interest, charges, expenses, fees, attorney’s fees, expert witness fees, audit fees, letter of credit fees, collateral monitoring fees, closing fees, facility fees, termination fees, minimum interest charges and any other sums chargeable to Borrower under this Agreement or under any other Loan Documents.

“**Other Property**” means the following as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and all rights relating thereto: all present and future “commercial tort claims” (including without limitation any commercial tort claims identified in the Representations), “documents”, “instruments”, “promissory notes”, “chattel paper”, “letters of credit”, “letter-of-credit rights”, “fixtures”, “farm products” and “money”; and all other goods and personal property of every kind, tangible and intangible, whether or not governed by the California Uniform Commercial Code.

“**Permitted Liens**” means the following: (i) purchase money security interests in specific items of Equipment; (ii) leases of specific items of Equipment; (iii) liens for taxes not yet payable; (iv) additional security interests and liens consented to in writing by Silicon, which consent may be withheld in its good faith business judgment; (v) security interests being terminated substantially concurrently with this Agreement; (vi) liens of materialmen, mechanics, warehousemen, carriers, or other similar liens arising in the ordinary course of business and securing obligations which are not delinquent; (vii) liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by liens of the type described above in clauses (i) or (ii) above, provided that any extension, renewal or replacement lien is limited to the property encumbered by the existing lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase; (viii) Liens in favor of customs and revenue authorities which secure payment of customs duties in connection with the importation of goods. Silicon will have the right to require, as a condition to its consent under subparagraph (iv) above, that the holder of the additional security interest or lien sign an intercreditor agreement on Silicon’s then standard form, acknowledge that the security interest is subordinate to the security interest in favor of Silicon, and agree not to take any action to enforce its subordinate security interest so long as any Obligations remain outstanding, and that Borrower agree that any uncured default in any obligation secured by the subordinate security interest shall also constitute an Event of Default under this Agreement.

“**Person**” means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, government, or any agency or political division thereof, or any other entity.

“**Representations**” means the written Representations and Warranties provided by Borrower to Silicon referred to in the Schedule.

“**Reserves**” means, as of any date of determination, such amounts as Silicon may from time to time establish and revise in its good faith business judgment, reducing the amount of Loans, Letters of Credit and other financial accommodations which would otherwise be available to Borrower under the lending formula(s) provided in the Schedule: (a) to reflect events, conditions, contingencies or risks which, as determined by Silicon in its good faith business judgment, do or may adversely affect (i) the Collateral or any other property which is security for the Obligations or its value (including without limitation any increase in delinquencies of Accounts), (ii) the assets, business or prospects of Borrower or any Guarantor, or (iii) the security interests and other rights of Silicon in the Collateral (including the enforceability, perfection and priority thereof); or (b) to reflect Silicon’s good faith belief that any collateral report or financial information furnished by or on behalf of Borrower or any Guarantor to Silicon is or may have been incomplete, inaccurate or misleading in any material respect; or (c) in respect of any state of facts which Silicon determines in good faith constitutes an Event of Default or may, with notice or passage of time or both, constitute an Event of Default.

Other Terms. All accounting terms used in this Agreement, unless otherwise indicated, shall have the meanings given to such terms in accordance with GAAP, consistently applied. All other terms contained in this Agreement, unless otherwise indicated, shall have the meanings provided by the Code, to the extent such terms are defined therein.

9. GENERAL PROVISIONS.

9.1 Interest Computation. In computing interest on the Obligations, all checks, wire transfers and other items of payment received by Silicon (including proceeds of Accounts and payment of the Obligations in full) shall be deemed applied by Silicon on account of the Obligations three Business Days after receipt by Silicon of immediately available funds, and, for purposes of the foregoing, any such funds received after 12:00 Noon on any day shall be deemed received on the next Business Day. Silicon shall not, however, be required to credit Borrower’s account for the amount of any item of payment

which is unsatisfactory to Silicon in its good faith business judgment, and Silicon may charge Borrower's loan account for the amount of any item of payment which is returned to Silicon unpaid.

9.2 Application of Payments. All payments with respect to the Obligations may be applied, and in Silicon's good faith business judgment reversed and re-applied, to the Obligations, in such order and manner as Silicon shall determine in its good faith business judgment.

9.3 Charges to Accounts. Silicon may, in its discretion, require that Borrower pay monetary Obligations in cash to Silicon, or charge them to Borrower's Loan account, in which event they will bear interest at the same rate applicable to the Loans. Silicon may also, in its discretion, charge any monetary Obligations to Borrower's Deposit Accounts maintained with Silicon.

9.4 Monthly Accountings. Silicon shall provide Borrower monthly with an account of advances, charges, expenses and payments made pursuant to this Agreement. Such account shall be deemed correct, accurate and binding on Borrower and an account stated (except for reverses and reapplications of payments made and corrections of errors discovered by Silicon), unless Borrower notifies Silicon in writing to the contrary within 60 days after such account is rendered, describing the nature of any alleged errors or omissions.

9.5 Notices. All notices to be given under this Agreement shall be in writing and shall be given either personally or by reputable private delivery service or by regular first-class mail, or certified mail return receipt requested, addressed to Silicon or Borrower at the addresses shown in the heading to this Agreement, or at any other address designated in writing by one party to the other party. Notices to Silicon shall be directed to the Commercial Finance Division, to the attention of the Division Manager or the Division Credit Manager. All notices shall be deemed to have been given upon delivery in the case of notices personally delivered, or at the expiration of one Business Day following delivery to the private delivery service, or two Business Days following the deposit thereof in the United States mail, with postage prepaid.

9.6 Severability. Should any provision of this Agreement be held by any court of competent jurisdiction to be void or unenforceable, such defect shall not affect the remainder of this Agreement, which shall continue in full force and effect.

9.7 Integration. This Agreement and such other written agreements, documents and instruments as may be executed in connection herewith are the final, entire and complete agreement between Borrower and Silicon and supersede all prior and contemporaneous negotiations and oral representations and agreements, all of which are merged and integrated in this Agreement. There are no oral understandings, representations or agreements between the parties which are not set forth in this Agreement or in other written agreements signed by the parties in connection herewith.

9.8 Waivers; Indemnity. The failure of Silicon at any time or times to require Borrower to strictly comply with any of the provisions of this Agreement or any other Loan Document shall not waive or diminish any right of Silicon later to demand and receive strict compliance therewith. Any waiver of any default shall not waive or affect any other default, whether prior or subsequent, and whether or not similar. None of the provisions of this Agreement or any other Loan Document shall be deemed to have been waived by any act or knowledge of Silicon or its agents or employees, but only by a specific written waiver signed by an authorized officer of Silicon and delivered to Borrower. Borrower waives the benefit of all statutes of limitations relating to any of the Obligations or this Agreement or any other Loan Document, and Borrower waives demand, protest, notice of protest and notice of default or dishonor, notice of payment and nonpayment, release, compromise, settlement, extension or renewal of any commercial paper, instrument, account, General Intangible, document or guaranty at any time held by Silicon on which Borrower is or may in any way be liable, and notice of any action taken by Silicon, unless expressly required by this Agreement. Borrower hereby agrees to indemnify Silicon and its affiliates, subsidiaries, parent, directors, officers, employees, agents, and attorneys, and to hold them harmless from and against any and all claims, debts, liabilities, demands, obligations, actions, causes of action, penalties, costs and expenses (including reasonable attorneys' fees), of every kind, which they may sustain or incur based upon or arising out of any of the Obligations, or any relationship or agreement between Silicon and Borrower, or any other matter, relating to Borrower or the Obligations; provided that this indemnity shall not extend to damages proximately caused by the indemnitee's own gross negligence or willful misconduct. Notwithstanding any provision in this Agreement to the contrary, the indemnity agreement set forth in this Section shall survive any termination of this Agreement and shall for all purposes continue in full force and effect.

9.9 No Liability for Ordinary Negligence. Neither Silicon, nor any of its directors, officers, employees, agents, attorneys or any other Person affiliated with or representing Silicon shall be liable for any claims, demands, losses or damages, of any kind whatsoever, made, claimed, incurred or suffered by Borrower or any other party through the ordinary negligence of Silicon, or any of its directors, officers, employees, agents, attorneys or any other Person affiliated with or representing Silicon, but nothing herein shall relieve Silicon from liability for its own gross negligence or willful misconduct.

9.10 Amendment. The terms and provisions of this Agreement may not be waived or amended, except in a writing executed by Borrower and a duly authorized officer of Silicon.

9.11 Time of Essence. Time is of the essence in the performance by Borrower of each and every obligation under this Agreement.

9.12 Attorneys Fees and Costs. Borrower shall reimburse Silicon for all reasonable attorneys' fees and all filing, recording, search, title insurance, appraisal, audit, and other reasonable costs incurred by Silicon, pursuant to, or in connection with, or relating to this Agreement (whether or not a lawsuit is filed), including, but not limited to, any reasonable attorneys' fees and costs Silicon incurs in order to do the following: prepare and negotiate this Agreement and all present and future documents relating to this Agreement; obtain legal advice in connection with this Agreement or Borrower; enforce, or seek to enforce, any of its rights; prosecute actions against, or defend actions by, Account Debtors; commence, intervene in, or defend any action or proceeding; initiate any complaint to be relieved of the automatic stay in bankruptcy; file or prosecute any probate claim, bankruptcy claim, third-party claim, or other claim; examine, audit, copy, and inspect any of the Collateral or any of Borrower's books and records; protect, obtain possession of, lease, dispose of, or otherwise enforce Silicon's security interest in, the Collateral; and otherwise represent Silicon in any litigation relating to Borrower. In satisfying Borrower's obligation hereunder to reimburse Silicon for attorneys fees, Borrower may, for convenience, issue checks directly to Silicon's attorneys, Levy, Small & Lallas, but Borrower acknowledges and agrees that Levy, Small & Lallas is representing only Silicon and not Borrower in connection with this Agreement. If either Silicon or Borrower files any lawsuit against the other predicated on a breach of this Agreement, the prevailing party in such action shall be entitled to recover its reasonable costs and attorneys' fees, including (but not limited to) reasonable attorneys' fees and costs incurred in the enforcement of, execution upon or defense of any order, decree, award or judgment. All attorneys' fees and costs to which Silicon may be entitled pursuant to this Paragraph shall immediately become part of Borrower's Obligations, shall be due on demand, and shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations.

9.13 Benefit of Agreement. The provisions of this Agreement shall be binding upon and inure to the benefit of the respective successors, assigns, heirs, beneficiaries and representatives of Borrower and Silicon; provided, however, that Borrower may not assign or transfer any of its rights under this Agreement without the prior written consent of Silicon, and any prohibited assignment shall be void. No consent by Silicon to any assignment shall release Borrower from its liability for the Obligations.

9.14 Joint and Several Liability. If Borrower consists of more than one Person, their liability shall be joint and several, and the compromise of any claim with, or the release of, any Borrower shall not constitute a compromise with, or a release of, any other Borrower.

9.15 Limitation of Actions. Any claim or cause of action by Borrower against Silicon, its directors, officers, employees, agents, accountants or attorneys, based upon, arising from, or relating to this Loan Agreement, or any other Loan Document, or any other transaction contemplated hereby or thereby or relating hereto or thereto, or any other matter, cause or thing whatsoever, occurred, done, omitted or suffered to be done by Silicon, its directors, officers, employees, agents, accountants or attorneys, shall be barred unless asserted by Borrower by the commencement of an action or proceeding in a court of competent jurisdiction by the filing of a complaint within one year after the first act, occurrence or omission upon which such claim or cause of action, or any part thereof, is based, and the service of a summons and complaint on an officer of Silicon, or on any other person authorized to accept service on behalf of Silicon, within thirty (30) days thereafter. Borrower agrees that such one-year period is a reasonable and sufficient time for Borrower to investigate and act upon any such claim or cause of action. The one-year period provided herein shall not be waived, tolled, or extended except by the written consent of Silicon in its sole discretion. This provision shall survive any termination of this Loan Agreement or any other Loan Document.

9.16 Paragraph Headings; Construction. Paragraph headings are only used in this Agreement for convenience. Borrower and Silicon acknowledge that the headings may not describe completely the subject matter of the applicable paragraph, and the headings shall not be used in any manner to construe, limit, define or interpret any term or provision of this Agreement. This Agreement has been fully reviewed and negotiated between the parties and no uncertainty or ambiguity in any term or provision of this Agreement shall be construed strictly against Silicon or Borrower under any rule of construction or otherwise.

9.17 Governing Law; Jurisdiction; Venue. This Agreement and all acts and transactions hereunder and all rights and obligations of Silicon and Borrower shall be governed by the laws of the State of California. As a material part of the consideration to Silicon to enter into this Agreement, Borrower (i) agrees that all actions and proceedings relating directly or indirectly to this Agreement shall, at Silicon's option, be litigated in courts located within California, and that the exclusive venue therefor shall be Santa Clara County; (ii) consents to the jurisdiction and venue of any such court and consents to service of process in any such action or proceeding by personal delivery or any other method permitted by law; and (iii) waives any and all rights Borrower may have to object to the jurisdiction of any such court, or to transfer or change the venue of any such action or proceeding.

9.18 Mutual Waiver of Jury Trial. BORROWER AND SILICON EACH HEREBY WAIVE THE RIGHT TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING BASED UPON, ARISING OUT OF, OR IN ANY WAY RELATING TO, THIS AGREEMENT OR ANY OTHER PRESENT OR FUTURE INSTRUMENT OR AGREEMENT BETWEEN SILICON AND BORROWER, OR ANY CONDUCT, ACTS OR OMISSIONS OF SILICON OR BORROWER OR ANY OF THEIR DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, ATTORNEYS OR ANY OTHER PERSONS AFFILIATED WITH SILICON OR BORROWER, IN ALL OF THE FOREGOING CASES, WHETHER SOUNDING IN CONTRACT OR TORT OR OTHERWISE.

Borrower:	Silicon:
TEGAL CORPORATION	SILICON VALLEY BANK
BY /s/ Michael L. Parodi _____ President or Vice President	BY /s/ Patrick J. O'Donnell _____ Title Vice President
BY /s/ Kathy Petrini _____ Secretary or Ass't Secretary	

**Schedule to
Loan and Security Agreement**

Borrower: Tegal Corporation
Address: 2201 South McDowell Blvd.
Petaluma, CA 94954

Date: June 26, 2002

This Schedule forms an integral part of the Loan and Security Agreement between Silicon Valley Bank and the above-borrower of even date.

1. CREDIT LIMIT
(Section 1.1):

An amount not to exceed the lesser of: (i) **\$10,000,000** at any one time outstanding (the "Maximum Credit Limit"); or (ii) 85% (the "Advance Rate") of the amount of Borrower's Eligible Accounts (as defined in Section 8 above); provided that the total outstanding Obligations under this Loan Agreement and under the Exim Agreement (as defined below) shall not at any time exceed **\$10,000,000** (the "Overall Credit Limit").

Silicon may, from time to time, modify the Advance Rate, in its good faith business judgment, upon notice to the Borrower, based on changes in collection experience with respect to Accounts or other issues or factors relating to the Accounts or other Collateral.

Letter of Credit Sublimit \$5,000,000.
(Section 1.6):

Cash Management
Services and Reserves: _

Borrower may use up to \$5,000,000 of Loans available hereunder for Silicon's Cash Management Services (as defined below), including, merchant services, business credit card, ACH and other services identified in the cash management services agreement related to such service (the "Cash Management Services"). Silicon may, in its sole discretion, reserve against Loans which would otherwise be available hereunder such sums as Silicon shall determine in its good faith business judgment in connection with the Cash Management Services, and Silicon may charge to Borrower's Loan account, any amounts that may become due or owing to Silicon in connection with the Cash Management Services. Borrower agrees to execute and deliver to Silicon all standard form applications and agreements of Silicon in connection with the Cash Management Services, and, without limiting any of the terms of such applications and agreements, Borrower will pay all standard fees and charges of Silicon in connection with the Cash Management Services. The Cash Management Services shall terminate on the Maturity Date.

Foreign Exchange
Contract Sublimit:

\$5,000,000.

Borrower may enter into foreign exchange forward contracts with Silicon, on its standard forms, under which Borrower commits to purchase from or sell to Silicon a set amount of foreign currency more than one business day after the contract date (the "FX Forward Contracts"); provided that (1) at the time the FX Forward Contract is entered into Borrower has Loans available to it under this Agreement in an amount at least equal to 10% of the amount of the FX Forward Contract; (2) the total FX Forward Contracts at any one time outstanding may not exceed 10 times the amount of the Foreign Exchange Contract Sublimit set forth above. Silicon shall have the right to withhold, from the Loans otherwise available to Borrower under this Agreement, a reserve (which shall be in addition to all other reserves) in an amount equal to 10% of the total FX Forward Contracts from time to time outstanding, and in the event at any time there are insufficient Loans available to Borrower for such reserve, Borrower shall deposit and maintain with Silicon cash collateral in an amount at all times equal to such deficiency, which shall be held as Collateral for all purposes of this Agreement. Silicon may, in its discretion, terminate the FX Forward Contracts at any time that an Event of Default occurs and is continuing. Borrower shall execute all standard form applications and agreements of Silicon in connection with the FX Forward Contracts, and without limiting any of the terms of such applications and agreements, Borrower shall pay all standard fees and charges of Silicon in connection with the FX Forward Contracts.

**Exim Agreement;
Cross-Collateralization;
Cross-Default:**

Silicon and the Borrower are parties to that certain Loan and Security Agreement (Exim Program) of even date (the "Exim Agreement"). Both this Agreement and the Exim Agreement shall continue in full force and effect, and all rights and remedies under this Agreement and the Exim Agreement are cumulative. The term "Obligations" as used in this Agreement and in the Exim Agreement shall include without limitation the obligation to pay when due all Loans made pursuant to this Agreement (the "Non-Exim Loans") and all interest thereon and the obligation to pay when due all Loans made pursuant to the Exim Agreement (the "Exim Loans") and all interest thereon. Without limiting the generality of the foregoing, all "Collateral" as defined in this Agreement and as defined in the Exim Agreement shall secure all Exim Loans and all Non-Exim Loans and all interest thereon, and all other Obligations. Any Event of Default under this Agreement shall also constitute an Event of Default under the Exim Agreement, and any Event of Default under the Exim Agreement shall also constitute an Event of Default under this Agreement. In the event Silicon assigns its rights under the Exim Agreement and/or under any Note evidencing Exim Loans and/or its rights under this Agreement and/or under any Note evidencing Non-Exim Loans, to any third party, including without limitation the Export-Import Bank of the United States ("Exim Bank"), whether before or after the occurrence of any Event of Default, Silicon shall have the right (but not any obligation), in its sole discretion, to allocate and apportion Collateral to the Agreement and/or Note assigned and to specify the priorities of the respective security interests in such Collateral between itself and the assignee, all without notice to or consent of the Borrower.

2. INTEREST.

Interest Rate (Section 1.2): A rate equal to the "Prime Rate" in effect from time to time, plus **1.0%** per annum. Interest shall be calculated on the basis of a 360-day year for the actual number of days elapsed. "Prime Rate" means the rate announced from time to time by Silicon as its "prime rate;" it is a base rate upon which other rates charged by Silicon are based, and it is not necessarily the best rate available at Silicon. The interest rate applicable to the Obligations shall change on each date there is a change in the Prime Rate.

Minimum Monthly Interest (Section 1.2): Not Applicable.

3. FEES (Section 1.4):

Loan Fee: \$250,000, payable as follows: (i) \$125,000, payable concurrently herewith (subject to the Early Acceptance Reduction as set forth below), and (ii) \$125,000, payable on or before the first anniversary of the date of this Agreement.

Early Acceptance Reduction: If this Agreement and the Loan Documents related to this Agreement have been executed by each of the parties by June 25, 2002, Silicon will reduce the amount of the Loan Fee payable concurrently herewith from \$125,000 to \$105,000.

If this Agreement and the Loan Documents related to this Agreement have been executed by each of the parties by July 2, 2002, Silicon will reduce the amount of the Loan Fee payable concurrently herewith from \$125,000 to \$110,000.

Collateral Monitoring Fee: \$1,000, per month in the aggregate as between this Agreement and the Exim Agreement, payable in arrears (prorated for any partial month at the beginning and at termination of this Agreement).

Unused Line Fee: In the event, in any calendar month (or portion thereof at the beginning and end of the term hereof), the average daily principal balance of the aggregate Loans outstanding during the month under this Agreement and the Exim Agreement is less than the amount of the Maximum Credit Limit, Borrower shall pay Silicon an unused line fee in an amount equal to 0.25% per annum on the difference between the amount of the Maximum Credit Limit and such average daily principal balance of the Loans outstanding during the month, which unused line fee shall be computed and paid monthly, in arrears, on the first day of the following month.

4. MATURITY DATE

(Section 6.1):

Two years from the date of this Agreement.

5. FINANCIAL COVENANTS

(Section 5.1):

Borrower shall comply with each of the following covenants. Compliance shall be determined as of the end of each month, except as otherwise specifically provided below:

**Minimum Tangible
Net Worth:**

Borrower shall maintain a Tangible Net Worth of not less than \$16,000,000 plus 50% of the total consideration received by Borrower after the date hereof, in consideration for the issuance by the Borrower of its equity securities and subordinated debt securities, effective on the date such consideration is received.

Definitions.

For purposes of the foregoing financial covenants, the following term shall have the following meaning:

“Current assets”, “current liabilities” and “liabilities” shall have the meaning ascribed thereto by GAAP.

“Tangible Net Worth” shall mean the excess of total assets over total liabilities, determined in accordance with GAAP, with the following adjustments:

(A) there shall be excluded from assets: (i) notes, accounts receivable and other obligations owing to Borrower from its officers or other Affiliates, and (ii) all assets which would be classified as intangible assets under GAAP, including without limitation goodwill, licenses, patents, trademarks, trade names, copyrights, capitalized software and organizational costs, licenses and franchises

(B) there shall be excluded from liabilities: all indebtedness which is subordinated to the Obligations under a subordination agreement in form specified by Silicon or by language in the instrument evidencing the indebtedness which Silicon agrees in writing is acceptable to Silicon in its good faith business judgment.

6. REPORTING.

(Section 5.3):

Borrower shall provide Silicon with the following:

1. With each request for a Loan and on a minimum weekly basis, transaction reports and schedules of collections, on Silicon’s standard form.
 2. Monthly accounts receivable agings, aged by invoice date, within fifteen days after the end of each month.
 3. Monthly accounts payable agings, aged by invoice date, and outstanding or held check registers, if any, within fifteen days after the end of each month.
 4. Monthly reconciliations of accounts receivable agings (aged by invoice date), transaction reports, and general ledger, within fifteen days after the end of each month.
 6. Monthly unaudited financial statements, as soon as available, and in any event within thirty days after the end of each month.
 7. Monthly Compliance Certificates, within thirty days after the end of each month, in such form as Silicon shall reasonably specify, signed by the Chief Financial Officer of Borrower, certifying that as of the end of such month Borrower was in full compliance with all of the terms and conditions of this Agreement, and setting forth calculations showing compliance with the financial covenants set forth in this Agreement and such other information as Silicon shall reasonably request, including, without limitation, a statement that at the end of such month there were no held checks.
-

8. Quarterly unaudited financial statements, as soon as available, and in any event within forty-five days after the end of each fiscal quarter of Borrower.
 9. Annual operating budgets (including income statements, balance sheets and cash flow statements, by month) for the upcoming fiscal year of Borrower within thirty days prior to the end of each fiscal year of Borrower.
 10. Annual financial statements, as soon as available, and in any event within 120 days following the end of Borrower's fiscal year, certified by, and with an unqualified opinion of, independent certified public accountants acceptable to Silicon.
-

7. BORROWER INFORMATION:

Borrower represents and warrants that the information set forth in the Representations and Warranties of the Borrower dated June 25, 2002, previously submitted to Silicon (the "Representations") is true and correct as of the date hereof.

8. ADDITIONAL PROVISIONS

- (1) **Banking Relationship.** Borrower shall at all times maintain its primary banking relationship with Silicon. Without limiting the generality of the foregoing, Borrower shall, at all times, maintain not less than 80% of its total cash and investments on deposit with Silicon. As to any Deposit Accounts and investment accounts maintained with another institution, Borrower shall cause such institution, within 30 days after the date of this Agreement, to enter into a control agreement in form acceptable to Silicon in its good faith business judgment in order to perfect Silicon's first-priority security interest in said Deposit Accounts and investment accounts.
 - (2) **Subordination of Inside Debt.** All present and future indebtedness of Borrower to its officers, directors and shareholders ("Inside Debt") shall, at all times, be subordinated to the Obligations pursuant to a subordination agreement on Silicon's standard form. Borrower represents and warrants that there is no Inside Debt presently outstanding, except for the following: - \$0 -. Prior to incurring any Inside Debt in the future, Borrower shall cause the person to whom such Inside Debt will be owed to execute and deliver to Silicon a subordination agreement on Silicon's standard form.
-

- (3) **Warrants.** Concurrently herewith, Borrower shall provide Silicon with seven-year warrants to purchase a number of shares of common stock of Borrower equal to \$250,000 divided by the Initial Exercise Price which will be the greater of (i) \$2.00 per share and (ii) a price per share equal to the average closing price per share of the common stock of the Borrower for the 7 trading days immediately preceding the Issue Date of the Warrant to Purchase Stock, all on terms acceptable to Silicon, as set forth in the Warrant to Purchase Stock and related documents. Said warrants shall be deemed fully earned on the date hereof, shall be in addition to all interest and other fees, and shall be non-refundable.
- (4) **Copyright Filings.** Concurrently, Borrower is executing and delivering to Silicon an Intellectual Property Security Agreement (the "Intellectual Property Agreement"). Within 60 days after the date hereof, Borrower shall (i) cause all of its computer software, the licensing of which results in Accounts, or which is material to its business to be registered with the United States Copyright Office, (ii) complete the Exhibits to the Intellectual Property Agreement with all of the information called for with respect to such software, (iii) cause the Intellectual Property Agreement to be recorded in the United States Copyright Office, and (iv) provide evidence of such recordation to Silicon.
- (5) **Landlord Waivers.** Borrower shall, within thirty days of the date hereof, cause any third party who has an interest in any premises where Collateral is located, to execute and deliver to Silicon, in form acceptable to Silicon, such waivers and subordinations as Silicon shall specify in order to confirm Silicon's priority security interest in the Collateral and to assure Silicon of access to the Collateral.

Borrower:	Silicon:
TEGAL CORPORATION	SILICON VALLEY BANK
BY /s/ Michael L Parodi President or Vice President	BY /s/ Patrick J. O'Donnell Title <u>Vice President</u>
BY /s/ Kathy Petrini Secretary or Ass't Secretary	

SEVENTH AMENDMENT TO LEASE AGREEMENT

THIS SEVENTH AMENDMENT TO LEASE AGREEMENT ("this Amendment") is entered into as of June 5, 2003 ("Reference Date") by and between JANE CROCKER, formerly Jane C. Jacobs, as Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990 ("Crocker") and NORMAN E. MACKAY ("MacKay") (Crocker and MacKay hereinafter collectively referred to as "Landlord") and TEGAL CORPORATION, a Delaware corporation ("Tenant").

Recitals

A. Justin M. Jacobs, Jr. dba Landbank Investments ("Landbank") and Tenant have entered into that certain Lease Agreement dated as of August 15, 1986 ("Original Lease") wherein Landbank leased to Tenant and Tenant leased from Landbank the premises consisting of an approximately 120,000 square foot building ("Building"), the parking lot and other improvements located at 2201 South McDowell Boulevard, Petaluma, Sonoma County, California ("Original Premises"), as more specifically described in the Original Lease.

B. The Original Lease was amended by South McDowell Investments, a California general partnership, as successor-in interest to Landbank, ("SMI") and Tenant pursuant to the following documents: (i) Amendment dated as of August 31, 1987; (ii) letter agreement dated as of September 11, 1987; (iii) Amendment dated as of December 17, 1987; (iv) letter agreement dated January 15, 1988; (v) Amendment dated as of March 8, 1988; and (vi) Lease Amendment dated March 10, 1997 ("Sixth Amendment"). The foregoing documents are collectively referred to as the "Amendments". The Amendments and the Original Lease are collectively referred to as the "Lease."

C. SMI has assigned its right, title and interest in the Lease to Landlord.

D. Landlord and Tenant wish to further amend the Lease.

Agreement.

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Landlord and Tenant hereby agree as follows:

1. **Recitals.** Landlord and Tenant hereby agree that the hereinabove Recitals are true and correct.

2. **Definitions.** Unless defined otherwise in this Amendment, all definitions used in this Amendment shall have the same meaning and definition as given them in the Original Lease as amended by the Amendments.

3. **Tenant's Share.** As used in this Amendment, "Tenant's Share" shall mean 37.55%.

4. **Premises.** The definition of "Premises" in Section 1 of the Original Lease shall be deleted. From and after January 1, 2003, the Premises shall consist of approximately 45,064 square feet of space on the ground floor of the Building and the Chiller Area, as shown on Exhibit A, which is attached hereto and made a part hereof by this reference ("Premises"). Tenant shall surrender to Landlord all of the Original Premises other than the Premises shown on Exhibit A as set forth in Section 9 below. Tenant shall have the non-exclusive right in common with the other tenants of the Building, Landlord and any other person granted use by Landlord to use the Common Areas. The term "Common Areas" shall mean (i) all areas and facilities outside the Premises and within the exterior boundary line of the Project Site that are provided and designated by Landlord for the non-exclusive use of Landlord, Tenant and other tenants of the Building and their respective employees, guests and invitees which are improved as parking areas, landscaped areas, driveways, roadways and/or walkways and (ii) the lobby of the Building, common corridors, hallways, stairwells, elevator, and restrooms not located within space leased to other tenants. Landlord shall have the right, at any time and from time to time: (i) to designate or improve any portion of the Project Site as Common Areas and (ii) to make changes to the Common Areas. Any use of the Common Area shall be subject to such rules and regulations as Landlord may from time to time or at any time promulgate.

5. **Term.** Section 1 of the Sixth Amendment is hereby modified to extend the end of the Term to December 31, 2009. Section 9 of the Sixth Amendment, Option to Extend, is hereby deleted.

6. **Basic Rent.** Effective January 1, 2003 the Basic Rent shall be as follows:

<u>Period</u>	<u>Monthly Basic Rent</u>	<u>Annual Basic Rent</u>
January 1, 2003 through December 31, 2003	\$55,000.00	\$660,000.00
January 1, 2004 through December 31, 2004	\$56,650.00	\$679,800.00
January 1, 2005 through December 31, 2005	\$58,349.50	\$700,194.00
January 1, 2006 through December 31, 2006	\$60,099.99	\$721,199.88
January 1, 2007 through December 31, 2007	\$61,902.99	\$742,835.88
January 1, 2008 through December 31, 2008	\$63,760.08	\$765,120.96
January 1, 2009 through December 31, 2009	\$65,672.88	\$788,074.56

Section 2 of the Sixth Amendment is hereby deleted. There shall be no annual CPI adjustments in the Monthly Basic Rent set forth above.

7. **Maintenance and Repair of the Building and the Common Areas.** Tenant shall continue to maintain the Original Premises (including the entire Building and Common Areas) in the manner described in Section 9.B. of the Original Lease until April 1, 2003. Effective April 1, 2003, Tenant shall only be required to maintain and

repair the Premises (defined in Exhibit A) and shall at all times at Tenant's sole cost and expense keep all portions of the Premises in good order, condition and repair (including replacements, as and when necessary), including, without limitation, all drop ceilings, carpets, walls, moldings, doors, door jams, door closers, door hardware, fixtures, equipment and appurtenances thereof, floors, partitions, all electrical, lighting and sprinkler systems, and fixtures and equipment. Tenant shall also be responsible for the repair of any and all damage caused to the Building or the Common Areas by any act, neglect or omission of Tenant or its employees, agents, invitees, licensees, contractors or subtenants; the repair of any such damage shall be made by Tenant at Tenant's cost and expense and in conformance with existing Building standards of quality and materials. Commencing on April 1, 2003 Landlord shall maintain the Common Areas and the Building other than the Premises, except for the heating, ventilation and air conditioning system ("HVAC System") which shall be maintained by Tenant as set forth in Section 9 below. Landlord may at any time delegate such maintenance, or any portion thereof, to any other third party, affiliated or non-affiliated, upon such terms and conditions as Landlord deems compensatory, necessary or appropriate. The manner in which the Common Areas and the Building are maintained hereunder, and the expenditures therefor, shall be at Landlord's sole discretion. In the event that Tenant's proportionate share of any non-emergency single repair item exceeds \$5,000.00, Landlord shall give Tenant written notice of Landlord's intent to make such repair no less than ten (10) days in advance of such repair. Maintenance and repair of the structural portions and foundations of the Building and the structural members of the roof of the Building, replacement of the parking and driveway areas, replacement or repair of the slab, foundation, concrete walls and structural fill of the Building and repair or replacement of any material defects in the rough plumbing shall be at Landlord's sole cost and expense; all other maintenance and repair (including maintenance and repair of all portions of the roof membrane and drains of the Building other than the structural members, restriping, resurfacing and resealing of all parking and driveway areas and painting of the exterior of the Building) shall be included in Operating Costs and paid by Tenant pursuant to Section 8 of this Amendment or, at Landlord's election, paid directly by Tenant to the extent relating to the Premises. Landlord shall have no obligation to make any repairs or replacements hereunder until the expiration of ten (10) days following written notice from Tenant to Landlord of the need therefor. Tenant waives any right now or hereafter granted by law to make any repairs under this Section 7 upon Landlord's failure to do so hereunder or otherwise. Landlord shall at Landlord's cost and expense make all alterations, additions and improvements required to comply with any and all laws, ordinances, rules, regulations and orders applicable to the Premises except as set forth in Section 8.E. of the Original Lease, which shall continue to be the obligation of Tenant as set forth in Section 8.E. of the Original Lease.

8. Operating Costs.

A. Definition. "Operating Costs" shall mean the total of all costs and expenses paid or incurred by Landlord in connection with the use, operation, maintenance, ownership and repair of the Common Areas and the Building. Without limiting the generality of the foregoing, Operating Costs include all costs of and expenses

for: (i) maintaining, resurfacing, resealing, remarking, painting or restriping the parking areas on the Project Site; (ii) maintenance and repair of sidewalks, curbs, paving, walkways, landscaping (including tree trimming), planting and irrigation systems (including replacement of landscaping and plants required to replace dead or dying plants), trash facilities, lighting, drainage and common utility facilities, directional or other signs, markers and bumpers and driveway areas on the Project Site; (iii) all charges, wages, salaries, benefits and payroll burden fees of all parties (including affiliates of Landlord) providing services for the maintenance, repair, management and/or supervision of the Project Site, and for security personnel retained by Landlord in connection with the operation and maintenance of the Common Areas and the Building (although Landlord shall not be required to obtain security services); (iv) maintenance and repair of security systems and alarms; (v) depreciation or amortization (or in lieu thereof, rental payments) on all tools, equipment and machinery used in the operation and maintenance of the Common Areas and the Building; (vi) premiums for the insurance carried by Landlord pursuant to Section 13 below and for Comprehensive General Liability Insurance or Commercial General Liability Insurance, casualty insurance, workers compensation insurance or other insurance for the Common Areas, the Building and for the Project Site, or any portion thereof or interest therein; (vii) real property taxes and all personal property taxes and assessments levied or assessed on Project Site (but only for personal property used or contained in the Common Areas), or any portion thereof or interest therein; (viii) cleaning, collection, storage and removal of trash, rubbish, dirt and debris, and sweeping and cleaning the Common Areas; (ix) servicing and maintaining and monitoring any fire sprinkler system; (x) regular pickup of trash and garbage; (xi) a management fee for the internal administration and overhead costs incurred in the operation and management of the Common Areas hereunder, but only to the extent such management fee is paid to an unaffiliated third-party and is at prevailing commercial rates for such fees; (xii) maintenance and repair of all portions of the roof of the Building other than structural members of the roof; (xiii) the fee for the roof and parking lot drainage permits required by law; (xiv) cost of janitorial supplies and services; (xv) utility costs for Common Areas including, but not limited to, Common Area HVAC and PG&E costs; (xvi) the Oakmead Northbay Business Park Association assessment; (xvii) costs of exterior Building painting and painting of interior Building Common Areas except for repainting of the exterior of the Building more than one time in any five (5) year period; and (xviii) any alterations, additions or improvements required to be made to the Common Area in order to comply with applicable laws, ordinances, rules, regulations and orders.

B. Payment by Tenant of Tenant's Share of Operating Costs. Commencing on April 1, 2003 and continuing thereafter throughout the Term, Tenant shall pay to Landlord in the manner hereinafter provided, Tenant's Share of Operating Costs. On the first day of each month, Tenant shall pay in advance one-twelfth (1/12th) of the amount which Landlord estimates, based upon a detailed budget to be given to Tenant in advance, as the Tenant's Share of Operating Costs for the calendar Year. Within ninety (90) days after the end of each calendar year of the Term, or as soon thereafter as practicable, Landlord shall furnish to Tenant a statement of the actual amount of Tenant's Share of Operating Costs. If the amount paid by Tenant during such calendar year is less than Tenant's Share of Operating Costs as shown by Landlord's

statement, then Tenant shall pay the difference within twenty (20) days after the date of Landlord's statement; if the amount paid by Tenant during such calendar year is more than Tenant's Share of Operating Costs as shown by such statement, then Tenant shall receive a credit on future payments of Operating Costs hereunder for the amount of such excess. If at any time it appears to Landlord that Operating Costs for any calendar year will exceed Landlord's estimate thereof, then Landlord shall have the right by written notice to Tenant to revise the estimated monthly amount payable by Tenant hereunder and subsequent payments of Tenant's estimated Share of Operating Costs hereunder shall be increased based upon such revised statement; provided, however, there shall be no more than one revision during each calendar year, except for the 2003 calendar year, where there may be two (2) revisions. For the years in which the Term commences and expires, Operating Costs shall be prorated based on the number of days of the calendar year the Term is in effect. Tenant shall have the right to audit, at Tenant's cost and expense, not more than once each calendar year, the books and records of Landlord and/or its representatives relating to the Operating Costs. Such audit shall be at the offices of Landlord's accountant or at such other location as designated by Landlord.

C. **Capital Improvements.** If any of Tenant's obligations under Articles 7 and 8 of the Lease, as hereby amended, would require Tenant to pay all or any portion of any charge or Common Operating Expense which could be treated as a capital improvement under generally accepted accounting principles, then Tenant shall pay its share of such expense, as follows:

8.C.1. The cost of such improvement shall be amortized over the useful life of the improvement as reasonably determined by Landlord with interest on the unamortized balance at the then prevailing mark rate Landlord would pay if it borrowed funds to construct such improvements from an institutional lender, and Landlord shall inform Tenant of the monthly amortization payment required to so amortize such costs, and shall also provide Tenant with the information upon which such determination is made.

8.C.2. Tenant shall pay its proportionate share (based on the percentage of the Building leased by Tenant) of such amortization payment for each month after such improvement is completed until the first to occur of (i) the expiration of the Lease Term or (ii) the end of the term over which such costs were amortized, which amount shall be due at the same time the Base Monthly Rent is due.

9. **HVAC.** Subject to Landlord's reducing of Tenant's HVAC units to the Premises, at Landlord's sole expense, Tenant shall maintain and repair the HVAC System serving the Premises by procuring and maintaining an all-inclusive contract in customary form and substance ("HVAC Maintenance Contract") with a contractor specializing and experienced in the maintenance and repair of HVAC equipment ("HVAC Contractor), which HVAC Contractor and maintenance schedule shall be approved by Landlord. Tenant shall at Tenant's cost and expense replace the HVAC System if needed during the Term of the Lease.

10. Surrender of Portions of Original Premises. Tenant shall surrender all portions of the Original Premises which are not a part of the Premises ("Surrender Premises") to Landlord no later than the date which is sixty (60) days following the date this Amendment is executed by the parties ("Surrender Date"). The Surrender Premises shall be delivered to Landlord in good condition and repair with all interior walls patched and cleaned so that they appear freshly painted, all tile floors cleaned and waxed, all carpets cleaned and shampooed, and all broken, marred, stained or nonconforming acoustical ceiling tiles replaced and as required by the provisions of Section 7 of the Original Lease and Section 4 of the Sixth Amendment, except as otherwise provided in this Section 9. In addition the following shall be completed by Tenant at Tenant's expense on or before the Surrender Date:

A. all kitchen equipment and fixtures shall be removed from the kitchen area of the Surrender Premises with walls, doors and ceilings patched, floors and carpets cleaned, all damage caused by such removal repaired, a drop ceiling installed where the cooking area hood was located and the wall in the cafeteria between the service area and seating area removed;

B. all specialized equipment and telecommunication connections shall be removed from the second floor computer room area of the Surrender Premises, the raised portion of the flooring and wiring removed (such removal of the raised portion and wiring to be completed at a time to be designated by Landlord) and the floor restored to existing building standards;

C. the existing 175 gallon water heater in kitchen area shall be enclosed with sheet rock and an access door added; and

D. phone wires from the portion of the Original Premises previously occupied by ACTI shall be removed (such removal to be completed at a time designated by Landlord).

Notwithstanding any provisions of Section 7 of the Lease and any other provisions therein to the contrary, within thirty (30) days following the full execution of this Amendment by the parties, Tenant shall deliver to Landlord a completed bill of sale ("Bill of Sale") in the form attached hereto as Exhibit B and made a part hereof by this reference, listing on said Bill of Sale all furniture, cubicles and equipment and all telephone systems and connections and power connections going to work stations, offices and cubicles which Tenant will leave in the Surrender Premises and which shall become the property of Landlord ("Surrendered Personal Property"). Such Bill of Sale shall reflect that no monetary consideration was paid for the sale. Tenant hereby represents and warrants to Landlord that the Surrendered Personal Property is owned by Tenant and will not on the date this Amendment is executed by the parties be encumbered by any claim or lien, such as a Uniform Commercial Code Financing Statement. The transfer of such Surrendered Personal Property to Landlord is made in partial consideration for the execution of this Amendment and Tenant shall not be entitled to a credit against amounts owed to Tenant by Landlord of any amount for such transfer.

With respect to the Surrender Premises, once such Surrender Premises are surrendered to Landlord in the condition required by this Section 10 and accepted by Landlord, Tenant shall have no further obligations under Section 7 of the Original Lease and Section 4 of the Sixth Amendment. Upon the expiration or sooner termination of this Lease, Tenant shall comply with the provisions of Section 7 of the Original Lease and Section 4 of the Sixth Amendment with regard to the surrender of the Premises to Landlord. Within one hundred eighty (180) days after the date on which this Amendment is executed by the parties, Landlord shall provide Tenant with a list of the existing improvements which Tenant will be required to remove at the end of the term of the Lease. Landlord's failure to provide such list to Tenant within said one hundred eighty (180) days shall be deemed a waiver of Landlord's right to require Tenant to remove such improvements at the end of the term of the Lease.

11. Deferred Maintenance. Tenant acknowledges and agrees that Tenant shall remain responsible for the payment of maintenance and repairs which Tenant was required by the terms of the Original Lease to complete on the Original Premises prior to April 1, 2003, but which Tenant did not complete ("Deferred Maintenance"). Tenant shall have ninety (90) days after the date on which this Amendment is executed by the parties in which to complete the following Deferred Maintenance items: (1) replace the five (5) metal signs at the two (2) driveway entrances; (2) trim the trees described on the tree trimming plan, which is attached hereto as Exhibit C and made a part hereof by this reference; (3) repair the gate to the patio area so that the gate will close and latch; (4) resurface and reseal the cracks in the driveways and parking areas of the Project Site; (5) restore the wall in the main lobby where a pay telephone was removed; and (6) complete actions as necessary to put all plumbing in all restrooms in good condition and repair. Landlord shall complete the other Deferred Maintenance consisting of patching the roof membrane, cleaning the roof drains and replacing all wooden surfaces of the four exterior wooden benches and shall submit an invoice to Tenant for the cost of same. Tenant shall within ten (10) days of receipt of any such invoice pay to Landlord as additional rent the amount of any such invoice.

12. Improvements. In conjunction with the separation of the Premises from the Original Premises Tenant shall at Tenant's cost and expense make the following improvements to the Building ("Building Improvements"):

A. construct an approximately 45-foot straight wall with one door to separate the office spaces at the second set of pillars as shown on Exhibit D (page 1) which is attached hereto and made a part hereof by this reference;

B. install a doorway to allow access to the restroom hallway from the production area in the Premises and from the office areas in the Surrender Premises in the location shown on Exhibit D (page 1);

C. install a doorway for emergency exit at the end of the hallway adjacent to the reliability lab and production area in the Surrender Premises in the location shown on Exhibit D and also install an additional wall to the production area;

D. remove wall and stub above-ceiling electrical and water lines in the chase area adjacent to the training rooms in the location shown on Exhibit D and restore the floor; and

E. construct a wall with three (3) or four (4) doors in the location shown on page 2 of Exhibit D.

All such Building Improvements shall be completed by Tenant in conformance with current building standards and applicable building codes. The Building Improvement described in Section 12.A. above shall be completed no later than the date which is sixty (60) days following the date this Amendment is executed by the parties. The Building Improvements described in Section 12.B., C. and D. shall be completed no later than the date which is sixty (60) days following the date this Amendment is executed by the parties. The Building Improvement described in Section 12.E. shall be completed within thirty (30) days after Landlord requests in writing that such Building Improvement be made. At the time of such written request, Landlord shall specify whether three or four doors will be required. If any of the Building Improvements are not completed by Tenant by the date required, Landlord may at its election complete such Building Improvements. Tenant shall within ten (10) days of receipt of an invoice from Landlord following completion of any such work, pay to Landlord as additional rent the amount of any such invoices plus an administration fee of ten percent (10%) of the amount thereof.

13. Real Property Taxes. Effective April 1, 2003, Tenant shall pay only Tenant's Share of the Real Property Taxes. On the first day of each month, Tenant shall pay to Landlord as additional rent one-twelfth (1/12th) of the amount which Landlord estimates as Tenant's Share of Real Property Taxes for the calendar year. Landlord acknowledges that Tenant has paid the first installment of the Real Property Taxes due for the Original Premise, which installment was for taxes through December 31, 2002.

14. Insurance. Upon the execution of this Amendment by the parties, Tenant shall have no obligation to maintain and carry the insurance described in Sections 12.D., E., and F. of the Original Lease. Tenant shall continue to keep in force and maintain commercial general liability insurance as set forth in the Original Lease, except that such insurance shall be limited to liability arising out of the use, occupancy or maintenance of the Premises rather than the Original Premises. Landlord shall, commencing on the date this Amendment is executed by the parties, keep in force fire, extended coverage and "all risk" insurance, and commercial general liability insurance covering the Building and the Common Areas. Landlord shall credit Tenant for the insurance payment for the insurance described in the first sentence of this Section 14 applicable to the period April 1, 2003 through the date that this Amendment is executed by the parties less Tenant's pro-rata share of such insurance expense commencing April 1, 2003. Tenant shall, at its sole cost and expense, comply with any and all reasonable requirements pertaining to the Premises of any insurer necessary for the maintenance of reasonable fire and commercial general liability insurance covering the Building and the Common Areas. Tenant shall pay, as a part of the Operating Costs, Tenant's Share of the cost of such insurance carried by Landlord.

15. Subtenants. Tenant represents and warrants to Landlord that there are no subleases in effect which affect the Original Premises except for (i) a sublease dated July 23, 1991 between Tenant and Holtemann, Ord & Smith, Inc. ("USI Sublease"), the term of which has expired and is now a month-to-month tenancy, (ii) a sublease dated July 5, 2000 between Tenant and Teltronics Inc. ("Teltronics Sublease"), the term of which will expire on October 31, 2003, and (iii) a sublease dated February 15, 2003 between Tenant and SpatialLight, Inc. ("SpatialLight Sublease"), the term of which will expire on August 14, 2003. The USI Sublease and the Teltronics Sublease are hereinafter sometimes collectively referred to as the "Assigned Subleases". Tenant shall concurrently with the execution of this Amendment assign to Landlord in writing all of Tenant's right, title and interest in the Assigned Subleases with such assignment to be effective as of January 1, 2003. A copy of the form of such assignment is attached hereto as Exhibit E and made a part hereof by this reference. Tenant shall pay to Landlord subject to the reconciliation described in Section 22 below, the total amount of any security deposit paid to Tenant by the subtenants under the Assigned Subleases and all rent and other charges collected by Tenant under the Assigned Subleases for the period from January 1, 2003 until the date this Amendment is executed by the parties.

16. Sublease and Assignment Consideration. If Landlord consents to any assignment or sublease hereunder, then Tenant shall pay to Landlord, immediately upon Tenant's receipt thereof, seventy-five percent (75%) of any and all "consideration" (as defined below) received by Tenant on account of such transaction, howsoever the same may be denominated or characterized, and in the case of a sublease to the extent that such consideration exceeds the pro rata portion of the Basic Rent and other charges payable by Tenant hereunder attributable to the sublet portion of the Premises, based on the leasable area of the Premises and the leasable area of the sublet portion of the Premises after deducting therefrom any real estate broker commission incurred by Tenant in connection with the sublease or assignment and the cost of any improvements made to the space to be subleased as a condition of the sublease. As used herein, "consideration" includes any and all consideration received by Tenant on account of such assignment or subletting, including, without limitation, money, property, assumption of liabilities other than those arising under this Lease, discounts, services, credits or any other item or thing of value. Irrespective of the form of such consideration, Landlord shall be entitled to be paid in cash in an amount equivalent to the aggregate of the cash portion of the consideration and the value of any non-cash portion of the consideration. In the event that any consideration is paid or given in installments, Landlord shall receive each such installment at the time paid or given. Notwithstanding the above to the contrary, in the event of the sublease by Tenant of "production" space in the Premises, such event shall not entitle Landlord to receive excess rent consideration as described hereinabove.

17. Signs. Tenant shall within thirty (30) days of receipt of written notice from Landlord at Tenant's cost and expense remove the existing Tenant sign which Tenant installed on the Building and repair any damage to the Building resulting from such removal of said sign. Upon removal of said sign Tenant shall have no further right to have a sign on the Building, but may maintain at Tenant's expense the existing monument sign located on the lawn in the Common Areas.

18. Utilities. Tenant and Landlord acknowledge that the utility system serving the Building cannot be separately metered in a cost effective manner and therefore agree that Tenant shall continue to provide utilities for the entire Building. Tenant shall be reimbursed directly by other tenants in the Building for such other tenants' share of utility costs, at the rate of \$0.1746 per square foot per month which Landlord and Tenant agree is an equitable rate as of the Reference Date. This rate shall be subject to review upon the request of either Landlord or Tenant in the event of a substantial change in rates charged by any utility company furnishing utilities to the Building. The aforementioned rate is based upon the following calculations:

Internal Electric:	\$0.1575
Exterior Lighting:	\$0.0038
Gas:	\$0.0058
Water:	\$0.0075
Total:	\$0.1746

Landlord shall have no obligation to pay Tenant for any utility costs due from other tenants in the Building or for utility costs due for space in the Building which is not leased to another Tenant for periods prior to December 31, 2004, except for Common Areas. After December 31, 2004, Landlord shall reimburse Tenant for utility costs due for space in the Building which is not leased to another Tenant (except for Common Areas). Landlord shall pay to Tenant the utility costs for the Common Areas at the rate set forth above, after deducting therefrom Tenant's Share of utility costs for the Common Areas.

19. Stock Options. In consideration of the execution of this Seventh Amendment, and concurrently with the execution of this Amendment by the parties, Tenant shall issue to Landlord a written option ("Option") in form reasonably acceptable to Landlord, which Option shall grant Landlord the right to purchase 300,000 shares of Tegal Common Stock at the closing market price on the date on which this Amendment is fully executed by the parties. Such Option will be vested immediately and must be executed within ten (10) years of issue.

20. First Right of Refusal. Section 32 of the Original Lease is hereby deleted.

21. Lease Termination. Section 8 of the Sixth Amendment is hereby deleted. Tenant shall have no right to terminate the Lease prior to the expiration of the Term.

22. Reconciliation. Landlord and Tenant shall cooperate and use their best efforts to complete within sixty (60) days from the date this Amendment is executed by the parties a reconciliation of amounts owed to Landlord by Tenant and credits due to Tenant.

23. Default by Tenant. Notwithstanding the provisions of Section 16 of the Original Lease, the failure of Tenant to perform or observe any covenant or condition to be performed by Tenant under Sections 9, 10, and 17 of this Amendment shall constitute

a default hereunder by Tenant upon Tenant's failure to cure such breach within five (5) days after written notice from Landlord of Tenant's failure to perform. In addition to any other right or remedy of Landlord hereunder, upon the occurrence of a default and without waiving or releasing Tenant from any obligation of Tenant hereunder, Landlord may (but shall not be required to) cure such default for the account of Tenant. Landlord shall not be responsible or liable to Tenant for any loss or damage that may be caused to Tenant's stock or business by reason of effecting cure hereunder. All sums paid by Landlord and all costs and expenses incurred by Landlord in connection with such cure (including attorneys' fees), together with interest thereon and the maximum rate allowed by law from the respective dates of Landlord's incurrence of each item of cost or expense, shall be payable by Tenant on demand.

24. Late Charge. Section 5.C. of the Original Lease is hereby deleted and the following is substituted as Section 5.C.:

"C. Tenant hereby acknowledges that late payment by Tenant to Landlord of Basic Rent, Additional Rent and other sums due under this Lease will cause Landlord to incur additional costs not contemplated by this Lease, the exact amount of which will be extremely difficult or impossible to ascertain. Such additional costs include processing and accounting charges and late charges which may be imposed upon Landlord by the terms of any mortgage or deed of trust covering the Premises. Therefore, if any installment of Basic Rent, Additional Rent or any other sum due from Tenant shall not be received by Landlord within five (5) days after written notice from Landlord of non-receipt, Tenant shall pay to Landlord a late charge equal to six percent (6%) of the overdue amount. The parties hereby acknowledge, warrant and represent that such late charge represents a fair and reasonable estimate of the costs Landlord will incur by reason of late payment by Tenant. Acceptance of such late charge by Landlord shall in no event constitute a waiver of a Default with respect to such overdue amount or prevent Landlord from exercising any or all of the other rights and remedies granted under this Lease. Landlord may, as a matter of convenience, provide to Tenant from time to time billings or invoices for Rent or other sums due under this Lease, but Tenant's failure to receive any such billing or invoice, or Landlord's omission or cessation of any such billing or invoice shall not excuse Tenant's obligation for timely payment in accordance with this Lease."

25. Conditions Precedent. Landlord's obligations under this Amendment are conditioned upon:

A. Approval of this Amendment by Washington Mutual, Landlord's lender; and

B. Approval by Landlord of a resolution by Tenant's Board of Directors approving this Amendment and authorizing the signature of this Amendment by the Company.

26. Effect. Except as set forth in this Amendment, the Original Lease as amended by the Amendments shall remain in full force and effect.

27. Additional Rent. For all purposes under this Lease, all sums and other amounts payable by Tenant to Landlord or otherwise hereunder which are not specifically denominated as “rent” shall be payable as and shall be deemed to be additional rent. Such sums and amounts shall be payable as and when provided under this Lease, unless no date is specified, in which case such sums shall be payable together with each installment of Basic Rent payable hereunder.

28. Confidentiality. Tenant agrees not to disclose any of the terms and conditions of this Amendment to any other tenant or prospective tenant of Landlord in the Building, nor to any real estate brokers. Landlord acknowledges that Tenant has disclosed the terms of this Amendment to Equis Corporation, a consultant retained by Tenant. Tenant agrees to give Equis Corporation written notice requesting that Equis Corporation keep all such terms confidential. Tenant acknowledges that a disclosure in violation of this Section 28 could impair Landlord’s ability to lease space in the Building at fair market rental values.

29. Lease Buy-Out/Termination. Tenant may elect to terminate this Lease (“Right to Terminate”), as amended, upon the following terms and conditions:

A. **Notice.** Tenant must give Landlord prior notice in writing of its election to so terminate no earlier than one hundred eighty (180) days before the termination date elected by Tenant (“Termination Date”).

B. **No Default.** Tenant may not exercise said Right to Terminate the Lease and said election shall be void if Tenant is in default of a material provision of this Lease, as amended, as of the date of the purported exercise of this Right to Terminate or thereafter at the Termination Date.

C. **Termination Fee.** If Tenant so elects to terminate this Lease, then Tenant shall pay to Landlord on the Termination Date as consideration for Landlord’s agreement to allow Tenant to terminate this Lease the sum of Two Million Dollars (\$2,000,000.00). Landlord agrees that such amount shall adequately compensate Landlord for all detriment proximately caused by such termination or which in the ordinary course of things would be likely to result therefrom, including, without limitation, the following: (i) expenses for altering, remodeling or otherwise improving the Premises for the purpose of reletting, including installation of leasehold improvements; (ii) broker’s fees, advertising costs and other expenses of reletting the premises; (iii) costs of carrying the Premises after such early termination, such as taxes, insurance premiums, mortgage payments, utilities, and security precautions; (iv) free rent, moving costs and any other monetary inducement and expense, necessary to lease the Premises; and (v) costs of alterations or improvements required to comply with law, except for any costs of compliance, remediation or removal of Hazardous Materials from the Premises as set forth in Section 10 of the Original Lease. Tenant shall continue to remain responsible for the clean up and removal of Hazardous Materials as set forth in Section 10 of the Original Lease and, subject to this Section 10, to remove whatever Leasehold Improvements Tenant, itself, may have installed during the Term (as extended), including the cost of removal of those Special Operating Systems set forth on Exhibit M to the Lease.

D. Surrender. If Tenant so elects to terminate this Lease, then Tenant shall surrender possession of the Premises to Landlord pursuant to the provisions of this Lease, as amended.

E. Release. Upon such termination in accordance with the provisions of this Section 29, Landlord and Tenant shall fully and unconditionally release and discharge each other from their respective obligations arising under this Lease from and after the date of such early termination.

30. Counterparts. This Amendment may be executed in two or more counterparts, each of which shall be deemed an original, but all of which shall constitute one and the same instrument.

31. Exhibits. The following Exhibits are a part of this Amendment:

Exhibit A	Premises
Exhibit B	Surrendered Personal Property
Exhibit C	Tree Trimming Plan
Exhibit D	Building Improvements
Exhibit E	Assignment of Subleases

IN WITNESS WHEREOF, Landlord and Tenant have executed this Amendment to be effective as of January 1, 2003.

LANDLORD:

Date of Execution: 6/05/03

/s/ Jane Crocker
JANE CROCKER, as Trustee under the
Jane C. Jacobs Trust Agreement dated
October 5, 1990

Date of Execution: 6/05/03

/s/ Norman E. MacKay
NORMAN E. MACKAY

TENANT:

TEGAL CORPORATION,
a Delaware corporation

Date of Execution: 6/9/03

By: /s/ Michael L. Parodi

Its: President & CEO

Date of Execution: _____

By: _____

Its: _____

EXHIBIT B
SURRENDERED PERSONAL PROPERTY
BILL OF SALE

BILL OF SALE

TEGAL CORPORATION, a Delaware corporation, for good and valuable consideration, hereby sells, assigns, transfers and quitclaims to JANE CROCKER, Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990 and NORMAN E. MACKAY all of Tegal Corporation's right, title and interest in and to the furniture, equipment and other personal property (the "Personal Property" currently situated in the 74,936 square feet of space located at 2201 South McDowell Blvd., Petaluma, California, and hereinafter described, free and clear of all liens and encumbrances and otherwise in "AS IS" physical condition:

- A. Office cubicles:
 - B. Office and conference chairs:
 - C. Conference tables:
 - D. Whiteboards:
 - E. Desks and tables:
 - F. Bookshelves:
 - G. Small storage racks (6 feet):
 - H. Mid-size storage racks (9 feet):
 - I. Large storage racks:
 - J. Rolling racks:
 - K. File cabinets:
 - L. Glass display cases:
 - M. Work benches:
 - N. AT&T phone system, related equipment, phones and wiring
 - O. Security system for the Building and all related equipment
-

P. Baler (cardboard)

Q. *Intentionally omitted*

R. All other personal property remaining in the Premises after _____, 2003.

No monetary consideration was paid for this Bill of Sale. This Bill of Sale is made in partial consideration for the execution and delivery of that certain Seventh Amendment to Lease Agreement by and between Tegal Corporation and Jane Crocker, Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990 and Norman E. MacKay.

Executed this ____ day of _____, 2003.

TEGAL CORPORATION
a Delaware corporation

By: _____

Title: _____

EXHIBIT E

ASSIGNMENT OF SUBLEASES

FOR VALUABLE CONSIDERATION, receipt of which is hereby acknowledged, as of the Effective Date (hereinafter defined), TEGAL CORPORATION, a Delaware corporation ("Assignor"), assigns, transfers and conveys to JANE CROCKER, Trustee under the Jane C. Jacobs Trust Agreement dated October 5, 1990 and NORMAN E. MACKAY ("Assignee"), all of Assignor's right, title and interest as Sublandlord/Sublessor under the subleases, copies of which are attached hereto and incorporated herein by this reference (the "Subleases"). Assignor represents and warrants to Assignee that the copies of the Subleases attached hereto are true, current and complete copies of all such Subleases and that there are no amendments or modifications to such Subleases except for the amendments and modifications attached hereto. Also attached hereto is a rent roll and Assignor represents and warrants to Assignee that (i) the attached rent roll is true, correct and complete; (ii) none of the subtenants is in default under the Subleases except as set forth on the attached rent roll; (iii) Assignor is not in default of any of Assignor's obligations under any of the Subleases; and (iv) Assignor holds as security deposits under the Subleases only the amounts listed on the rent roll.

As of the Effective Date, Assignee assumes and agrees to keep, perform, and fulfill all obligations as Sublandlord/Sublessor under the Subleases required to be kept, performed and fulfilled by Assignor thereunder.

Assignor agrees to indemnify, hold harmless and defend Assignee from and against any and all liabilities, losses, costs, causes of action, claims, damages, and expenses (including reasonable attorneys' fees and costs) relating to obligations of Sublandlord/Sublessor under the Subleases arising, accruing or incurred prior to the Effective Date. The defense of Assignee as required by the immediately preceding sentence shall be with counsel reasonably satisfactory to Assignee.

Assignee agrees to indemnify, hold harmless and defend Assignor from and against any and all liabilities, losses, costs, causes of action, claims, damages, and expenses (including reasonable attorneys' fees and costs) relating to obligations of Sublandlord/Sublessor under the Subleases arising, accruing or incurred on or after the Effective Date. The defense of Assignor as required by the immediately preceding sentence shall be with counsel reasonably satisfactory to Assignor.

The provisions of this Assignment of Subleases shall be binding upon and inure to the benefit of Assignor and Assignee and their respective successors and assigns.

This Assignment of Subleases may be executed in counterparts, each of which shall be deemed to be an original, but such counterparts when taken together shall constitute but one assignment.

If either party institutes an action or proceeding to enforce its rights under this Assignment of Subleases or to interpret any provision of this Assignment of Subleases, the losing party shall pay to the prevailing party the attorneys' fees and costs incurred by the prevailing party in such action or proceeding.

IN WITNESS WHEREOF, the undersigned have executed the within instrument to be effective as of January 1, 2003 ("Effective Date").

ASSIGNOR:

TEGAL CORPORATION,
a Delaware corporation

Date of Execution: 6/9/03

By: /s/ Michael L. Parodi
Its: President & CEO

Date of Execution: _____

By: _____

Its: _____

ASSIGNEE:

Date of Execution: 5/29/03

By: /s/ Jane Crocker
JANE CROCKER, as Trustee under the
Jane C. Jacobs Trust Agreement dated
October 5, 1990

Date of Execution: 5/29/03

By: /s/ Norman E. MacKay
NORMAN E. MACKAY

**Loan and Security Agreement
(Exim Program)**

Borrower: Tegal Corporation
Address: 2201 South McDowell Blvd.
Petaluma, CA 94954

Date: June 26, 2002

THIS LOAN AND SECURITY AGREEMENT is entered into on the above date between SILICON VALLEY BANK ("Silicon"), whose address is 3003 Tasman Drive, Santa Clara, California 95054 and the borrower(s) named above (jointly and severally, the "Borrower"), whose chief executive office is located at the above address ("Borrower's Address"). The Schedule to this Agreement (the "Schedule") shall for all purposes be deemed to be a part of this Agreement, and the same is an integral part of this Agreement. (Definitions of certain terms used in this Agreement are set forth in Section 8 below.)

I. LOANS.

1.1 Loans. Silicon will make loans to Borrower (the "Loans"), in amounts determined by Silicon in its good faith business judgment, up to the amounts (the "Credit Limit") shown on the Schedule, provided no Default or Event of Default has occurred and is continuing, and subject to deduction of Reserves for accrued interest and such other Reserves as Silicon deems proper from time to time in its good faith business judgment.

1.2 Interest. All Loans and all other monetary Obligations shall bear interest at the rate shown on the Schedule, except where expressly set forth to the contrary in this Agreement. Interest shall be payable monthly, on the last day of the month. Interest may, in Silicon's discretion, be charged to Borrower's loan account, and the same shall thereafter bear interest at the same rate as the other Loans. Silicon may, in its discretion, charge interest to Borrower's Deposit Accounts maintained with Silicon. Regardless of the amount of Obligations that may be outstanding from time to time, Borrower shall pay Silicon minimum monthly interest during the term of this Agreement in the amount set forth on the Schedule (the "Minimum Monthly Interest").

1.3 Overadvances. If at any time or for any reason the total of all outstanding Loans and all other monetary Obligations exceeds the Credit Limit (an "Overadvance"), Borrower shall immediately pay the amount of the excess to Silicon, without notice or demand. Without limiting Borrower's obligation to repay to Silicon the amount of any Overadvance, Borrower agrees to pay Silicon interest on the outstanding amount of any Overadvance, on demand, at the Default Rate.

1.4 Fees. Borrower shall pay Silicon the fees shown on the Schedule, which are in addition to all interest and other sums payable to Silicon and are not refundable.

1.5 Loan Requests. To obtain a Loan, Borrower shall make a request to Silicon by facsimile or telephone. Loan requests received after 12:00 Noon will not be considered by Silicon until the next Business Day. Silicon may rely on any telephone request for a Loan given by a person whom Silicon believes is an authorized representative of Borrower, and Borrower will indemnify Silicon for any loss Silicon suffers as a result of that reliance.

1.6 Letters of Credit. At the request of Borrower, Silicon may, in its good faith business judgment, issue or arrange for the issuance of letters of credit for the account of Borrower, in each case in form and substance satisfactory to Silicon in its sole discretion (collectively, "Letters of Credit"). The aggregate face amount of all Letters of Credit from time to time

outstanding shall not exceed the amount shown on the Schedule (the "Letter of Credit Sublimit"), and shall be reserved against Loans which would otherwise be available hereunder, and in the event at any time there are insufficient Loans available to Borrower for such reserve, Borrower shall deposit and maintain with Silicon cash collateral in an amount at all times equal to such deficiency, which shall be held as Collateral for all purposes of this Agreement. Borrower shall pay all bank charges (including charges of Silicon) for the issuance of Letters of Credit, together with such additional fee as Silicon's letter of credit department shall charge in connection with the issuance of the Letters of Credit. Any payment by Silicon under or in connection with a Letter of Credit shall constitute a Loan hereunder on the date such payment is made. Each Letter of Credit shall have an expiry date no later than thirty days prior to the Maturity Date. Borrower hereby agrees to indemnify and hold Silicon harmless from any loss, cost, expense, or liability, including payments made by Silicon, expenses, and reasonable attorneys' fees incurred by Silicon arising out of or in connection with any Letters of Credit. Borrower agrees to be bound by the regulations and interpretations of the issuer of any Letters of Credit guaranteed by Silicon and opened for Borrower's account or by Silicon's interpretations of any Letter of Credit issued by Silicon for Borrower's account, and Borrower understands and agrees that Silicon shall not be liable for any error, negligence, or mistake, whether of omission or commission, in following Borrower's instructions or those contained in the Letters of Credit or any modifications, amendments, or supplements thereto. Borrower understands that Letters of Credit may require Silicon to indemnify the issuing bank for certain costs or liabilities arising out of claims by Borrower against such issuing bank. Borrower hereby agrees to indemnify and hold Silicon harmless with respect to any loss, cost, expense, or liability incurred by Silicon under any Letter of Credit as a result of Silicon's indemnification of any such issuing bank. The provisions of this Loan Agreement, as it pertains to Letters of Credit, and any other Loan Documents relating to Letters of Credit are cumulative.

2. SECURITY INTEREST. To secure the payment and performance of all of the Obligations when due, Borrower hereby grants to Silicon a security interest in all of the following (collectively, the "Collateral"): all right, title and interest of Borrower in and to all of the following, whether now owned or hereafter arising or acquired and wherever located: all Accounts; all Inventory; all Equipment; all Deposit Accounts; all General Intangibles (including without limitation all Intellectual Property); all Investment Property; all Other Property; and any and all claims, rights and interests in any of the above, and all guaranties and security for any of the above, and all substitutions and replacements for, additions, accessions, attachments, accessories, and improvements to, and proceeds (including proceeds of any insurance policies, proceeds of proceeds and claims against third parties) of, any and all of the above, and all Borrower's books relating to any and all of the above.

3. REPRESENTATIONS, WARRANTIES AND COVENANTS OF BORROWER.

In order to induce Silicon to enter into this Agreement and to make Loans, Borrower represents and warrants to Silicon as follows, and Borrower covenants that the following representations will continue to be true, and that Borrower will at all times comply with all of the following covenants, throughout the term of this Agreement and until all Obligations have been paid and performed in full:

3.1 Corporate Existence and Authority. Borrower is and will continue to be, duly organized, validly existing and in good standing under the laws of the jurisdiction of its incorporation. Borrower is and will continue to be qualified and licensed to do business in all jurisdictions in which any failure to do so would result in a Material Adverse Change. The execution, delivery and performance by Borrower of this Agreement, and all other documents contemplated hereby (i) have been duly and validly authorized, (ii) are enforceable against Borrower in accordance with their terms (except as enforcement may be limited by equitable principles and by bankruptcy, insolvency, reorganization, moratorium or similar laws relating to creditors' rights generally), and (iii) do not violate Borrower's articles or certificate of incorporation, or Borrower's by-laws, or any law or any material agreement or instrument which is binding upon Borrower or its property, and (iv) do not constitute grounds for acceleration of any material indebtedness or obligation under any agreement or instrument which is binding upon Borrower or its property.

3.2 Name; Trade Names and Styles. The name of Borrower set forth in the heading to this Agreement is its correct name. Listed in the Representations are all prior names of Borrower and all of Borrower's present and prior trade names. Borrower shall give Silicon 30 days' prior written notice before changing its name or doing business under any other name. Borrower has complied, and will in the future comply, in all material respects, with all laws relating to the conduct of business under a fictitious business name, except where the failure to so comply would not reasonably be expected to result in a Material Adverse Change.

3.3 Place of Business; Location of Collateral. The address set forth in the heading to this Agreement is Borrower's chief executive office. In addition, Borrower has places of business and Collateral is located only at the locations set forth in the Representations. Borrower will give Silicon at least 30 days prior written notice before opening any additional place of business, changing its chief executive office, or moving any of the Collateral to a location other than Borrower's Address or one of the locations set forth in the Representations, except that Borrower may maintain sales offices in the ordinary course of business at which not more than a total of \$10,000 fair market value of Equipment is located.

3.4 Title to Collateral; Perfection; Permitted Liens.

(a) Borrower is now, and will at all times in the future be, the sole owner of all the Collateral, except for items of Equipment which are leased to Borrower. The Collateral now is and will remain free and clear of any and all liens, charges, security interests, encumbrances and adverse claims, except for Permitted Liens. Silicon now has, and will continue to have, a first-priority perfected and enforceable security interest in all of the Collateral, subject only to the Permitted Liens, and Borrower will at all times defend Silicon and the Collateral against all claims of others.

(b) Borrower has set forth in the Representations all of Borrower's Deposit Accounts, and Borrower will give Silicon five Business Days advance written notice before establishing any new Deposit Accounts and will cause the institution where any such new Deposit Account is maintained to execute and deliver to Silicon a control agreement in form sufficient to perfect Silicon's security interest in the Deposit Account and otherwise satisfactory to Silicon in its good faith business judgment. Nothing herein limits any requirements which may be set forth in the Schedule as to where Deposit Accounts will be maintained.

(c) In the event that Borrower shall at any time after the date hereof have any commercial tort claims against others, which it is asserting or intends to assert, and in which the potential recovery exceeds \$100,000, Borrower shall promptly notify Silicon thereof in writing and provide Silicon with such information regarding the same as Silicon shall request (unless providing such information would waive the Borrower's attorney-client privilege). Such notification to Silicon shall constitute a grant of a security interest in the commercial tort claim and all proceeds thereof to Silicon, and Borrower shall execute and deliver all such documents and take all such actions as Silicon shall request in connection therewith.

(d) None of the Collateral now is or will be affixed to any real property in such a manner, or with such intent, as to become a fixture. Borrower is not and will not become a lessee under any real property lease pursuant to which the lessor may obtain any rights in any of the Collateral and no such lease now prohibits, restrains, impairs or will prohibit, restrain or impair Borrower's right to remove any Collateral from the leased premises. Whenever any Collateral is located upon premises in which any third party has an interest, Borrower shall, whenever requested by Silicon, use its best efforts to cause such third party to execute and deliver to Silicon, in form acceptable to Silicon, such waivers and subordinations as Silicon shall specify in its good faith business judgment. Borrower will keep in full force and effect, and will comply with all material terms of, any lease of real property where any of the Collateral now or in the future may be located.

3.5 Maintenance of Collateral. Borrower will maintain the Collateral in good working condition (ordinary wear and tear excepted), and Borrower will not use the Collateral for any unlawful purpose. Borrower will immediately advise Silicon in writing of any material loss or damage to the Collateral.

3.6 Books and Records. Borrower has maintained and will maintain at Borrower's Address complete and accurate books and records, comprising an accounting system in accordance with GAAP.

3.7 Financial Condition, Statements and Reports. All financial statements now or in the future delivered to Silicon have been, and will be, prepared in conformity with GAAP and now and in the future will fairly present the results of operations and financial condition of Borrower, in accordance with GAAP, at the times and for the periods therein stated. Between the last date covered by any such statement provided to Silicon and the date hereof, there has been no Material Adverse Change.

3.8 Tax Returns and Payments; Pension Contributions. Borrower has timely filed, and will timely file, all required tax returns and reports, and Borrower has timely paid, and will timely pay, all foreign, federal, state and local taxes, assessments, deposits and contributions now or in the future owed by Borrower. Borrower may, however, defer payment of any contested taxes, provided that Borrower (i) in good faith contests Borrower's obligation to pay the taxes by appropriate proceedings promptly and diligently instituted and conducted, (ii) notifies Silicon in writing of the commencement of, and any material development in, the proceedings, and (iii) posts bonds or takes any other steps required to keep the contested taxes from becoming a lien upon any of the Collateral. Borrower is unaware of any claims or adjustments proposed for any of Borrower's prior tax years which could result in additional taxes becoming due and payable by Borrower. Borrower has paid, and shall continue to pay all amounts necessary to fund all present and future pension, profit sharing and deferred compensation plans in accordance with their terms, and Borrower has not and will not withdraw from participation in, permit partial or complete termination of, or permit the occurrence of any other event with respect to, any such plan which could reasonably be expected to result in any liability of Borrower, including any liability to the Pension Benefit Guaranty Corporation or its successors or any other governmental agency.

3.9 Compliance with Law. Borrower has, to the best of its knowledge, complied, and will comply, in all material respects, with all provisions of all foreign, federal, state and local laws and regulations applicable to Borrower, including, but not limited to, those relating to Borrower's ownership of real or personal property, the conduct and licensing of Borrower's business, and all environmental matters.

3.10 Litigation. There is no claim, suit, litigation, proceeding or investigation pending or (to best of Borrower's knowledge) threatened against or affecting Borrower in any court or before any governmental agency (or any basis therefor known to Borrower) which could reasonably be expected to result, either separately or in the aggregate, in any Material Adverse Change. Borrower will promptly inform Silicon in writing of any claim, proceeding, litigation or investigation in the future threatened or instituted against Borrower involving any single claim of \$50,000 or more, or involving \$100,000 or more in the aggregate.

3.11 Use of Proceeds. All proceeds of all Loans shall be used solely for lawful business purposes. Borrower is not purchasing or carrying any "margin stock" (as defined in Regulation U of the Board of Governors of the Federal Reserve System) and no part of the proceeds of any Loan will be used to purchase or carry any "margin stock" or to extend credit to others for the purpose of purchasing or carrying any "margin stock."

4. ACCOUNTS.

4.1 Representations Relating to Accounts. Borrower represents and warrants to Silicon as follows: Each Account with respect to which Loans are requested by Borrower shall, on the date each Loan is requested and made, (i) represent an undisputed bona fide existing unconditional obligation of the Account Debtor created by the sale, delivery, and acceptance of goods or the rendition of services, or the non-exclusive licensing of Intellectual Property, in the ordinary course of Borrower's business, and (ii) meet the Minimum Eligibility Requirements set forth in Section 8 below.

4.2 Representations Relating to Documents and Legal Compliance. Borrower represents and warrants to Silicon as follows: All statements made and all unpaid balances appearing in all invoices, instruments and other documents evidencing the Accounts are and shall be true and correct and all such invoices, instruments and other documents and all of Borrower's books and records are and shall be genuine and in all respects what they purport to be. All sales and other transactions underlying or giving rise to each Account shall comply in all material respects with all applicable laws and governmental rules and regulations. To the best of Borrower's knowledge, all signatures and endorsements on all documents, instruments, and agreements relating to all Accounts are and shall be genuine, and all such documents, instruments and agreements are and shall be legally enforceable in accordance with their terms.

4.3 Schedules and Documents relating to Accounts. Borrower shall deliver to Silicon transaction reports and schedules of collections, as provided in the Schedule, on Silicon's standard forms; provided, however, that Borrower's failure to execute and deliver the same shall not affect or limit Silicon's security interest and other rights in all of Borrower's Accounts, nor shall Silicon's failure to advance or lend against a specific Account affect or limit Silicon's security interest and other rights therein. If requested by Silicon, Borrower shall furnish Silicon with copies (or, at Silicon's request, originals) of all contracts, orders, invoices, and other similar documents, and all shipping instructions, delivery receipts, bills of lading, and other evidence of delivery, for any goods the sale or disposition of which gave rise to such Accounts, and Borrower warrants the genuineness of all of the foregoing. Borrower shall also furnish to Silicon an aged accounts receivable trial balance as provided in the Schedule. In addition, Borrower shall deliver to Silicon, on its request, the originals of all instruments, chattel paper, security agreements, guarantees and other documents and property evidencing or securing any Accounts, in the same form as received, with all necessary endorsements, and copies of all credit memos.

4.4 Collection of Accounts. Borrower shall have the right to collect all Accounts, unless and until a Default or an Event of Default has occurred and is continuing. Whether or not an Event of Default has occurred and is continuing, Borrower shall hold all payments on, and proceeds of, Accounts in trust for Silicon, and Borrower shall immediately deliver all such payments and proceeds to Silicon in their original form, duly endorsed, to be applied to the Obligations in such order as Silicon shall determine. Silicon may, in its good faith business judgment, require that all proceeds of Collateral be deposited by Borrower into a lockbox account, or such other "blocked account" as Silicon may specify, pursuant to a blocked account agreement in such form as Silicon may specify in its good faith business judgment.

4.5. Remittance of Proceeds. All proceeds arising from the disposition of any Collateral shall be delivered, in kind, by Borrower to Silicon in the original form in which received by Borrower not later than the following Business Day after receipt by Borrower, to be applied to the Obligations in such order as Silicon shall determine; provided that, if no Default or Event of Default has occurred and is continuing, Borrower shall not be obligated to remit to Silicon the proceeds of the sale of worn out or obsolete Equipment disposed of by Borrower in good faith in an arm's length transaction for an aggregate purchase price of \$25,000 or less (for all such transactions in any fiscal year). Borrower agrees that it will not commingle proceeds of Collateral with any of Borrower's other funds or property, but will hold such proceeds separate and apart from such other

funds and property and in an express trust for Silicon. Nothing in this Section limits the restrictions on disposition of Collateral set forth elsewhere in this Agreement.

4.6 Disputes. Borrower shall notify Silicon promptly of all disputes or claims relating to Accounts. Borrower shall not forgive (completely or partially), compromise or settle any Account for less than payment in full, or agree to do any of the foregoing, except that Borrower may do so, provided that: (i) Borrower does so in good faith, in a commercially reasonable manner, in the ordinary course of business, and in arm's length transactions, which are reported to Silicon on the regular reports provided to Silicon; (ii) no Default or Event of Default has occurred and is continuing; and (iii) taking into account all such discounts, settlements and forgiveness, the total outstanding Loans will not exceed the Credit Limit.

4.7 Returns. Provided no Event of Default has occurred and is continuing, if any Account Debtor returns any Inventory to Borrower, Borrower shall promptly determine the reason for such return and promptly issue a credit memorandum to the Account Debtor in the appropriate amount. In the event any attempted return occurs after the occurrence and during the continuance of any Event of Default, Borrower shall hold the returned Inventory in trust for Silicon, and immediately notify Silicon of the return of the Inventory.

4.8 Verification. Silicon may, from time to time, verify directly with the respective Account Debtors the validity, amount and other matters relating to the Accounts, by means of mail, telephone or otherwise, either in the name of Borrower or Silicon or such other name as Silicon may choose.

4.9 No Liability. Silicon shall not be responsible or liable for any shortage or discrepancy in, damage to, or loss or destruction of, any goods, the sale or other disposition of which gives rise to an Account, or for any error, act, omission, or delay of any kind occurring in the settlement, failure to settle, collection or failure to collect any Account, or for settling any Account in good faith for less than the full amount thereof, nor shall Silicon be deemed to be responsible for any of Borrower's obligations under any contract or agreement giving rise to an Account. Nothing herein shall, however, relieve Silicon from liability for its own gross negligence or willful misconduct.

5. ADDITIONAL DUTIES OF BORROWER.

5.1 Financial and Other Covenants. Borrower shall at all times comply with the financial and other covenants set forth in the Schedule.

5.2 Insurance. Borrower shall, at all times insure all of the tangible personal property Collateral and carry such other business insurance, with insurers reasonably acceptable to Silicon, in such form and amounts as Silicon may reasonably require and that are customary and in accordance with standard practices for Borrower's industry and locations, and Borrower shall provide evidence of such insurance to Silicon. All such insurance policies shall name Silicon as an additional loss payee, and shall contain a lenders loss payee endorsement in form reasonably acceptable to Silicon. Upon receipt of the proceeds of any such insurance, Silicon shall apply such proceeds in reduction of the Obligations as Silicon shall determine in its good faith business judgment, except that, provided no Default or Event of Default has occurred and is continuing, Silicon shall release to Borrower insurance proceeds with respect to Equipment totaling less than \$100,000, which shall be utilized by Borrower for the replacement of the Equipment with respect to which the insurance proceeds were paid. Silicon may require reasonable assurance that the insurance proceeds so released will be so used. If Borrower fails to provide or pay for any insurance, Silicon may, but is not obligated to, obtain the same at Borrower's expense. Borrower shall promptly deliver to Silicon copies of all material reports made to insurance companies.

5.3 Reports. Borrower, at its expense, shall provide Silicon with the written reports set forth in the Schedule, and such other written reports with respect to Borrower (including budgets, sales projections, operating plans and other financial documentation), as Silicon shall from time to time specify in its good faith business judgment.

5.4 Access to Collateral, Books and Records. At reasonable times, and on one Business Day's notice, Silicon, or its agents, shall have the right to inspect the Collateral, and the right to audit and copy Borrower's books and records. Silicon shall take reasonable steps to keep confidential all information obtained in any such inspection or audit, but Silicon shall have the right to disclose any such information to its auditors, regulatory agencies, and attorneys, and pursuant to any subpoena or other legal process. The foregoing inspections and audits shall be at Borrower's expense and the charge therefor shall be \$700 per person per day (or such higher amount as shall represent Silicon's then current standard charge for the same), plus reasonable out-of-pocket expenses. In the event Borrower and Silicon schedule an audit more than 10 days in advance, and Borrower seeks to reschedule the audit with less than 10 days written notice to Silicon, then (without limiting any of Silicon's rights or remedies), Borrower shall pay Silicon a cancellation fee of \$1,000 plus any out-of-pocket expenses incurred by Silicon, to compensate Silicon for the anticipated costs and expenses of the cancellation.

5.5 Negative Covenants. Except as may be permitted in the Schedule, Borrower shall not, without Silicon's prior written consent (which shall be a matter of its good faith business judgment), do any of the following: (i) merge or consolidate with another corporation or entity; (ii) acquire any assets, except in the ordinary course of business; (iii) enter into any other transaction outside the ordinary course of business; (iv) sell or transfer any Collateral, except for the sale of finished Inventory in the ordinary course of Borrower's business, and except for the sale of obsolete or unneeded Equipment in the ordinary course of business; (v) store any Inventory or other Collateral with any warehouseman or other third party; (vi) sell any Inventory on a sale-or-return, guaranteed sale, consignment, or other contingent basis; (vii) make any loans of any money or other assets*; (viii) incur any debts, outside the ordinary course of business, which would result in a Material Adverse Change; (ix) guarantee or otherwise become liable with respect to the obligations of another party or entity; (x) pay or declare any dividends on Borrower's stock (except for dividends payable solely in stock of Borrower); (xi) redeem, retire, purchase or otherwise acquire, directly or indirectly, any of Borrower's stock; (xii) make any change in Borrower's capital structure which would result in a Material Adverse Change; or (xiii) engage, directly or indirectly, in any business other than the businesses currently engaged in by Borrower or reasonably related thereto; or (xiv) dissolve or elect to dissolve. Transactions permitted by the foregoing provisions of this Section are only permitted if no Default or Event of Default would occur as a result of such transaction.

***, except that, provided that no Default or Event of Default has occurred and is continuing, Borrower make loans to employees of Borrower in an aggregate amount not exceeding \$150,000 outstanding at any time**

5.6 Litigation Cooperation. Should any third-party suit or proceeding be instituted by or against Silicon with respect to any Collateral or relating to Borrower, Borrower shall, without expense to Silicon, make available Borrower and its officers, employees and agents and Borrower's books and records, to the extent that Silicon may deem them reasonably necessary in order to prosecute or defend any such suit or proceeding.

5.7 Further Assurances. Borrower agrees, at its expense, on request by Silicon, to execute all documents and take all actions, as Silicon, may, in its good faith business judgment, deem necessary or useful in order to perfect and maintain Silicon's perfected first-priority security interest in the Collateral (subject to Permitted Liens), and in order to fully consummate the transactions contemplated by this Agreement.

6. TERM.

6.1 Maturity Date. This Agreement shall continue in effect until the maturity date set forth on the Schedule (the "Maturity Date"), subject to Section 6.3 below.

6.2 Early Termination. This Agreement may be terminated prior to the Maturity Date as follows: (i) by Borrower, effective three Business Days after written notice of termination is given to Silicon; or (ii) by Silicon at any time after the occurrence and during the continuance of an Event of Default, without notice, effective immediately.

6.3 Payment of Obligations. On the Maturity Date or on any earlier effective date of termination, Borrower shall pay and perform in full all Obligations, whether evidenced by installment notes or otherwise, and whether or not all or any part of such Obligations are otherwise then due and payable. Without limiting the generality of the foregoing, if on the Maturity Date, or on any earlier effective date of termination, there are any outstanding Letters of Credit issued by Silicon or issued by another institution based upon an application, guarantee, indemnity or similar agreement on the part of Silicon, then on such date Borrower shall provide to Silicon cash collateral in an amount equal to 105% of the face amount of all such Letters of Credit plus all interest, fees and cost due or to become due in connection therewith (as estimated by Silicon in its good faith business judgment), to secure all of the Obligations relating to said Letters of Credit, pursuant to Silicon's then standard form cash pledge agreement. Notwithstanding any termination of this Agreement, all of Silicon's security interests in all of the Collateral and all of the terms and provisions of this Agreement shall continue in full force and effect until all Obligations have been paid and performed in full; provided that Silicon may, in its sole discretion, refuse to make any further Loans after termination. No termination shall in any way affect or impair any right or remedy of Silicon, nor shall any such termination relieve Borrower of any Obligation to Silicon, until all of the Obligations have been paid and performed in full. Upon payment and performance in full of all the Obligations and termination of this Agreement, Silicon shall promptly terminate its financing statements with respect to the Borrower and deliver to Borrower such other documents as may be required to fully terminate Silicon's security interests.

7. EVENTS OF DEFAULT AND REMEDIES.

7.1 Events of Default. The occurrence of any of the following events shall constitute an "Event of Default" under this Agreement, and Borrower shall give Silicon immediate written notice thereof: (a) Any warranty, representation, statement, report or certificate made or delivered to Silicon by Borrower or any of Borrower's officers, employees or agents, now or in the future, shall be untrue or misleading in a material respect when made or deemed to be made; or (b) Borrower shall fail to pay when due any Loan or any interest thereon or any other monetary Obligation; or (c) the total Loans and other Obligations outstanding at any time shall exceed the Credit Limit; or (d) Borrower shall fail to comply with any of the financial covenants set forth in the Schedule, or shall fail to perform any other non-monetary Obligation which by its nature cannot be cured, or shall fail to permit Silicon to conduct an inspection or audit as specified in Section 5.4 hereof; or (e) Borrower shall fail to perform any other non-monetary Obligation, which failure is not cured within five Business Days after the date due; or (f) any levy, assessment, attachment, seizure, lien or encumbrance (other than a Permitted Lien) is made on all or any part of the Collateral which is not cured within 10 days after the occurrence of the same; or (g) any default or event of default occurs under any obligation secured by a Permitted Lien, which is not cured within any applicable cure period or waived in writing by the holder of the Permitted Lien; or (h) Borrower breaches any material contract or obligation, which has resulted or may reasonably be expected to result in a Material Adverse Change; or (i) Dissolution, termination of existence, insolvency or business failure of Borrower; or appointment of a receiver, trustee or custodian, for all or any part of the property of, assignment for the benefit of creditors by, or the commencement of any proceeding by Borrower under any reorganization, bankruptcy, insolvency, arrangement, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction, now or in the future in effect; or (j) the commencement of any proceeding against Borrower or any guarantor of any of the Obligations under any reorganization, bankruptcy, insolvency, arrangement, readjustment of debt, dissolution or liquidation law or statute of any jurisdiction, now or in the future in effect, which is not cured by the dismissal thereof within 30 days after the date commenced; or (k) revocation or termination of, or limitation or denial of liability upon, any guaranty of the Obligations or any attempt to do any of the foregoing, or commencement of proceedings by any guarantor of any of the Obligations under any bankruptcy or insolvency law; or (l) revocation or termination of, or limitation or denial of liability upon, any pledge of any certificate of deposit, securities or other property or asset of any kind pledged by any third party to secure any or all of the Obligations, or any attempt to do any of the foregoing, or commencement of proceedings by or against any such third party under any bankruptcy or insolvency law; or (m) Borrower makes any payment on account of any indebtedness or obligation which has been subordinated to the Obligations other than as permitted in the applicable subordination agreement, or if any Person who has subordinated such indebtedness or obligations terminates or in any way limits his subordination agreement; or (n) there shall be a change in the record or beneficial ownership of the outstanding shares of stock of Borrower, in one or more transactions,* without the prior written consent of Silicon; or (o) Borrower shall generally not pay its debts as they become due, or Borrower shall conceal, remove or transfer any part of its property, with intent to hinder, delay or defraud its creditors, or make or suffer any transfer of any of its property which may be fraudulent under any bankruptcy, fraudulent conveyance or similar law; or (p) a Material Adverse Change shall occur; or (q) Silicon, acting in good faith and in a commercially reasonable manner, deems itself insecure because of the occurrence of an event prior to the effective date hereof of which Silicon had no knowledge on the effective date or because of the occurrence of an event on or subsequent to the effective date. Silicon may cease making any Loans hereunder during any of the above cure periods, and thereafter if an Event of Default has occurred and is continuing.

***the result of which is that any one Person owns at least 50% of the outstanding stock of Borrower,**

7.2 Remedies. Upon the occurrence and during the continuance of any Event of Default, and at any time thereafter, Silicon, at its option, and without notice or demand of any kind (all of which are hereby expressly waived by Borrower), may do any one or more of the following: (a) Cease making Loans or otherwise extending credit to Borrower under this Agreement or any other Loan Document; (b) Accelerate and declare all or any part of the Obligations to be immediately due, payable, and performable, notwithstanding any deferred or installment payments allowed by any instrument evidencing or relating to any Obligation; (c) Take possession of any or all of the Collateral wherever it may be found, and for that purpose Borrower hereby authorizes Silicon without judicial process to enter onto any of Borrower's premises without interference to search for, take possession of, keep, store, or remove any of the Collateral, and remain on the premises or cause a custodian to remain on the premises in exclusive control thereof, without charge for so long as Silicon deems it necessary, in its good faith business judgment, in order to complete the enforcement of its rights under this Agreement or any other agreement; provided, however, that should Silicon seek to take possession of any of the Collateral by court process, Borrower hereby irrevocably waives: (i) any bond and any surety or security relating thereto required by any statute, court rule or otherwise as an incident to such possession; (ii) any demand for possession prior to the commencement of any suit or action to recover possession thereof; and (iii) any requirement that Silicon retain possession of, and not dispose of, any such Collateral until after trial or final judgment; (d) Require Borrower to assemble any or all of the Collateral and make it available to Silicon at places designated by

Silicon which are reasonably convenient to Silicon and Borrower, and to remove the Collateral to such locations as Silicon may deem advisable; (e) Complete the processing, manufacturing or repair of any Collateral prior to a disposition thereof and, for such purpose and for the purpose of removal, Silicon shall have the right to use Borrower's premises, vehicles, hoists, lifts, cranes, and other Equipment and all other property without charge; (f) Sell, lease or otherwise dispose of any of the Collateral, in its condition at the time Silicon obtains possession of it or after further manufacturing, processing or repair, at one or more public and/or private sales, in lots or in bulk, for cash, exchange or other property, or on credit, and to adjourn any such sale from time to time without notice other than oral announcement at the time scheduled for sale. Silicon shall have the right to conduct such disposition on Borrower's premises without charge, for such time or times as Silicon deems reasonable, or on Silicon's premises, or elsewhere and the Collateral need not be located at the place of disposition. Silicon may directly or through any affiliated company purchase or lease any Collateral at any such public disposition, and if permissible under applicable law, at any private disposition. Any sale or other disposition of Collateral shall not relieve Borrower of any liability Borrower may have if any Collateral is defective as to title or physical condition or otherwise at the time of sale; (g) Demand payment of, and collect any Accounts and General Intangibles comprising Collateral and, in connection therewith, Borrower irrevocably authorizes Silicon to endorse or sign Borrower's name on all collections, receipts, instruments and other documents, to take possession of and open mail addressed to Borrower and remove therefrom payments made with respect to any item of the Collateral or proceeds thereof, and, in Silicon's good faith business judgment, to grant extensions of time to pay, compromise claims and settle Accounts and the like for less than face value; (h) Offset against any sums in any of Borrower's general, special or other Deposit Accounts with Silicon against any or all of the Obligations; and (i) Demand and receive possession of any of Borrower's federal and state income tax returns and the books and records utilized in the preparation thereof or referring thereto. All reasonable attorneys' fees, expenses, costs, liabilities and obligations incurred by Silicon with respect to the foregoing shall be added to and become part of the Obligations, shall be due on demand, and shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations. Without limiting any of Silicon's rights and remedies, from and after the occurrence and during the continuance of any Event of Default, the interest rate applicable to the Obligations shall be increased by an additional four percent per annum (the "Default Rate").

7.3 Standards for Determining Commercial Reasonableness. Borrower and Silicon agree that a sale or other disposition (collectively, "sale") of any Collateral which complies with the following standards will conclusively be deemed to be commercially reasonable: (i) Notice of the sale is given to Borrower at least ten days prior to the sale, and, in the case of a public sale, notice of the sale is published at least five days before the sale in a newspaper of general circulation in the county where the sale is to be conducted; (ii) Notice of the sale describes the collateral in general, non-specific terms; (iii) The sale is conducted at a place designated by Silicon, with or without the Collateral being present; (iv) The sale commences at any time between 8:00 a.m. and 6:00 p.m.; (v) Payment of the purchase price in cash or by cashier's check or wire transfer is required; (vi) With respect to any sale of any of the Collateral, Silicon may (but is not obligated to) direct any prospective purchaser to ascertain directly from Borrower any and all information concerning the same. Silicon shall be free to employ other methods of noticing and selling the Collateral, in its discretion, if they are commercially reasonable.

7.4 Power of Attorney. Upon the occurrence and during the continuance of any Event of Default, without limiting Silicon's other rights and remedies, Borrower grants to Silicon an irrevocable power of attorney coupled with an interest, authorizing and permitting Silicon (acting through any of its employees, attorneys or agents) at any time, at its option, but without obligation, with or without notice to Borrower, and at Borrower's expense, to do any or all of the following, in Borrower's name or otherwise, but Silicon agrees that if it exercises any right hereunder, it will do so in good faith and in a commercially reasonable manner: (a) Execute on behalf of Borrower any documents that Silicon may, in its good faith business judgment, deem advisable in order to perfect and maintain Silicon's security interest in the Collateral, or in order to exercise a right of Borrower or Silicon, or in order to fully consummate all the transactions contemplated under this Agreement, and all other Loan Documents; (b) Execute on behalf of Borrower, any invoices relating to any Account, any draft against any Account Debtor and any notice to any Account Debtor, any proof of claim in bankruptcy, any Notice of Lien, claim of mechanic's, materialman's or other lien, or assignment or satisfaction of mechanic's, materialman's or other lien; (c) Take control in any manner of any cash or non-cash items of payment or proceeds of Collateral; endorse the name of Borrower upon any instruments, or documents, evidence of payment or Collateral that may come into Silicon's possession; (d) Endorse all checks and other forms of remittances received by Silicon; (e) Pay, contest or settle any lien, charge, encumbrance, security interest and adverse claim in or to any of the Collateral, or any judgment based thereon, or otherwise take any action to terminate or discharge the same; (f) Grant extensions of time to pay, compromise claims and settle Accounts and General Intangibles for less than face value and execute all releases and other documents in connection therewith; (g) Pay any sums required on account of Borrower's taxes or to secure the release of any liens therefor, or both; (h) Settle and adjust, and give releases of, any insurance claim that relates to any of the Collateral and obtain payment therefor; (i) Instruct any third party having custody or control of any books or records belonging to, or relating to, Borrower to give Silicon the same rights of access and other rights with respect thereto as Silicon has under this Agreement; and (j) Take any

action or pay any sum required of Borrower pursuant to this Agreement and any other Loan Documents. Any and all reasonable sums paid and any and all reasonable costs, expenses, liabilities, obligations and attorneys' fees incurred by Silicon with respect to the foregoing shall be added to and become part of the Obligations, shall be payable on demand, and shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations. In no event shall Silicon's rights under the foregoing power of attorney or any of Silicon's other rights under this Agreement be deemed to indicate that Silicon is in control of the business, management or properties of Borrower.

7.5 Application of Proceeds. All proceeds realized as the result of any sale of the Collateral shall be applied by Silicon first to the reasonable costs, expenses, liabilities, obligations and attorneys' fees incurred by Silicon in the exercise of its rights under this Agreement, second to the interest due upon any of the Obligations, and third to the principal of the Obligations, in such order as Silicon shall determine in its sole discretion. Any surplus shall be paid to Borrower or other persons legally entitled thereto; Borrower shall remain liable to Silicon for any deficiency. If, Silicon, in its good faith business judgment, directly or indirectly enters into a deferred payment or other credit transaction with any purchaser at any sale of Collateral, Silicon shall have the option, exercisable at any time, in its good faith business judgment, of either reducing the Obligations by the principal amount of purchase price or deferring the reduction of the Obligations until the actual receipt by Silicon of the cash therefor.

7.6 Remedies Cumulative. In addition to the rights and remedies set forth in this Agreement, Silicon shall have all the other rights and remedies accorded a secured party under the California Uniform Commercial Code and under all other applicable laws, and under any other instrument or agreement now or in the future entered into between Silicon and Borrower, and all of such rights and remedies are cumulative and none is exclusive. Exercise or partial exercise by Silicon of one or more of its rights or remedies shall not be deemed an election, nor bar Silicon from subsequent exercise or partial exercise of any other rights or remedies. The failure or delay of Silicon to exercise any rights or remedies shall not operate as a waiver thereof, but all rights and remedies shall continue in full force and effect until all of the Obligations have been fully paid and performed.

8. DEFINITIONS. As used in this Agreement, the following terms have the following meanings:

"Account Debtor" means the obligor on an Account.

"Accounts" means all present and future "accounts" as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all accounts receivable and other sums owing to Borrower.

"Affiliate" means, with respect to any Person, a relative, partner, shareholder, director, officer, or employee of such Person, or any parent or subsidiary of such Person, or any Person controlling, controlled by or under common control with such Person.

"Business Day" means a day on which Silicon is open for business.

"Code" means the Uniform Commercial Code as adopted and in effect in the State of California from time to time.

"Collateral" has the meaning set forth in Section 2 above.

"continuing" and **"during the continuance of"** when used with reference to a Default or Event of Default means that the Default or Event of Default has occurred and has not been either waived in writing by Silicon or cured within any applicable cure period.

"Default" means any event which with notice or passage of time or both, would constitute an Event of Default.

"Default Rate" has the meaning set forth in Section 7.2 above.

"Deposit Accounts" means all present and future "deposit accounts" as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all general and special bank accounts, demand accounts, checking accounts, savings accounts and certificates of deposit.

"Eligible Inventory" means Inventory which Silicon, in its sole judgment, deems eligible for borrowing, based on such considerations as Silicon may from time to time deem appropriate*. Without limiting the fact that the determination of which Inventory is eligible for borrowing is a matter of Silicon's discretion, Inventory which does not meet the following requirements will not be deemed to be Eligible Inventory: Inventory which (i) consists of raw materials** or finished goods, in good, new and salable condition which is not perishable, not obsolete or unmerchantable, and is not comprised of packaging materials or supplies; (ii) meets all applicable governmental standards; (iii) has been manufactured in compliance with the Fair Labor Standards Act; (iv) conforms in all respects to the warranties and representations set forth in this Agreement; (v) is at all times subject to Silicon's duly perfected, first priority security interest; and (vi) is situated at a one of the locations set forth on the Schedule.

***and which constitutes “Eligible Export-Related Inventory” (as defined in the Exim Borrower Agreement referred to in the Schedule)**

**** work in process**

“Eligible Accounts” means Accounts and General Intangibles arising in the ordinary course of Borrower’s business from the sale of goods or the rendition of services, or the non-exclusive licensing of Intellectual Property, which Silicon, in its good faith business judgment, shall deem eligible for borrowing*. Without limiting the fact that the determination of which Accounts are eligible for borrowing is a matter of Silicon’s good faith business judgment, the following (the “Minimum Eligibility Requirements”) are the minimum requirements for an Account to be an Eligible Account: (i) the Account must not be outstanding for more than 90 days from its invoice date (the “Eligibility Period”), (ii) the Account must not represent progress billings, or be due under a fulfillment or requirements contract with the Account Debtor, (iii) the Account must not be subject to any contingencies (including Accounts arising from sales on consignment, guaranteed sale or other terms pursuant to which payment by the Account Debtor may be conditional), (iv) the Account must not be owing from an Account Debtor with whom Borrower has any dispute (whether or not relating to the particular Account), (v) the Account must not be owing from an Affiliate of Borrower, (vi) the Account must not be owing from an Account Debtor which is subject to any insolvency or bankruptcy proceeding, or whose financial condition is not acceptable to Silicon, or which, fails or goes out of a material portion of its business, (vii) the Account must not be owing from the United States or any department, agency or instrumentality thereof (unless there has been compliance, to Silicon’s satisfaction, with the United States Assignment of Claims Act), (viii) (ix) the Account must not be owing from an Account Debtor to whom Borrower is or may be liable for goods purchased from such Account Debtor or otherwise (but, in such case, the Account will be deemed not eligible only to the extent of any amounts owed by Borrower to such Account Debtor). Accounts owing from one Account Debtor will not be deemed Eligible Accounts to the extent they exceed 25% of the total Accounts outstanding. In addition, if more than 50% of the Accounts owing from an Account Debtor are outstanding for a period longer than their Eligibility Period (without regard to unapplied credits) or are otherwise not eligible Accounts, then all Accounts owing from that Account Debtor will be deemed ineligible for borrowing. Silicon may, from time to time, in its good faith business judgment, revise the Minimum Eligibility Requirements, upon written notice to Borrower.

***and which constitute “Eligible Export-Related Accounts Receivable” (as defined in the Exim Borrower Agreement referred to in the Schedule).**

“Equipment” means all present and future “equipment” as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all machinery, fixtures, goods, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing.

“Event of Default” means any of the events set forth in Section 7.1 of this Agreement.

“GAAP” means generally accepted accounting principles consistently applied.

“General Intangibles” means all present and future “general intangibles” as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all Intellectual Property, payment intangibles, royalties, contract rights, goodwill, franchise agreements, purchase orders, customer lists, route lists, telephone numbers, domain names, claims, income tax refunds, security and other deposits, options to purchase or sell real or personal property, rights in all litigation presently or hereafter pending (whether in contract, tort or otherwise), insurance policies (including without limitation key man, property damage, and business interruption insurance), payments of insurance and rights to payment of any kind.

“good faith business judgment” means honesty in fact and good faith (as defined in Section 1201 of the Code) in the exercise of Silicon’s business judgment.

“including” means including (but not limited to).

“Intellectual Property” means all present and future (a) copyrights, copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished, (b) trade secret rights, including all rights to unpatented inventions and know-how, and confidential information; (c) mask work or similar rights available for the protection of semiconductor chips; (d) patents, patent applications and like protections including without limitation improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same; (e) trademarks, servicemarks, trade styles, and trade names, whether or not any of the foregoing are registered, and all applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by any such trademarks; (f) computer software and computer software products; (g) designs and design rights; (h) technology; (i) all claims for damages by way of past, present and future infringement of any of the rights included above; (j) all licenses or other rights to use any property or rights of a type described above.

“Inventory” means all present and future “inventory” as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and includes without limitation all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products, including without limitation such inventory as is temporarily out of Borrower’s custody or possession or in transit and including any returned goods and any documents of title representing any of the above.

“Investment Property” means all present and future investment property, securities, stocks, bonds, debentures, debt securities, partnership interests, limited liability company interests, options, security entitlements, securities accounts, commodity contracts, commodity accounts, and all financial assets held in any securities account or otherwise, and all options and warrants to purchase any of the foregoing, wherever located, and all other securities of every kind, whether certificated or uncertificated.

“Loan Documents” means, collectively, this Agreement, the Representations, and all other present and future documents, instruments and agreements between Silicon and Borrower, including, but not limited to those relating to this Agreement, and all amendments and modifications thereto and replacements therefor.

“Material Adverse Change” means any of the following: (i) a material adverse change in the business, operations, or financial or other condition of the Borrower, or (ii) a material impairment of the prospect of repayment of any portion of the Obligations; or (iii) a material impairment of the value or priority of Silicon’s security interests in the Collateral.

“Obligations” means all present and future Loans, advances, debts, liabilities, obligations, guaranties, covenants, duties and indebtedness at any time owing by Borrower to Silicon, whether evidenced by this Agreement or any note or other instrument or document, or otherwise, whether arising from an extension of credit, opening of a letter of credit, banker’s acceptance, loan, guaranty, indemnification or otherwise, whether direct or indirect (including, without limitation, those acquired by assignment and any participation by Silicon in Borrower’s debts owing to others), absolute or contingent, due or to become due, including, without limitation, all interest, charges, expenses, fees, attorney’s fees, expert witness fees, audit fees, letter of credit fees, collateral monitoring fees, closing fees, facility fees, termination fees, minimum interest charges and any other sums chargeable to Borrower under this Agreement or under any other Loan Documents.

“Other Property” means the following as defined in the California Uniform Commercial Code in effect on the date hereof with such additions to such term as may hereafter be made, and all rights relating thereto: all present and future “commercial tort claims” (including without limitation any commercial tort claims identified in the Representations), “documents”, “instruments”, “promissory notes”, “chattel paper”, “letters of credit”, “letter-of-credit rights”, “fixtures”, “farm products” and “money”; and all other goods and personal property of every kind, tangible and intangible, whether or not governed by the California Uniform Commercial Code.

“Permitted Liens” means the following: (i) purchase money security interests in specific items of Equipment; (ii) leases of specific items of Equipment; (iii) liens for taxes not yet payable; (iv) additional security interests and liens consented to in writing by Silicon, which consent may be withheld in its good faith business judgment; (v) security interests being terminated substantially concurrently with this Agreement; (vi) liens of materialmen, mechanics, warehousemen, carriers, or other similar liens arising in the ordinary course of business and securing obligations which are not delinquent; (vii) liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by liens of the type described above in clauses (i) or (ii) above, provided that any extension, renewal or replacement lien is limited to the property encumbered by the existing lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase; (viii) Liens in favor of customs and revenue authorities which secure payment of customs duties in connection with the importation of goods. Silicon will have the right to require, as a condition to its consent under subparagraph (iv) above, that the holder of the additional security interest or lien sign an intercreditor agreement on Silicon’s then standard form, acknowledge that the security interest is subordinate to the security interest in favor of Silicon, and agree not to take any action to enforce its subordinate security interest so long as any Obligations remain outstanding, and that Borrower agree that any uncured default in any obligation secured by the subordinate security interest shall also constitute an Event of Default under this Agreement.

“Person” means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, government, or any agency or political division thereof, or any other entity.

“Representations” means the written Representations and Warranties provided by Borrower to Silicon referred to in the Schedule.

“Reserves” means, as of any date of determination, such amounts as Silicon may from time to time establish and revise in its good faith business judgment, reducing the amount of Loans, Letters of Credit and other financial accommodations which would otherwise be available to Borrower under the lending formula(s) provided in the Schedule: (a) to reflect events, conditions, contingencies or risks which, as determined by Silicon in its good faith business judgment, do or may adversely affect (i) the Collateral or any other property which is security for the Obligations or its value (including without limitation any increase in delinquencies of Accounts), (ii) the assets, business or prospects of Borrower or any Guarantor, or (iii) the security interests and other rights of Silicon in the Collateral (including the enforceability, perfection and priority thereof); or (b) to reflect Silicon’s good faith belief that any collateral report or financial information furnished by or on behalf of Borrower or any Guarantor to Silicon is or may have been incomplete, inaccurate or misleading in any material respect; or (c) in respect of any state of facts which Silicon determines in good faith constitutes an Event of Default or may, with notice or passage of time or both, constitute an Event of Default.

Other Terms. All accounting terms used in this Agreement, unless otherwise indicated, shall have the meanings given to such terms in accordance with GAAP, consistently applied. All other terms contained in this Agreement, unless otherwise indicated, shall have the meanings provided by the Code, to the extent such terms are defined therein.

9. GENERAL PROVISIONS.

9.1 Interest Computation. In computing interest on the Obligations, all checks, wire transfers and other items of payment received by Silicon (including proceeds of Accounts and payment of the Obligations in full) shall be deemed applied by Silicon on account of the Obligations three Business Days after receipt by Silicon of immediately available funds, and, for purposes of the foregoing, any such funds received after 12:00 Noon on any day shall be deemed received on the next Business Day. Silicon shall not, however, be required to credit Borrower’s account for the amount of any item of payment which is unsatisfactory to Silicon in its good faith business judgment, and Silicon may charge Borrower’s loan account for the amount of any item of payment which is returned to Silicon unpaid.

9.2 Application of Payments. All payments with respect to the Obligations may be applied, and in Silicon’s good faith business judgment reversed and re-applied, to the Obligations, in such order and manner as Silicon shall determine in its good faith business judgment.

9.3 Charges to Accounts. Silicon may, in its discretion, require that Borrower pay monetary Obligations in cash to Silicon, or charge them to Borrower’s Loan account, in which event they will bear interest at the same rate applicable to the Loans. Silicon may also, in its discretion, charge any monetary Obligations to Borrower’s Deposit Accounts maintained with Silicon.

9.4 Monthly Accountings. Silicon shall provide Borrower monthly with an account of advances, charges, expenses and payments made pursuant to this Agreement. Such account shall be deemed correct, accurate and binding on Borrower and an account stated (except for reverses and reapplications of payments made and corrections of errors discovered by Silicon), unless Borrower notifies Silicon in writing to the contrary within 60 days after such account is rendered, describing the nature of any alleged errors or omissions.

9.5 Notices. All notices to be given under this Agreement shall be in writing and shall be given either personally or by reputable private delivery service or by regular first-class mail, or certified mail return receipt requested, addressed to Silicon or Borrower at the addresses shown in the heading to this Agreement, or at any other address designated in writing by one party to the other party. Notices to Silicon shall be directed to the Commercial Finance Division, to the attention of the Division Manager or the Division Credit Manager. All notices shall be deemed to have been given upon delivery in the case of notices personally delivered, or at the expiration of one Business Day following delivery to the private delivery service, or two Business Days following the deposit thereof in the United States mail, with postage prepaid.

9.6 Severability. Should any provision of this Agreement be held by any court of competent jurisdiction to be void or unenforceable, such defect shall not affect the remainder of this Agreement, which shall continue in full force and effect.

9.7 Integration. This Agreement and such other written agreements, documents and instruments as may be executed in connection herewith are the final, entire and complete agreement between Borrower and Silicon and supersede all prior and contemporaneous negotiations and oral representations and agreements, all of which are merged and integrated in this Agreement. There are no oral understandings, representations or agreements between the parties which are not set forth in this Agreement or in other written agreements signed by the parties in connection herewith.

9.8 Waivers; Indemnity. The failure of Silicon at any time or times to require Borrower to strictly comply with any of the provisions of this Agreement or any other Loan Document shall not waive or diminish any right of Silicon later to demand and receive strict compliance therewith. Any waiver of any default shall not waive or affect any other default, whether prior or subsequent, and whether or not similar. None of the provisions of this Agreement or any other Loan Document shall be deemed to have been waived by any act or knowledge of Silicon or its agents or employees, but only by a specific written waiver signed by an authorized officer of Silicon and delivered to Borrower. Borrower waives the benefit of all statutes of limitations relating to any of the Obligations or this Agreement or any other Loan Document, and Borrower waives demand, protest, notice of protest and notice of default or dishonor, notice of payment and nonpayment, release, compromise, settlement, extension or renewal of any commercial paper, instrument, account, General Intangible, document or guaranty at any time held by Silicon on which Borrower is or may in any way be liable, and notice of any action taken by Silicon, unless expressly required by this Agreement. Borrower hereby agrees to indemnify Silicon and its affiliates, subsidiaries, parent, directors, officers, employees, agents, and attorneys, and to hold them harmless from and against any and all claims, debts, liabilities, demands, obligations, actions, causes of action, penalties, costs and expenses (including reasonable attorneys' fees), of every kind, which they may sustain or incur based upon or arising out of any of the Obligations, or any relationship or agreement between Silicon and Borrower, or any other matter, relating to Borrower or the Obligations; provided that this indemnity shall not extend to damages proximately caused by the indemnitee's own gross negligence or willful misconduct. Notwithstanding any provision in this Agreement to the contrary, the indemnity agreement set forth in this Section shall survive any termination of this Agreement and shall for all purposes continue in full force and effect.

9.9 No Liability for Ordinary Negligence. Neither Silicon, nor any of its directors, officers, employees, agents, attorneys or any other Person affiliated with or representing Silicon shall be liable for any claims, demands, losses or damages, of any kind whatsoever, made, claimed, incurred or suffered by Borrower or any other party through the ordinary negligence of Silicon, or any of its directors, officers, employees, agents, attorneys or any other Person affiliated with or representing Silicon, but nothing herein shall relieve Silicon from liability for its own gross negligence or willful misconduct.

9.10 Amendment. The terms and provisions of this Agreement may not be waived or amended, except in a writing executed by Borrower and a duly authorized officer of Silicon.

9.11 Time of Essence. Time is of the essence in the performance by Borrower of each and every obligation under this Agreement.

9.12 Attorneys Fees and Costs. Borrower shall reimburse Silicon for all reasonable attorneys' fees and all filing, recording, search, title insurance, appraisal, audit, and other reasonable costs incurred by Silicon, pursuant to, or in connection with, or relating to this Agreement (whether or not a lawsuit is filed), including, but not limited to, any reasonable attorneys' fees and costs Silicon incurs in order to do the following: prepare and negotiate this Agreement and all present and future documents relating to this Agreement; obtain legal advice in connection with this Agreement or Borrower; enforce, or seek to enforce, any of its rights; prosecute actions against, or defend actions by, Account Debtors; commence, intervene in, or defend any action or proceeding; initiate any complaint to be relieved of the automatic stay in bankruptcy; file or prosecute any probate claim, bankruptcy claim, third-party claim, or other claim; examine, audit, copy, and inspect any of the Collateral or any of Borrower's books and records; protect, obtain possession of, lease, dispose of, or otherwise enforce Silicon's security interest in, the Collateral; and otherwise represent Silicon in any litigation relating to Borrower. In satisfying Borrower's obligation hereunder to reimburse Silicon for attorneys fees, Borrower may, for convenience, issue checks directly to Silicon's attorneys, Levy, Small & Lallas, but Borrower acknowledges and agrees that Levy, Small & Lallas is representing only Silicon and not Borrower in connection with this Agreement. If either Silicon or Borrower files any lawsuit against the other predicated on a breach of this Agreement, the prevailing party in such action shall be entitled to recover its reasonable costs and attorneys' fees, including (but not limited to) reasonable attorneys' fees and costs incurred in the enforcement of, execution upon or defense of any order, decree, award or judgment. All attorneys' fees and costs to which Silicon may be entitled pursuant to this Paragraph shall immediately become part of Borrower's Obligations, shall be due on demand, and shall bear interest at a rate equal to the highest interest rate applicable to any of the Obligations.

9.13 Benefit of Agreement. The provisions of this Agreement shall be binding upon and inure to the benefit of the respective successors, assigns, heirs, beneficiaries and representatives of Borrower and Silicon; provided, however, that Borrower may not assign or transfer any of its rights under this Agreement without the prior written consent of Silicon, and any prohibited assignment shall be void. No consent by Silicon to any assignment shall release Borrower from its liability for the Obligations.

9.14 Joint and Several Liability. If Borrower consists of more than one Person, their liability shall be joint and several, and the compromise of any claim with, or the release of, any Borrower shall not constitute a compromise with, or a release of, any other Borrower.

9.15 Limitation of Actions. Any claim or cause of action by Borrower against Silicon, its directors, officers, employees, agents, accountants or attorneys, based upon, arising from, or relating to this Loan Agreement, or any other Loan Document, or any other transaction contemplated hereby or thereby or relating hereto or thereto, or any other matter, cause or thing whatsoever, occurred, done, omitted or suffered to be done by Silicon, its directors, officers, employees, agents, accountants or attorneys, shall be barred unless asserted by Borrower by the commencement of an action or proceeding in a court of competent jurisdiction by the filing of a complaint within one year after the first act, occurrence or omission upon which such claim or cause of action, or any part thereof, is based, and the service of a summons and complaint on an officer of Silicon, or on any other person authorized to accept service on behalf of Silicon, within thirty (30) days thereafter. Borrower agrees that such one-year period is a reasonable and sufficient time for Borrower to investigate and act upon any such claim or cause of action. The one-year period provided herein shall not be waived, tolled, or extended except by the written consent of Silicon in its sole discretion. This provision shall survive any termination of this Loan Agreement or any other Loan Document.

9.16 Paragraph Headings; Construction. Paragraph headings are only used in this Agreement for convenience. Borrower and Silicon acknowledge that the headings may not describe completely the subject matter of the applicable paragraph, and the headings shall not be used in any manner to construe, limit, define or interpret any term or provision of this Agreement. This Agreement has been fully reviewed and negotiated between the parties and no uncertainty or ambiguity in any term or provision of this Agreement shall be construed strictly against Silicon or Borrower under any rule of construction or otherwise.

9.17 Governing Law; Jurisdiction; Venue. This Agreement and all acts and transactions hereunder and all rights and obligations of Silicon and Borrower shall be governed by the laws of the State of California. As a material part of the consideration to Silicon to enter into this Agreement, Borrower (i) agrees that all actions and proceedings relating directly or indirectly to this Agreement shall, at Silicon's option, be litigated in courts located within California, and that the exclusive venue therefor shall be Santa Clara County; (ii) consents to the jurisdiction and venue of any such court and consents to service of process in any such action or proceeding by personal delivery or any other method permitted by law; and (iii) waives any and all rights Borrower may have to object to the jurisdiction of any such court, or to transfer or change the venue of any such action or proceeding.

9.18 Mutual Waiver of Jury Trial. BORROWER AND SILICON EACH HEREBY WAIVE THE RIGHT TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING BASED UPON, ARISING OUT OF, OR IN ANY WAY RELATING TO, THIS AGREEMENT OR ANY OTHER PRESENT OR FUTURE INSTRUMENT OR AGREEMENT BETWEEN SILICON AND BORROWER, OR ANY CONDUCT, ACTS OR OMISSIONS OF SILICON OR BORROWER OR ANY OF THEIR DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, ATTORNEYS OR ANY OTHER PERSONS AFFILIATED WITH SILICON OR BORROWER, IN ALL OF THE FOREGOING CASES, WHETHER SOUNDING IN CONTRACT OR TORT OR OTHERWISE.

Borrower:	Silicon:
TEGAL CORPORATION	SILICON VALLEY BANK
BY /s/ Michael L. Parodi President or Vice President	BY /s/ Patrick J. O'Donnell Title Vice President
BY Kathy Petrini Secretary or Ass't Secretary	

Silicon Valley Bank

Schedule to
Loan and Security Agreement
(Exim Program)

Borrower: Tegal Corporation

Address: 2201 South McDowell Blvd.

Petaluma, CA 94954

Date: June 26, 2002

This Schedule forms an integral part of the Loan and Security Agreement between Silicon Valley Bank and the above-borrower of even date.

1. Credit Limit
(Section 1.1):

An amount not to exceed the lesser of a total of \$5,000,000 at any one time outstanding (the "Maximum Credit Limit"), or the sum of (a) and (b) below:

- (a) 90% (an "Advance Rate") of the amount of Borrower's Eligible Accounts (as defined in Section 8 above); provided, however, if the Eligible Account is denominated in Euros or Japanese Yen and an FX Forward Contract (as defined below) has not been entered into with respect thereto, then such percentage shall be 70%, plus

 - (b) an amount not to exceed the lesser of:
 - (1) 75% (an "Advance Rate") of the value of Borrower's Eligible Inventory (as defined in Section 8 above), calculated at the lower of cost or market value and determined on a first-in, first-out basis, or

 - (2) 75% (an "Advance Rate") of the cost of goods sold with respect to "System Purchase Orders" (as defined below) as such outstanding System Purchase Orders are presented to Silicon; or

 - (3) 60% of the aggregate amount of all Loans available under subclauses (a) and (b) of the Credit Limit; or
-

(4) **\$3,000,000.**

Notwithstanding the foregoing, the total outstanding Obligations under this Loan Agreement and under the Non-Exim Agreement (as defined below) shall not at any time exceed \$10,000,000 (the "Overall Credit Limit").

For the purposes hereof, the term "System Purchase Orders" means a purchase order of the Borrower from a customer of Borrower for an entire etching machine manufactured by Borrower, a copy of which purchase order shall have been provided to Silicon (and the original of which purchase order will be provided to Silicon upon Silicon's request). A System Purchase Order shall not include any purchase orders for spare parts or any purchase orders for anything less than an entire etching machine.

Silicon may, from time to time, modify the Advance Rates, in its good faith business judgment, upon notice to the Borrower, based on changes in collection experience with respect to Accounts, its evaluation of the Inventory or other issues or factors relating to the Accounts, Inventory or other Collateral.

Letter of Credit Sublimit
(Section 1.6):

\$5,000,000.

Foreign Exchange
Contract Sublimit:

\$5,000,000.

Borrower may enter into foreign exchange forward contracts with Silicon, on its standard forms, under which Borrower commits to purchase from or sell to Silicon a set amount of foreign currency more than one business day after the contract date (the "FX Forward Contracts"); provided that (1) at the time the FX Forward Contract is entered into Borrower has Loans available to it under this Agreement in an amount at least equal to 10% of the amount of the FX Forward Contract; (2) the total FX Forward Contracts at any one time outstanding may not exceed 10 times the amount of the Foreign Exchange Contract Sublimit set forth above. Silicon shall have the right to withhold, from the Loans otherwise available to Borrower under this Agreement, a reserve (which shall be in addition to all other reserves) in an amount equal to 10% of the total FX Forward Contracts from time to time outstanding, and in the event at any time there are insufficient Loans available to Borrower for such reserve, Borrower shall deposit and maintain with Silicon cash collateral in an amount at all times equal to such deficiency, which shall be held as Collateral for all purposes of this Agreement. Silicon may, in its discretion, terminate the FX Forward Contracts at any time that an Event of Default occurs and is continuing. Borrower shall execute all standard form applications and agreements of Silicon in connection with the FX Forward Contracts, and without limiting any of the terms of such applications and agreements, Borrower shall pay all standard fees and charges of Silicon in connection with the FX Forward Contracts.

2. Interest.

Interest Rate (Section 1.2): A rate equal to the "Prime Rate" in effect from time to time, plus 1.0% per annum. Interest shall be calculated on the basis of a 360-day year for the actual number of days elapsed. "Prime Rate" means the rate announced from time to time by Silicon as its "prime rate;" it is a base rate upon which other rates charged by Silicon are based, and it is not necessarily the best rate available at Silicon. The interest rate applicable to the Obligations shall change on each date there is a change in the Prime Rate.

Minimum Monthly Interest (Section 1.2):

Not Applicable.

3. Fees (Section 1.4):

Loan Fee:

The Loan Fee is payable as provided for in the Non-Exim Agreement.

Early Acceptance Reduction:

If this Agreement and the Loan Documents related to this Agreement have been executed by each of the parties by June 25, 2002, Silicon will reduce the amount of the Loan Fee payable concurrently herewith as provided for in the Non-Exim Agreement.

If this Agreement and the Loan Documents related to this Agreement have been executed by each of the parties by July 2, 2002, Silicon will reduce the amount of the Loan Fee payable concurrently herewith as provided for in the Non-Exim Agreement.

Collateral Monitoring Fee: \$1,000, per month in the aggregate as between this Agreement and the Non-Exim Agreement, payable in arrears (prorated for any partial month at the beginning and at termination of this Agreement).

Unused Line Fee: In the event, in any calendar month (or portion thereof at the beginning and end of the term hereof), the average daily principal balance of the aggregate Loans outstanding during the month under this Agreement and the Non-Exim Agreement is less than the amount of the Maximum Credit Limit, Borrower shall pay Silicon an unused line fee in an amount equal to 0.25% per annum on the difference between the amount of the Maximum Credit Limit and such average daily principal balance of the Loans outstanding during the month, which unused line fee shall be computed and paid monthly, in arrears, on the first day of the following month.

4. Maturity Date
(Section 6.1): Two years from the date of this Agreement.

5. Financial Covenants
(Section 5.1): Borrower shall comply with each of the financial covenants set forth in the Non-Exim Agreement (as defined below).

6. Reporting,
(Section 5.3): Borrower shall provide Silicon with the following:

1. With each request for a Loan and on a minimum weekly basis, transaction reports and schedules of collections, on Silicon's standard form.
 2. Monthly accounts receivable agings, aged by invoice date, within fifteen days after the end of each month.
 3. Monthly accounts payable agings, aged by invoice date, and outstanding or held check registers, if any, within fifteen days after the end of each month.
 4. Monthly reconciliations of accounts receivable agings (aged by invoice date), transaction reports, and general ledger, within fifteen days after the end of each month.
-

5. Monthly perpetual inventory reports for the Inventory valued on a first-in, first-out basis at the lower of cost or market (in accordance with GAAP) or such other inventory reports as are requested by Silicon in its good faith business judgment, all within fifteen days after the end of each month.
6. Monthly unaudited financial statements, as soon as available, and in any event within thirty days after the end of each month.
7. Monthly Compliance Certificates, within thirty days after the end of each month, in such form as Silicon shall reasonably specify, signed by the Chief Financial Officer of Borrower, certifying that as of the end of such month Borrower was in full compliance with all of the terms and conditions of this Agreement, and setting forth calculations showing compliance with the financial covenants set forth in this Agreement and such other information as Silicon shall reasonably request, including, without limitation, a statement that at the end of such month there were no held checks.
8. Quarterly unaudited financial statements, as soon as available, and in any event within forty-five days after the end of each fiscal quarter of Borrower.
9. Annual operating budgets (including income statements, balance sheets and cash flow statements, by month) for the upcoming fiscal year of Borrower within thirty days prior to the end of each fiscal year of Borrower.
10. Annual financial statements, as soon as available, and in any event within 120 days following the end of Borrower's fiscal year, certified by, and with an unqualified opinion of, independent certified public accountants acceptable to Silicon.
11. Together with each transaction report, as provided for above, Borrower shall provide Silicon with a copy of each purchase order or sales contract with respect to each invoice in excess of \$100,000.

7. Borrower Information:

Borrower represents and warrants that the information set forth in the Representations and Warranties of the Borrower dated June 25, 2002, previously submitted to Silicon (the "Representations") is true and correct as of the date hereof.

8. ADDITIONAL PROVISIONS

- (1) **Banking Relationship.** Borrower shall at all times maintain its primary banking relationship with Silicon. Without limiting the generality of the foregoing, Borrower shall, at all times, maintain not less than 80% of its total cash and investments on deposit with Silicon. As to any Deposit Accounts and investment accounts maintained with another institution, Borrower shall cause such institution, within 30 days after the date of this Agreement, to enter into a control agreement in form acceptable to Silicon in its good faith business judgment in order to perfect Silicon's first-priority security interest in said Deposit Accounts and investment accounts.

 - (2) **Subordination of Inside Debt.** All present and future indebtedness of Borrower to its officers, directors and shareholders ("Inside Debt") shall, at all times, be subordinated to the Obligations pursuant to a subordination agreement on Silicon's standard form. Borrower represents and warrants that there is no Inside Debt presently outstanding, except for the following: - \$0 -. Prior to incurring any Inside Debt in the future, Borrower shall cause the person to whom such Inside Debt will be owed to execute and deliver to Silicon a subordination agreement on Silicon's standard form.

 - (3) **Warrants.** Concurrently herewith, Borrower shall provide Silicon with the warrants provided for in the Non-Exim Agreement.

 - (4) **Copyright Filings.** Concurrently, Borrower is executing and delivering to Silicon an Intellectual Property Security Agreement (the "Intellectual Property Agreement"). Within 60 days after the date hereof, Borrower shall (i) cause all of its computer software, the licensing of which results in Accounts, or which is material to its business to be registered with the United States Copyright Office, (ii) complete the Exhibits to the Intellectual Property Agreement with all of the information called for with respect to such software, (iii) cause the Intellectual Property Agreement to be recorded in the United States Copyright Office, and (iv) provide evidence of such recordation to Silicon.
-

- (5) **Foreign Bank Accounts.** Without limitation upon any other terms of this Agreement, Borrower covenants and agrees that the proceeds of any Export-Related Accounts Receivable that are remitted by the Account Debtor to any account in the name of Borrower or any of its subsidiaries (including, without limitation, Tegal GmbH), whether maintained at Deutsche Bank or any other foreign financial institution (each such account a "Foreign Bank Account"), are to be remitted by Borrower (or, if applicable, caused to be remitted by Borrower), immediately to Borrower's cash collateral account maintained at Silicon in accordance with Section 4.4 above. Additionally, without limitation upon any other terms of this Agreement, within 30 days of the date of this Agreement with respect to any Foreign Bank Account which exists as of the date hereof, and prior to establishing any new Foreign Bank Account, Borrower shall either (i) provide Silicon with liens against the Foreign Bank Accounts which, under the laws applicable to the Foreign Bank Accounts, are equivalent in priority and protection to a first-priority perfected security interest ("Priority Lien"), and with dominion over such Foreign Bank Accounts, including without limitation, by causing Deutsche Bank and any other financial institution at which a Foreign Bank Account is maintained to execute such documents and take such other actions as Silicon deems necessary in order to grant Silicon such lien against, and dominion over, all Foreign Bank Accounts; or at Borrower's option, or at Silicon's option if Silicon determines in its good faith business judgment that a Priority Lien and dominion cannot be obtained within the above referenced time periods, (ii) establish a new bank account (or use an existing bank account) in the United States at Silicon, or such other financial institution as is acceptable to Silicon, (the "U.S. Account"), cause Silicon to have a first-priority perfected security interest in the U.S. Account, cause Silicon to have dominion over the U.S. Account, and direct all Account Debtors of Export-Related Accounts Receivable to remit payments to such U.S. Account.
- (6) **Landlord Waivers.** Borrower shall, within thirty days of the date hereof, cause any third party who has an interest in any premises where Collateral is located, to execute and deliver to Silicon, in form acceptable to Silicon, such waivers and subordinations as Silicon shall specify in order to confirm Silicon's priority security interest in the Collateral and to assure Silicon of access to the Collateral.
-

9. EXIM PROVISIONS:

- (1) **Exim Guaranty.** Prior to the first disbursement of any Loans hereunder, Borrower shall cause the Export Import Bank of the United States (the "Exim Bank") to guarantee the Loans made under this Agreement, pursuant to a Master Guarantee Agreement, Loan Authorization Agreement and (to the extent applicable) Delegated Authority Letter Agreement (collectively, the "Exim Guaranty"), and Borrower shall cause the Exim Guaranty to be in full force and effect throughout the term of this Agreement and so long as any Loans hereunder are outstanding. If, for any reason, the Exim Guaranty shall cease to be in full force and effect, or if the Exim Bank declares the Exim Guaranty void or revokes any obligations thereunder or denies liability thereunder, any such event shall constitute an Event of Default under this Agreement. Nothing in any confidentiality agreement in this Agreement or in any other agreement shall restrict Silicon's right to make disclosures and provide information to the Exim Bank in connection with the Exim Guaranty.

 - (2) **Exim Borrower Agreement; Costs.** Borrower shall, concurrently execute and deliver a Borrower Agreement, in the form specified by the Exim Bank, in favor of Silicon and the Exim Bank (the "Exim Borrower Agreement"). This Agreement is subject to all of the terms and conditions of the Exim Borrower Agreement, all of which are hereby incorporated herein by this reference. Borrower expressly agrees to perform all of the obligations and comply with all of the affirmative and negative covenants and all other terms and conditions set forth in the Exim Borrower Agreement as though the same were expressly set forth herein. In the event of any conflict between the terms of the Exim Borrower Agreement and the other terms of this Agreement, whichever terms are more restrictive shall apply. Borrower shall reimburse Silicon for all fees and all out of pocket costs and expenses incurred by Silicon with respect to the Exim Guaranty and the Exim Borrower Agreement, including without limitation all facility fees and usage fees, and Silicon is authorized to debit Borrower's account with Silicon for such fees, costs and expenses when paid by Silicon.
-

- (3) **Non-Exim Agreement; Cross-Collateralization; Cross-Default.** Silicon and the Borrower are parties to that certain Loan and Security Agreement of even date herewith (the "Non-Exim Agreement"). Both this Agreement and the Non-Exim Agreement shall continue in full force and effect, and all rights and remedies under this Agreement and the Non-Exim Agreement are cumulative. The term "Obligations" as used in this Agreement and in the Non-Exim Agreement shall include without limitation the obligation to pay when due all Loans made pursuant to this Agreement (the "Exim Loans") and all interest thereon and the obligation to pay when due all Loans made pursuant to the Non-Exim Agreement (the "Non-Exim Loans") and all interest thereon. Without limiting the generality of the foregoing, all "Collateral" as defined in this Agreement and as defined in the Non-Exim Agreement shall secure all Exim Loans and all Non-Exim Loans and all interest thereon, and all other Obligations. Any Event of Default under this Agreement shall also constitute an Event of Default under the Non-Exim Agreement, and any Event of Default under the Non-Exim Agreement shall also constitute an Event of Default under this Agreement. In the event Silicon assigns its rights under this Agreement and/or under any Note evidencing Exim Loans and/or its rights under the Non-Exim Agreement and/or under any Note evidencing Non-Exim Loans, to any third party, including without limitation the Exim Bank, whether before or after the occurrence of any Event of Default, Silicon shall have the right (but not any obligation), in its sole discretion, to allocate and apportion Collateral to the Agreement and/or Note assigned and to specify the priorities of the respective security interests in such Collateral between itself and the assignee, all without notice to or consent of the Borrower.

Borrower:	Silicon:
TEGAL CORPORATION	SILICON VALLEY BANK
BY <u>/s/ Michael L. Parodi</u> President or Vice President	BY <u>/s/ Patrick J. O'Donnell</u> Title <u>Vice President</u>
BY <u>/s/ Kathy Petrini</u> Secretary or Ass't Secretary	

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of June 26, 2002 by and between SILICON VALLEY BANK ("Secured Party") and TEGAL CORPORATION ("Grantor").

RECITALS

A. Secured Party and Borrower are entering into that certain Loan and Security Agreement by dated of even date herewith (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein which are not defined, have the meanings set forth in the Loan Agreement).

B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Secured Party a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to all Intellectual Property and all other Collateral.

NOW, THEREFORE, as collateral security for the payment and performance when due of all of the Obligations, Grantor hereby grants, represents, warrants, covenants and agrees as follows:

AGREEMENT

1. Grant of Security Interest. To secure all of the Obligations, Grantor grants and pledges to Secured Party a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property (as defined in the Loan Agreement), including without limitation the following:

(a) All of present and future United States registered copyrights and copyright registrations, including, without limitation, the registered copyrights, maskworks, software, computer programs and other works of authorship subject to United States copyright protection listed in Exhibit A-1 to this Agreement (and including all of the exclusive rights afforded a copyright registrant in the United States under 17 U.S.C. §106 and any exclusive rights which may in the future arise by act of Congress or otherwise) and all present and future applications for copyright registrations (including applications for copyright registrations of derivative works and compilations) (collectively, the "Registered Copyrights"), and any and all royalties, payments, and other amounts payable to Borrower in connection with the Registered Copyrights, together with all renewals and extensions of the Registered Copyrights, the right to recover for all past, present, and future infringements of the Registered Copyrights, and all computer programs, computer databases, computer program flow diagrams, source codes, object codes and all tangible property embodying or incorporating the Registered Copyrights, and all other rights of every kind whatsoever accruing thereunder or pertaining thereto.

(b) All present and future copyrights, maskworks, software, computer programs and other works of authorship subject to (or capable of becoming subject to) United States copyright protection which are not registered in the United States Copyright Office (the "Unregistered Copyrights"), whether now owned or hereafter acquired, including without limitation the Unregistered Copyrights listed in Exhibit A-2 to this Agreement, and any and all royalties, payments, and other amounts payable to Borrower in connection with the Unregistered Copyrights, together with all renewals and extensions of the Unregistered Copyrights, the right to recover for all past, present, and future infringements of the Unregistered Copyrights, and all computer programs, computer databases, computer program flow diagrams, source codes, object codes and all tangible property embodying or incorporating the Unregistered Copyrights, and all other rights of every kind whatsoever accruing thereunder or pertaining thereto. The Registered Copyrights and the Unregistered Copyrights collectively are referred to herein as the "Copyrights."

(c) All right, title and interest in and to any and all present and future license agreements with respect to the Copyrights.

(d) All present and future accounts, accounts receivable, royalties, and other rights to payment arising from, in connection with or relating to the Copyrights.

(e) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");

(f) All trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Borrower connected with and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

(g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the rights identified above;

(h) All licenses or other rights to use any of the Copyrights, Patents or Trademarks, and all license fees and royalties arising from such use to the extent permitted by such license or rights;

(i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks or Patents; and

(j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing, and all license royalties and proceeds of infringement suits, and all rights corresponding to the foregoing throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part of the foregoing.

2. Loan Agreement. This security interest is granted in conjunction with the security interest granted to Secured Party under the Loan Agreement. The rights and remedies of Secured Party with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Secured Party as a matter of law or equity. Each right, power and remedy of Secured Party provided for herein or in the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Secured Party of any one or more of the rights, powers or remedies provided for in this Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Secured Party, of any or all other rights, powers or remedies.

3. Covenants and Warranties. Borrower represents, warrants, covenants and agrees as follows:

(a) Subject to Section 8 (4) of the Schedule to the Loan Agreement, all of Borrower's present and future maskworks, software, computer programs and other works of authorship subject to (or capable of becoming subject to) United States copyright protection, the sale, licensing or other disposition of which results in royalties receivable, license fees receivable, accounts receivable or other sums owing to Borrower (collectively, "Accounts"), have been and shall be registered with the United States Copyright Office prior to the date Borrower requests or accepts any Loan from Secured Party with respect to such Accounts and prior to the date Borrower includes any such Accounts in any accounts receivable aging, borrowing base report or certificate or other similar report provided to Secured Party, and Borrower shall provide to Secured Party copies of all such registrations promptly upon the receipt of the same.

(b) Borrower shall undertake all reasonable measures to cause its employees, agents and independent contractors to assign to Borrower all rights of authorship to any copyrighted material in which Borrower has or may subsequently acquire any right or interest.

(c) Borrower shall promptly advise Secured Party of any Trademark, Patent or Copyright not specified in this Agreement, which is hereafter acquired by Borrower.

(d) Subject to Section 8 (4) of the Schedule to the Loan Agreement, Borrower shall promptly register the most recent version of any of Borrower's Copyrights, which are not already so registered, and which are referred to in Section 3(a) above or which are material to its business, and shall, from time to time, execute and file such other instruments, and take such further actions as Secured Party may reasonably request from time to time to perfect or continue the perfection of Secured Party's interest in the Collateral.

4. General. If any action relating to this Agreement is brought by either party hereto against the other party, the prevailing party shall be entitled to recover reasonable attorneys fees, costs and disbursements. This Agreement may be amended only by a written instrument signed by both parties hereto. To the extent that any provision of this Agreement conflicts with any provision of the Loan Agreement, the provision giving Secured Party greater rights or remedies shall govern, it being understood that the purpose of this Agreement is to add to, and not detract from, the rights granted to Secured Party under the Loan Agreement. This Agreement, the Loan Agreement, and the other Loan Documents comprise the entire agreement of the parties with respect to the matters addressed in this Agreement. This Agreement shall be governed by the laws of the State of California, without regard for choice of law provisions. Borrower and Secured Party consent to the nonexclusive jurisdiction of any state or federal court located in Santa Clara County, California.

5. WAIVER OF RIGHT TO JURY TRIAL. SECURED PARTY AND BORROWER EACH HEREBY WAIVE THE RIGHT TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING BASED UPON, ARISING OUT OF, OR IN ANY WAY RELATING TO: (I) THIS AGREEMENT; OR (II) ANY OTHER PRESENT OR FUTURE INSTRUMENT OR AGREEMENT BETWEEN SECURED PARTY AND BORROWER; OR (III) ANY CONDUCT, ACTS OR OMISSIONS OF SECURED PARTY OR BORROWER OR ANY OF THEIR DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, ATTORNEYS OR ANY OTHER PERSONS AFFILIATED WITH SECURED PARTY OR BORROWER; IN EACH OF THE FOREGOING CASES, WHETHER SOUNDING IN CONTRACT OR TORT OR OTHERWISE.

IN WITNESS WHEREOF, the parties have cause this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

Address of Grantor: 2201 South McDowell Blvd. Petaluma, CA 94954	Grantor: TEGAL CORPORATION
Executed 6/26/02	By <u>/s/ Michael L. Parodi</u> Title <u>Chairman, President & CEO</u> Name: <u>Michael L. Parodi</u>
Address of Secured Party: 3003 Tasman Drive Santa Clara, California 95054	Secured Party: SILICON VALLEY BANK
Executed 6/26/02	By <u>/s/ Patrick J. O'Donnell</u> Title <u>Vice President</u>

EXHIBIT A-1

REGISTERED COPYRIGHTS

(including copyrights that are the subject of an application for registration)

Description	Registration/ Application Number	Registration/ Application Date
V4.02C (PT/20) 26-041-006 U1	TX-4-222-674	
MCFTASK.SRC	TX-4-222-675	
MCFTASK.SRC	TX-4-222-676	
V4.02G (PT/9) 26-041-016 U1	TX-4-222-677	
RFTASK.SRC	TX-4-222-678	
MFCTASK.SRC	TX-4-222-679	
901e plasma production etcher: system manual: vol. 1-2	TX-4-222-689	
T901e plasma production etcher: system manual: vol. 1-2	TX-4-222-690	
T903e plasma production etcher: system manual: vol. 1-2	TX-4-222-691	
903e plasma production etcher: system manual: vol. 1-2	TX-4-222-692	
9XX SECs user's manual	TX-5-340-216	

EXHIBIT A-2

UNREGISTERED COPYRIGHTS

None.

September 25, 1996

EXHIBIT B

PATENTS

Description	Registration/ Application Number	Registration/ Application Date
<hr/>		

See attached list.

EXHIBIT C

TRADEMARKS

Description	Registration/ Application Number	Registration/ Application Date
Mark: TEGAL COMPLETE CUSTOMER SATISFACTION	1,493,986	6/28/1988
Mark: TEGAL	--	--
Mark: TEGAL	1,494,896	7/5/1988
Mark: TEGAL AND AN UPWARD ARROW CONTAINED IN AN UNENCLOSED BOX	858993	6/23/1998
Mark: TEGAL AND AN UPWARD ARROW CONTAINED IN AN UNENCLOSED BOX	2,495,626	10/9/2001
Mark: 903G	76/201,864	1/30/2001
Mark: 901G	76/201,857	1/30/2001
Mark: i901	76/201,866	1/30/2001
Mark: i903	76/201,861	1/30/2001
Mark: 980	76/201,858	1/30/2001
Mark: 981	76/201,854	1/30/2001
Mark: 983	76/201,862	1/30/2001
Mark: SPECTRA	--	1/15/2002

THIS WARRANT AND THE SHARES ISSUABLE HEREUNDER HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED OR ANY APPLICABLE STATE SECURITIES LAW, AND MAY NOT BE SOLD, PLEDGED, OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THEREOF UNDER SUCH ACT OR PURSUANT TO RULE 144 AND AN EXEMPTION UNDER APPLICABLE STATE LAW OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE CORPORATION AND ITS COUNSEL, THAT SUCH REGISTRATION IS NOT REQUIRED.

WARRANT TO PURCHASE STOCK

Corporation:	Tegal Corporation
Number of Shares:	An amount equal to \$250,000 divided by the Initial Exercise Price
Class of Stock:	Common Stock
Initial Exercise Price:	The greater of (i) \$2.00 per share or (ii) a price per share equal to the average closing price per share of the Company's common stock for the seven trading days immediately preceding the Issue Date.
Issue Date:	June 26, 2002
Expiration Date:	June 25, 2009

THIS WARRANT CERTIFIES THAT, for the agreed upon value of \$1.00 and for other good and valuable consideration, SILICON VALLEY BANK ("Holder") is entitled to purchase the number of fully paid and nonassessable shares of the class of securities (the "Shares") of the corporation (the "Company") at the initial exercise price per Share (the "Warrant Price") all as set forth above and as adjusted pursuant to Article 2 of this Warrant, subject to the provisions and upon the terms and conditions set forth in this Warrant.

ARTICLE 1. EXERCISE.

1.1 Method of Exercise. Holder may exercise this Warrant by delivering a duly executed Notice of Exercise in substantially the form attached as Appendix 1 to the principal office of the Company set forth in Section 5.5 of this Warrant. Unless Holder is exercising the conversion right set forth in Section 1.2, Holder shall also deliver to the Company a check for the aggregate Warrant Price for the Shares being purchased.

1.2 Conversion Right. In lieu of exercising this Warrant as specified in Section 1.1, Holder may from time to time convert this Warrant, in whole or in part, into a number of Shares determined by dividing (a) the aggregate fair market value of the Shares or other securities otherwise issuable upon exercise of this Warrant minus the aggregate Warrant Price of such Shares by (b) the fair market value of one Share. The fair market value of the Shares shall be determined pursuant to Section 1.3.

1.3 Fair Market Value. If the Shares are traded in a public market, the fair market value of the Shares shall be the closing price of the Shares (or the closing price of the Company's stock into which the Shares are convertible) reported for the business day immediately before Holder delivers its Notice of Exercise to the Company. If the Shares are not traded in a public market, the Board of Directors of the Company shall determine fair market value in its reasonable good faith judgment.

1.4 Delivery of Certificate and New Warrant. Promptly after Holder exercises or converts this Warrant, the Company shall deliver to Holder certificates for the Shares acquired and, if this Warrant has not been fully exercised or converted and has not expired, a new Warrant representing the Shares not so acquired.

1.5 Replacement of Warrants. On receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and amount to the Company or, in the case of mutilation, or surrender and cancellation of this Warrant, the Company shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor.

1.6 Assumption on Sale, Merger, or Consolidation of the Company.

1.6.1 "Acquisition". For the purpose of this Warrant, "Acquisition" means any sale, license, or other disposition of all or substantially all of the assets of the Company, or any reorganization, consolidation, or merger of the Company where the holders of the Company's securities before the transaction beneficially own less than 50% of the outstanding voting securities of the surviving entity after the transaction.

1.6.2 Assumption of Warrant. Upon the closing of any Acquisition, the successor entity shall assume the obligations of this Warrant, and this Warrant shall be exercisable for the same securities, cash, and property as would be payable for the Shares issuable upon exercise of the unexercised portion of this Warrant as if such Shares were outstanding on the record date for the Acquisition and subsequent closing. The Initial Exercise Price and/or number of Shares shall be adjusted accordingly.

ARTICLE 2. ADJUSTMENTS TO THE SHARES.

2.1 Stock Dividends, Splits, Etc. If the Company declares or pays a dividend on its common stock (or the Shares if the Shares are securities other than common stock) payable in common stock, or other securities, subdivides the outstanding common stock into a greater amount of common stock, or, if the Shares are securities other than common stock, subdivides the Shares in a transaction that increases the amount of common stock into which the Shares are convertible, then upon exercise of this Warrant, for each Share acquired, Holder shall receive, without cost to Holder, the total number and kind of securities to which Holder would have been entitled had Holder owned the Shares of record as of the date the dividend or subdivision occurred. If the outstanding shares are combined or consolidated, by reclassification or otherwise, into a lesser number of shares, the Initial Exercise Price shall be proportionately increased.

2.2 Reclassification, Exchange, Combinations or Substitution. Upon any reclassification, exchange, substitution, or other event that results in a change of the number and/or class of the securities issuable upon exercise or conversion of this Warrant, Holder shall be entitled to receive, upon exercise or conversion of this Warrant, the number and kind of securities and property that Holder would have received for the Shares if this Warrant had been exercised immediately before such reclassification, exchange, substitution, or other event. Such an event shall include any automatic conversion of the outstanding or issuable securities of the Company of the same class or series as the Shares to common stock pursuant to the terms of the Company's Articles of Incorporation upon the closing of a registered public offering of the Company's common stock. The Company or its successor shall promptly issue to Holder a new Warrant for such new securities or other property. The new Warrant shall provide for adjustments which shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article 2 including, without limitation, adjustments to the Initial Exercise Price and to the number of securities or property issuable upon exercise of the new Warrant. The provisions of this Section 2.2 shall similarly apply to successive reclassifications, exchanges, substitutions, or other events.

2.3 Adjustments for Diluting Issuances. The Warrant Price and the number of Shares issuable upon exercise of this Warrant or, if the Shares are Preferred Stock, the number of shares of common stock issuable upon conversion of the Shares, shall be subject to adjustment, from time to time in the manner set forth in the Company's Certificate of Incorporation. The provisions set forth for the Shares in the Company's Certificate of Incorporation relating to the above in effect as of the Issue Date may not be amended, modified or waived, without the prior written consent of Holder unless such amendment, modification or waiver affects Holder in the same manner as they affect all other shareholders of the same series of shares granted to Holder.

2.4 No Impairment. The Company shall not, by amendment of its Articles of Incorporation or through a reorganization, transfer of assets, consolidation, merger, dissolution, issue, or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed under this Warrant by the Company, but shall at all times in good faith assist in carrying out of all the provisions of this Article 2 and in taking all such action as may be necessary or appropriate to protect Holder's rights under this Article against impairment.

2.5 Fractional Shares. No fractional Shares shall be issuable upon exercise or conversion of the Warrant and the number of Shares to be issued shall be rounded down to the nearest whole Share. If a fractional share interest arises upon any exercise or conversion of the Warrant, the Company shall eliminate such fractional share interest by paying Holder the amount computed by multiplying the fractional interest by the fair market value of a full Share.

2.6 Certificate as to Adjustments. Upon each adjustment of the Warrant Price, the Company shall promptly notify Holder in writing, and, at the Company's expense, promptly compute such adjustment, and furnish Holder with an officer's certificate setting forth such adjustment and the facts upon which such adjustment is based. The Company shall, upon written request, furnish Holder a certificate setting forth the Warrant Price in effect upon the date thereof and the series of adjustments leading to such Warrant Price.

ARTICLE 3. REPRESENTATIONS AND COVENANTS OF THE COMPANY.

3.1 Representations and Warranties. The Company represents and warrants to the Holder as follows:

(a) The initial Warrant Price referenced on the first page of this Warrant is not greater than (i) the price per share at which the Shares were last issued in an arms-length transaction in which at least \$500,000 of the Shares were sold and (ii) the fair market value of the Shares as of the date of this Warrant.

(b) All Shares which may be issued upon the exercise of the purchase right represented by this Warrant, and all securities, if any, issuable upon conversion of the Shares, shall, upon issuance, be duly authorized, validly issued, fully paid and nonassessable, and free of any liens and encumbrances except for restrictions on transfer provided for herein or under applicable federal and state securities laws.

(c) The capitalization table previously provided to Holder remains true and complete as of the Issue Date.

3.2 Notice of Certain Events. If the Company proposes at any time (a) to declare any dividend or distribution upon its common stock, whether in cash, property, stock, or other securities and whether or not a regular cash dividend; (b) to offer for subscription pro rata to the holders of any class or series of its stock any additional shares of stock of any class or series or other rights; (c) to effect any reclassification or recapitalization of common stock; (d) to merge or consolidate with or into any other corporation, or sell, lease, license, or convey all or substantially all of its assets, or to liquidate, dissolve or wind up; or (e) offer holders of registration rights the opportunity to participate in an underwritten public offering of the Company's securities

for cash, then, in connection with each such event, the Company shall give Holder (1) at least 10 days prior written notice of the date on which a record will be taken for such dividend, distribution, or subscription rights (and specifying the date on which the holders of common stock will be entitled thereto) or for determining rights to vote, if any, in respect of the matters referred to in (c) and (d) above; (2) in the case of the matters referred to in (c) and (d) above at least 10 days prior written notice of the date when the same will take place (and specifying the date on which the holders of common stock will be entitled to exchange their common stock for securities or other property deliverable upon the occurrence of such event); and (3) in the case of the matter referred to in (e) above, the same notice as is given to the holders of such registration rights.

3.3 Registration Under Securities Act of 1933, as amended. The Company agrees that the Shares shall be entitled to the registration rights set forth in the Company's Unit Purchase Agreement dated December 31, 2001. The provisions set forth in the Company's Unit Purchase Agreement relating to the above in effect as of the Issue Date may not be amended, modified or waived without the prior written consent of Holder unless such amendment, modification or waiver affects Holder in the same manner as they affect all other shareholders of the same series of shares granted to the Holder .

ARTICLE 4. REPRESENTATIONS, WARRANTIES OF THE HOLDER. The Holder represents and warrants to the Company as follows:

4.1 Purchase for Own Account. Except for transfers to Holder's affiliates, this Warrant and the securities to be acquired upon exercise of this Warrant by the Holder will be acquired for investment for the Holder's account, not as a nominee or agent, and not with a view to the public resale or distribution within the meaning of the 1933 Act, and the Holder has no present intention of selling, granting any participation in, or otherwise distributing the same. If not an individual, the Holder also represents that the Holder has not been formed for the specific purpose of acquiring this Warrant or the Shares.

4.2 Disclosure of Information. The Holder has received or has had full access to all the information it considers necessary or appropriate to make an informed investment decision with respect to the acquisition of this Warrant and its underlying securities. The Holder further has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of this Warrant and its underlying securities and to obtain additional information (to the extent the Company possessed such information or could acquire it without unreasonable effort or expense) necessary to verify any information furnished to the Holder or to which the Holder has access.

4.3 Investment Experience. The Holder understands that the purchase of this Warrant and its underlying securities involves substantial risk. The Holder: (i) has experience as an investor in securities of companies in the development stage and acknowledges that the Holder is able to fend for itself, can bear the economic risk of such Holder's investment in this Warrant and its underlying securities and has such knowledge and experience in financial or business matters that the Holder is capable of evaluating the merits and risks of its investment in this Warrant and its underlying securities and/or (ii) has a preexisting personal or business relationship with the Company and certain of its officers, directors or controlling persons of a nature and duration that enables the Holder to be aware of the character, business acumen and financial circumstances of such persons.

4.4 Accredited Investor Status. The Holder is an "accredited investor" within the meaning of Regulation D promulgated under the 1933 Act.

ARTICLE 5. MISCELLANEOUS.

5.1 Term: This Warrant is exercisable in whole or in part at any time and from time to time on or before the Expiration Date.

5.2 Legends. This Warrant and the Shares shall be imprinted with a legend in substantially the following form:

THIS SECURITY HAS NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED OR UNDER ANY APPLICABLE STATE LAWS, AND MAY NOT BE SOLD, PLEDGED OR OTHERWISE TRANSFERRED WITHOUT AN EFFECTIVE REGISTRATION THERE OF UNDER SUCH ACT AND AN EXEMPTION UNDER APPLICABLE STATE LAW OR PURSUANT TO RULE 144 OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE CORPORATION AND ITS COUNSEL THAT SUCH REGISTRATION IS NOT REQUIRED.

5.3 Compliance with Securities Laws on Transfer. This Warrant and the Shares issuable upon exercise of this Warrant may not be transferred or assigned in whole or in part without compliance with applicable federal and state securities laws by the transferor and the transferee (including, without limitation, the delivery of investment representation letters and legal opinions reasonably satisfactory to the Company, as reasonably requested by the Company). The Company shall not require Holder to provide an opinion of counsel if the transfer is to an affiliate of Holder or if there is no material question as to the availability of current information as referenced in Rule 144(c), Holder represents that it has complied with Rule 144(d) and (e) in reasonable detail, the selling broker represents that it has complied with Rule 144(f), and the Company is provided with a copy of Holder's notice of proposed sale.

5.4 Transfer Procedure. Subject to the provisions of Section 5.3, upon receipt by Holder of the executed Warrant, Holder will transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) to Silicon Valley Bancshares, Holder's parent company. Subject to the provisions of Section 5.3, Holder or Silicon Valley Bancshares (if applicable) may transfer all or part of this Warrant or the Shares issuable upon exercise of this Warrant (or the securities issuable, directly or indirectly, upon conversion of the Shares, if any) to The Silicon Valley Bank Foundation, or to any affiliate of Holder, or to any other transferee, by giving the Company notice of the portion of the Warrant being transferred with the name, address and taxpayer identification number of the transferee and surrendering this Warrant to the Company for reissuance to the transferee(s) (and Holder if applicable). The Company may refuse to transfer this Warrant to any person who directly competes with the Company unless the Company's stock is publicly traded.

5.5 Notices. All notices and other communications from the Company to the Holder, or vice versa, shall be deemed delivered and effective when given personally or mailed by first-class registered or certified mail, postage prepaid, at such address as may have been furnished to the Company or the Holder, as the case may be, in writing by the Company or such holder from time to time. All notices to the Holder shall be addressed as follows:

Silicon Valley Bank
Attn: Treasury Department
3003 Tasman Drive, HG 110
Santa Clara, CA 95054

All notices to the Company shall be addressed as follows:

Tegal Corporation
Attn: Kathy Petrini
2201 South McDowell Blvd.
Petaluma, CA 94954

5.6 Waiver. This Warrant and any term hereof may be changed, waived, discharged or terminated only by an instrument in writing signed by the party against which enforcement of such change, waiver, discharge or termination is sought.

5.7 Attorney's Fees. In the event of any dispute between the parties concerning the terms and provisions of this Warrant, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorney's fees.

5.8 Automatic Conversion upon Expiration. In the event that, upon the Expiration Date, the fair market value of one Share (or other security issuable upon the exercise hereof) as determined in accordance with Section 1.3 above is greater than the Exercise Price in effect on such date, then this Warrant shall automatically be deemed on and as of such date to be converted pursuant to Section 1.2 above as to all Shares (or such other securities) for which it shall not previously have been exercised or converted, and the Company shall promptly deliver a certificate representing the Shares (or such other securities) issued upon such conversion to the Holder.

5.9 Governing Law. This Warrant shall be governed by and construed in accordance with the laws of the State of California, without giving effect to its principles regarding conflicts of law.

"COMPANY"
Tegal Corporation

By: /s/ Michael L. Parodi
Name: Michael L. Parodi
Title: Chairman of the Board,
President or Vice President

By: /s/ Kathy Petrini
Name: Kathy Petrini
Title: Chief Financial Officer, Secretary,
Assistant Treasurer or Assistant Secretary

"HOLDER"

By: /s/ Patrick J. O'Donnell
Name: Patrick J. O'Donnell
Title: Vice President

Dated: June 26, 2002

APPENDIX 1

NOTICE OF EXERCISE

1. Holder elects to purchase _____ shares of the Common/Series _____ Preferred [strike one] Stock of _____ pursuant to the terms of the attached Warrant, and tenders payment of the purchase price of the shares in full.

1. Holder elects to convert the attached Warrant into Shares/cash [strike one] in the manner specified in the Warrant. This conversion is exercised for _____ of the Shares covered by the Warrant.

[Strike paragraph that does not apply.]

2. Please issue a certificate or certificates representing the shares in the name specified below:

Holders Name

(Address)

3. The undersigned represents it is acquiring the shares solely for its own account and not as a nominee for any other party and not with a view toward the resale or distribution except in compliance with applicable securities laws.

HOLDER:

By: _____

Name: _____

Title: _____

(Date)

EMPLOYMENT AGREEMENT

THIS AGREEMENT between Tegal Corporation (“Tegal”) and Tom Mika (“Mika”) is dated and entered into as of this 12th day of August, 2002. Tegal and Mika hereby agree as follows:

RECITALS

Mika and Tegal have decided to enter into an employment agreement and have agreed upon the terms of such employment, which terms are set forth herein.

AGREEMENT

1. Employment. As of the date hereof, Tegal will employ Mika, and Mika will accept employment with Tegal, as its Executive Vice President & Chief Financial Officer, with such duties and responsibilities consistent with such offices.
 2. Other Business. Mika will devote his time, attention and effort to Tegal’s business on a substantially full-time basis. Notwithstanding the foregoing, Mika shall be entitled to serve on the Board of Directors of other corporations, as Mika may elect from time to time, so long as such service is approved by the Board.
 3. Term. This Agreement shall continue until the twelve-month anniversary of the date hereof.
 4. Salary. Mika’s base salary (the “Base Salary”) shall be \$175,000.00 per year. Mika’s salary will be temporarily reduced by 20%, to \$140,000.00, until such time as cost reduction measures are lifted and full pay is reinstated to all Tegal employees. Mika’s salary will be paid in bi-weekly installments at the same intervals as other employees of Tegal and is subject to discretionary increases in accordance with Tegal’s normal review procedures and policies.
 5. Annual Bonus. In addition to his Base Salary, and subject to the achievements of certain goals established in accordance with this Section 5, Mika shall be paid an annual bonus (the “Bonus”) during the term of this Agreement in an amount not less than 35% of Base Salary. Each year the Board shall approve objective, quantifiable, and reasonably attainable annual goals, which shall be reduced to writing and presented by the CEO to the Board on or before the 60th day following the commencement of each fiscal year during the term of this Agreement. The actual Bonus paid shall be evaluated using the Board-approved Bonus plan methodology. The Bonus shall be paid in cash when bonuses are generally paid to other senior executives of Tegal for the relevant fiscal year.
 6. Stock Offering. Upon signing of this Agreement, the Board will grant Mika, as soon as practical, the option to purchase 100,000 shares of Tegal Common Stock with a four-year vesting period, at the prevailing price established by the Board of Directors. This grant is subject to the terms and conditions of the Tegal Stock Option Plan.
 7. Reimbursement of Expenses. Tegal shall reimburse Mika for all reasonable out-of-pocket expenditures incurred by Mika in performing his obligations hereunder, including, without limitation, telephone, fax, and travel-related expenses. All reimbursable expenses shall be reimbursed in accordance with Tegal’s standard practices as in effect from time to time, upon delivery by Mika of an itemized statement, accompanied by appropriate receipts, describing the reimbursable expenses incurred and approved by Mike Parodi. Tegal shall reimburse Mika for all car and related expenses for the term of this Agreement to a maximum of \$600.00 per month.
-

8. Relocation Costs. Tegal will reimburse Mika for up to a maximum of \$15,000.00 in expenses associated with his relocation (above and beyond the move itself), including any broker's fees or closing costs related to the sale of the Maryland property. These expenses will be reimbursed through a receipted expense report, approved by Mike Parodi. The actual move will be handled by corporate movers, arranged by Tegal, and directly billed to the Company. Please contact Diane Walsh when you are ready to begin this process.
9. Benefits. During the term of the Agreement, Mika will be entitled to participate in all fringe benefit programs as shall be provided from time to time to Tegal's employees. Currently, those benefits include medical and dental plans, a flexible spending account, 401(k) savings plan, Employee Qualified Stock Purchase Plan, life insurance, short and long-term disability insurance, sick pay, and an employee assistance program.

According to the current Tegal Vacation Policy, Mika will earn two (2) weeks vacation during the first year of employment with hours accruing monthly. The vacation accrual rate will increase one day per year for your second through fifth years of employment.

10. Termination. Employment of Mika pursuant to this Agreement may be terminated as follows:
 - 10.1 With or without cause, Tegal may terminate the employment of Mika at any time during the term of employment, upon 30 days' prior written notice to Mika.
 - 10.2 Mika may terminate his employment at any time upon 30 days prior written notice to Tegal.
 11. Termination Payments.
 - 11.1 *Termination by Employer.* If Tegal terminates Mika's employment prior to his relocation to the Petaluma Area and without cause, Mika shall continue to receive his then effective Base Salary and benefits, pursuant to Section 9 hereof, for twelve (12) months following the effective date of such termination (the "Salary and Benefits Continuance"). If Tegal terminates Mika's employment after his relocation to the Petaluma Area and without cause, Mika shall continue to receive his then effective Base Salary and benefits for twelve (12) months following the date of such termination and the Salary and Benefits Continuance shall be extended beyond the first twelve (12) months on a month-to-month basis, to a maximum of eighteen (18) months, should Mika remain continuously unemployed following the effective date of termination.
-

11.2 *Termination by Employee.* In the case of voluntary termination of Mika's employment by Mika, except when he terminates his employment because of good reason or breach of the Agreement by Tegal, Mika shall not be entitled to a Salary and Benefits Continuance. If Mika terminates his employment because of good reason, as hereinafter defined, Mika shall be entitled to the Salary and Benefits Continuance. For Purpose of the Agreement, "good reason" shall mean (i) any material breach of this Agreement by Tegal; (ii) the assignment to Mika of any duties, or the substantial reduction of Mika's duties, either of which is inconsistent with Mika's position as Executive Vice President and Chief Financial Officer; or (iii) any change in Mika's reporting relationship which results in his not reporting directly to the President and CEO.

12. Termination; Definitions; Special Provisions.

12.1 *Cause.* Wherever reference is made in this Agreement to Termination being with or without cause, "cause" means cause given by Mika to Tegal and is limited to the following:

- (a) Repeated failure or refusal to carry out the reasonable directions of the President and CEO, which directions are consistent with Mika's duties as set forth herein;
- (b) Conviction for violation of a state or federal criminal law involving the commission of a felony; or
- (c) Any material breach of the Agreement, if not corrected as provided in Section 12.2 below.

12.2 *Breach.* Whenever a breach of this Agreement by either party is relied upon as justification for any action taken by a party pursuant to any provision of this Agreement, before such action is taken, the party asserting the breach shall give the other party at least 90 days' prior written notice of the existence and nature of the breach and the opportunity to correct it during the 90-day period.

13. General Provisions.

13.1 *Severability.* In the event that any provision of this Agreement shall be determined by any court of competent jurisdiction to be unenforceable or otherwise invalid as written, the same shall be enforced and validated to the extent permitted by law. All provisions of this Agreement are severable, and the unenforceability or invalidity of any single provision hereof shall not affect the remaining provisions.

13.2 *Employment.* Nothing in this Agreement shall obligate Tegal to continue to retain Mika as an employee. Mika understands that this means that Tegal has and will continue to have the right to terminate his employment for any reason, with or without cause or prior notice.

13.3 *Entire Agreement.* This Agreement contains the sole and entire agreement and understanding between Tegal and Mika with respect to the subject matter hereof, and supersedes and replaces any prior agreement to the extent any such agreement is inconsistent herewith. This Agreement can be amended, modified, released or changed in whole or in part only by a written agreement executed by Tegal and Mika.

IN WITNESS WHEREOF, the parties have executed and entered into this Agreement on the date set forth above.

TEGAL CORPORATION

Dated: 8/12/02

By: /s/ Michael L. Parodi
Michael L. Parodi
Chairman of the Board,
President or Vice President

Dated 8/12/02

By: /s/ Tom Mika
Tom Mika
Executive Vice President
and Chief Financial Officer

Employment Agreement

This Agreement between Tegal Corporation ("Tegal") and Carole Anne Demachkie ("Demachkie") is dated and entered into as of August 30, 2002. Tegal and Demachkie hereby agree as follows:

1. Employment. As of the date hereof, Tegal will employ Demachkie and Demachkie will accept employment by Tegal, as Vice President and General Manager of Sputtered Films, with such duties and responsibilities consistent with such offices.

2. Term. This Agreement shall continue until the eighteen month anniversary of the date hereof. At the end of the initial eighteen (18) month term, Demachkie will continue on as an "at will employee" with the same terms and benefits granted herein or may renew the agreement if employee and employer mutually agree to do so.

3. Salary. Demachkie's base salary shall be \$120,000.00 annually. Demachkie's salary will be temporarily reduced by 20% to \$96,000.00, until such time as full pay is reinstated in accordance with Section 10.7 of the "Agreement and Plan of Merger", dated as of August 13, 2002. Demachkie's salary will also be subject to discretionary increases in accordance with Tegal's normal review procedures and policies. The base pay will be paid in bi-weekly installments. This position is classified as Exempt.

3. Hire Date. Demachkie's hire date for employment and benefits purposes will be carried-over from Sputtered Films ("SF").

4. Health & Savings Benefits & Vacation. During the term of this Agreement, Demachkie will be entitled to participate in all fringe benefit programs as shall be provided from time to time to Tegal's employees. Currently Tegal's fringe benefit programs include medical and dental plans, flexible spending account, 401(k) savings plan, Employee Qualified Stock Purchase Plan, sick pay, vacation pay, life insurance, short and long term disability insurance, and an employee assistance program.

Tegal reserves the right to modify or eliminate any employee benefit and/or policies as necessary and prudent.

5. Retention Bonus. If Demachkie remains actively employed with Tegal for the first full twelve months of this Agreement, a bonus of \$24,000.00 will be paid within 30 days of the twelve month anniversary of the signing of this Agreement. In the event that Demachkie's employment is terminated by Tegal without cause within the twelve-month period, or in the event that Demachkie shall terminate her employment for reason of a mandated change of location from Santa Barbara, CA, Demachkie shall be entitled to receive the retention bonus on a prorata basis for the time served through the twelve-month period.

7. Stock Options. Tegal will grant Demachkie, subject to Tegal Board approval, an option to purchase 30,000 shares of Tegal Common Stock with a four year vesting period, at the prevailing price established by the Board of Directors. This grant is subject to the terms and conditions of the Tegal Stock Option Plan. Demachkie will receive documentation from our Finance Department once this proposal has received Board confirmation.

8. Maintaining Confidential Information/Property Rights. Demachkie agrees to sign and abide by the enclosed Tegal policies regarding Confidential & Proprietary Information and Intellectual Property/Property Rights.

9. Severability. In the event that any provision of this Agreement shall be determined by any court of competent jurisdiction to be unenforceable or otherwise invalid as written, the same shall be enforced and validated to the extent permitted by law. All provisions of this Agreement are severable, and the unenforceability or invalidity of any single provision hereof shall not affect the remaining provisions.

10. Termination. The term of Demachkie's employment hereunder may be terminated by either party at any time, with or without cause and with or without prior notice. Until the term of Demachkie's employment hereunder is terminated, all other terms and provisions of this contract shall remain in full force and effect.

11. Entire Agreement. This Agreement contains the sole and entire agreement and understanding between Tegal and Demachkie with respect to the subject matter hereof, and supersedes and replaces any prior agreement to the extent any such agreement is inconsistent herewith. This Agreement can be amended, modified, released or changed in whole or in part only by written agreement executed by Tegal and Demachkie.

IN WITNESS WHEREOF, the parties have executed and entered into this Agreement on the date set forth above.

TEGAL CORPORATION

BY: /s/ Michael L Parodi
Michael L. Parodi, CEO and
Chairman of the Board of Directors

/s/ Carole Anne Demachkie
CAROLE ANNE DEMACHKIE

Date: 8/30/02

List of Subsidiaries of Tegal Corporation

<u>Corporate Name</u>	<u>Jurisdiction of Incorporation</u>
Tegal Germany	Germany
Tegal Japan, Inc.	Japan
Tegal Italy Srl	Italy
Sputtered Films, Inc.	California

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-12473, 333-66781, 333-00462, 333-88373 and 333-51294) and Form S-2 (No. 333-83840) of Tegal Corporation of our report dated June 10, 2003 relating to the consolidated financial statements and financial statement schedule, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

San Francisco, California
June 27, 2003