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# UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON D.C. 20549

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FORM 10-K

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

FOR THE FISCAL YEAR ENDED MARCH 31, 1998

[] 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)

<TABLE>

<S>

<C> DELAWARE

68-0370244

(STATE OR OTHER JURISDICTION OF

(I.R.S. EMPLOYER IDENTIFICATION NO.)

INCORPORATION OR ORGANIZATION)

2201 SOUTH MCDOWELL BLVD.

94955-6020

P.O. BOX 6020

(ZIP CODE)

PETALUMA, CALIFORNIA

(ADDRESS OF PRINCIPAL EXECUTIVE OFFICES)

</TABLE>

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 [X] 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. []

The aggregate market value of the voting stock held by non-affiliates of the Registrant, based on the closing sale price of the Common Stock on March 31, 1998, as reported on the Nasdaq National Market was \$37,639,389. As of March 31, 1998, 10,566,038 shares of the Registrant's Common Stock were outstanding.

## DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for Registrant's 1998 Annual Meeting of Stockholders to be held on September 15, 1998, 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.

Total Pages

Index to Exhibits appears on page

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## 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 "-- Additional Risk Factors."

## THE COMPANY

Tegal Corporation ("Tegal" or the "Company") designs, manufactures, markets and services plasma etch systems used in the fabrication of integrated circuits ("ICs") and related devices in the thin film head, small flat panel and printer head applications. Etching constitutes one of the principal IC and related device production process steps and must be performed numerous times in the production of such devices.

The Company was formed in December 1989 to acquire the operations of the former Tegal Corporation, a division of Motorola, Inc. ("Motorola"). The predecessor company was founded in 1972 and acquired by Motorola in 1978.

## SEMICONDUCTOR INDUSTRY BACKGROUND

Growth of Semiconductor and Semiconductor Equipment Industries

The semiconductor industry has experienced significant growth in recent 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 the recently developing markets, such as multimedia, wireless communications and portable and network computing. As a result of this increased demand, semiconductor device manufacturers in recent years have 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 periods 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 such as occurred in late 1995 and continues through the date of this report.

Growth in the semiconductor industry has been driven, in large part, by advances in semiconductor performance at a decreasing cost per function. Increasingly advanced semiconductor processing technologies 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 is becoming an increasingly large part of the total cost in producing advanced ICs. Today, the average state of the art dynamic random access memory (DRAM) fab costs from \$750 million to over \$1.5 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.

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Each step of the manufacturing process for ICs requires specialized manufacturing equipment. Today, plasma etch systems are used for the great majority of etching processes. 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 Etch Market

The Company believes that the dry etch market is becoming increasingly segmented. 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 0.25 micron. Nonetheless, even in the most advanced ICs, a significant number of production steps can be performed with a significantly less demanding (or "non-critical") etch performance. As a result, the Company believes the etch market has also begun to segment according to the required level of etch performance -- critical or non-critical.

## Segmentation of the Etch Market by Film

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. According to VLSI Research Inc., the polysilicon, oxide and metal segments of the dry etch market represented approximately 41%, 43% and 16%, respectively, of the total sales of dry etch systems in 1997. New films are continually being developed in each of these three market segments.

Today, the semiconductor industry is faced with the need to develop and adopt an unprecedented number of new films as conventional materials are running out of the physical properties needed to support continuing shrinks in die size and to provide improved performance. Certain of these films present unique etch production problems. For example, the use of certain new films, such as platinum, currently being used in the development of high-density DRAM devices, 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, corrosion of metal etched wafers within 48 to 72 hours after completion of the etch process has been a chronic problem for

semiconductor manufacturers, 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.

Segmentation of the Etch Market into Critical and Non-Critical Production Steps

Over time, the disparity in relative prices for etch systems capable of etching at non-critical versus critical dimensions has grown significantly. The Company believes 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 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, the Company believes 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, the Company believes that the leading purchasing factor for a semiconductor manufacturer will continue to be, ultimately, the product's etch performance. When non-critical etching is required in the production process, the Company believes 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

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overall etch system costs, while meeting the required etch process performance. The Company believes that a well-implemented "mix and match" purchasing philosophy already adopted by a significant number of semiconductor manufacturers to minimize their expenditures for photolithography equipment, could allow a semiconductor manufacturer to realize significant etch system savings.

## **BUSINESS STRATEGY**

Tegal believes it currently has one of the largest installed bases of etch equipment in the industry and that over the years it has earned a reputation as a supplier of reliable, value-oriented etch systems. The Company's systems are sold throughout the world to both domestic and international customers. In fiscal 1998, approximately 61% of the Company's revenues resulted from international sales. To support its systems sales, the Company maintains local service and support in every major geographic market in which it has an installed base, backed up by a spares logistics system designed to provide delivery within 24 hours anywhere in the world.

The Company's objective is to build on its technical knowledge, experience and reputation in the etch industry, as well as its established sales, marketing and customer service infrastructure, to be a leading supplier of etch systems for both the critical and non-critical segments of the etch market. To meet this objective, the Company is implementing a business strategy incorporating the following elements:

- Use the performance capabilities of the Company's 6500 series systems to penetrate the IC and related device markets for critical etch of specific applications and films where Tegal's products provide unique performance capabilities; and
- Increase sales of its non-critical etch systems by focusing sales and marketing on specialty applications that are addressed by the Company's 900 series non-critical etchers such as thin film heads, small flat panels, printer heads, and the conversion from wet to dry etch technologies.

## **PRODUCTS**

## Critical Etch Products

The Company offers several models of its 6500 series critical etch products

configured to address film types and applications desired by the customer. In 1994, Tegal introduced its 6500 series etch system for sub-0.5 micron polysilicon etching.

In 1995, the Company introduced its emerging films 6500 series etch system for the etching of new high k dielectrics and associated materials used in capacitors at sub-0.5 micron, for high-density DRAM devices and FRAMs. The Company also introduced its metal etch system for sub-0.5 micron critical etching of five layer composite films of aluminum/copper/silicon/titanium alloys in 1995. In 1996, the Company introduced its isolation technology 6500 series etch system aimed at transistor isolation needs caused by increased packing densities used in memory devices employing design rules at or below 0.35 micron. In 1997, the Company introduced its 6500 series etchers to the thin film head market and started etching samples on the leading edge thin film head materials. All 6500 series models offer one and two-chamber configurations. 6500 series systems typically range in price between \$1.8 million and \$2.5 million.

The Company's 6500 series systems have been engineered to provide process flexibility and competitive throughput for wafers up to eight inches, while minimizing cost and space requirements. A dual chamber platform design allows for either parallel or integrated etch processes. The Company seeks 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, noncontact 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

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designed to enable a semiconductor manufacturer to reduce wafer particle contamination to a level which the Company believes exceeds industry standards and to improve etch results and process flexibility.

In addition, the Company's 6500 series systems incorporate a software system which has been designed and tested to minimize the risk of the system operator "crashing" the system or interrupting wafer fabrication and to be 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 archiving and remote, real time diagnostics.

## Non-Critical Etch Products

The Company first introduced its 900 series etch system in 1984 as a critical etch tool of that era. Over the years, the Company has repositioned the 900 series system as a non-critical etch system capable of performing the less-demanding etch steps required in the production of an IC and related devices. In 1994, the Company introduced an eight inch wafer capable 900 series system (capable of etching five inch to eight inch wafers) that was a scaled-up version of its three inch to six inch wafer capable non-critical etch system. The 900 series non-critical etch systems are aimed at pad, zero layer, non-selective nitride, backside, planarization and small flat panel display applications and thin film etch applications used in the manufacture of read-write heads for the disk drive industry. The Company's 900 series systems typically sell for a price of \$350,000 to \$600,000.

The 900 series systems incorporate a single diode process chamber on a non-loadlocked modular platform for reliability and ease of maintenance, which the Company believes results in higher average throughput and lower operating costs. Continued improvements in both reliability and performance have enabled the Company to offer the 900 series systems as a solution for non-critical applications involving line widths of 0.8 micron and greater.

The Company sells its systems to semiconductor and related electronic device component manufacturers throughout the world. Major customers over the last three fiscal years have included the following:

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ABB Semiconductor AG Matsushita SGS-Thomson Microelectronics

Austria Mikro Systeme Micrel Semiconductor Shanghai Belling

InternationalMotorolaSiemensBoschNECSiliconixEMMNorthern TelecomSonyHyundaiRead RiteToshiba

International Rectifier -- Rohm VLSI Technology

Hex Fet America Samsung Winbond

LG Semiconductor Seiko Epson

Linear Technology SEL

</TABLE>

Of these 26 customers, 14 ordered one or more systems from the Company in fiscal 1998. The composition of the Company's top five customers has changed from year to year, but net system sales to the Company's top five customers in each of fiscal 1998, 1997 and 1996 accounted for 61.2%, 46.7% and 48.6%, respectively, of the Company's total net system sales. Motorola, Samsung, Read Rite and Hyundai represented 18.2%, 12.2%, 11.2% and 10.3%, respectively, of the Company's net system sales in fiscal 1998. Winbond, Hyundai and Motorola represented 16.8%, 13.6% and 10.2%, respectively, of the Company's net system sales in fiscal 1997. Sony and Motorola represented 16.3% and 14.9%, respectively, of the Company's net system sales in fiscal 1996. Other than the above customers, no single customer represented more than 10% of the Company's net system sales in fiscal 1998, 1997 or 1996. Although the composition of the group comprising the Company's 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

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competitive conditions in the semiconductor and related device manufacturing industry, may have a material adverse effect on the Company.

## BACKLOG

The Company schedules production of its systems based upon order backlog and customer commitments. The Company includes in its backlog only orders for which written authorizations have been accepted and shipment dates within the next 12 months have been assigned. As of March 31, 1998 and 1997 the Company's order backlog was approximately \$3.4 million and \$8.3 million, respectively. Systems orders are subject to cancellation by the customer, but with substantial penalties other than in the case of orders for evaluation systems or for systems which 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, the Company's backlog at any particular date is not necessarily indicative of actual sales for any succeeding period.

## MARKETING, SALES AND SERVICE

The Company sells its systems worldwide through a network of 14 direct sales representatives and 16 independent sales representatives in 17 sales offices located throughout the world. In the United States, the Company markets its systems through direct sales personnel located in its Petaluma, California headquarters, two regional sales offices and through two independent sales representatives. In addition, the Company provides field service and applications engineers out of three regional offices and its Petaluma headquarters in order to ensure dedicated technical and field process support throughout the United States on short notice.

The Company maintains sales, service, and process support capabilities in Japan, Taiwan, Germany and the United Kingdom service/support operations in Austria, China, France and Italy. In addition to its international direct sales and support organizations, the Company markets its systems through independent sales representatives in China, Israel, Italy, Korea and Singapore.

International sales, which consist of export sales from the United States either directly to the end user or to one of the Company's foreign subsidiaries, accounted for 61.3%, 69.0% and 63.2% of total revenue for fiscal 1998, 1997 and 1996, respectively. The Company generally sells its systems on 30-to-60 day credit terms to its domestic and European customers. Customers in 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 either billed in local currency or U.S. dollars. The Company anticipates that international sales will continue to account for a significant portion of revenue in the foreseeable future. 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 the Company's 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 the Company.

The Company generally warrants its new systems for 12 months and its refurbished systems for six months from shipment. Installation is included in the price of the system. The Company's field process engineers provide customers with call-out repair and maintenance services for a fee. Customers may also enter into repair and maintenance service contracts covering the Company's systems. The Company trains customers' service engineers to perform routine service for a fee and provides telephone consultation services generally free of charge.

The sales cycles for the Company's 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 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

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problems, one or more presentations to the customer (frequently including extensive participation by the Company's 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 strategy approach and prioritization. The Company may, in some instances, need to provide the customer with an evaluation critical etch 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. The Company believes that continued and timely development of new systems and enhancements to existing systems is necessary for it to maintain its competitive position. Accordingly, the Company devotes a significant portion of its personnel and financial resources to research and development programs and seeks to maintain close relationships with its customers in order to be responsive to their system needs.

The Company's research and development encompasses the following areas: plasma technology, process characterization and development, material sciences applicable to the etch environment, system 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. The Company employs multi-discipline teams to facilitate short engineering cycle times and rapid product development.

As of March 31, 1998, the Company had 65 full-time employees dedicated to equipment design engineering, process support and research and development. Research and development expenses for fiscal 1998, 1997 and 1996 were \$11.0 million, \$10.5 million and \$10.0 million, respectively, and represented 26.6%,

18.3% and 16.1% of total revenue, respectively. Such expenditures were used for the development of new systems and processes, continued enhancement and customization of existing systems, etching customer samples in the Company's demonstration labs and providing process engineering support at customer sites.

#### MANUFACTURING

The Company's etch systems are produced at its headquarters in Petaluma, California. The Company's manufacturing activities consist of assembling and testing components and sub-assemblies which are then integrated into finished systems. The Company has structured its production facility to be driven either by orders or by forecasts and has adopted a modular system architecture to increase assembly efficiency and design flexibility. The Company has also implemented "just-in-time" manufacturing techniques in its assembly processes. The Company believes that improvements in manufacturing processes have allowed the Company to reduce significantly its non-critical system manufacturing cycle times. Non-critical system manufacturing cycle times, which typically took nearly three months in 1990, now take approximately 14 days. The Company's cycle times for its critical etch products are currently two to three months. The Company seeks to improve these cycle times as the Company continues to manufacture its 6500 series systems.

The Company procures certain components and sub-assemblies included in its systems from a limited group of suppliers, and occasionally from a single source supplier. In particular, the Company is dependent upon MECS Corporation ("MECS"), a robotic equipment supplier, as the sole source for the robotic arm used in all of its 6500 series systems. The Company currently has no existing supply contract with MECS, and the Company currently purchases all robotic assemblies from MECS on a purchase order basis. Disruption or termination of certain of these sources, including its robotic sub-assembly source, could have an adverse effect on the Company's operations. While the Company believes that alternative sources could be obtained and qualified to supply these components or sub-assemblies, a prolonged inability to obtain such components or sub-assemblies, receipt of defective components or sub-assemblies, as well as difficulties or delays in shifting to alternative sources, could have a material adverse effect on the Company's operating results and could damage customer relationships.

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## **ENVIRONMENTAL MATTERS**

The Company is 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 the manufacturing process. The Company believes that it is currently in compliance in all material respects with these regulations and that it has obtained all necessary environmental permits to conduct its business, which permits generally relate to the discharge of hazardous wastes. Nevertheless, the failure to comply with present or future regulations could result in fines being imposed on the Company, suspension of production, alteration of the Company's manufacturing processes, or cessation of operations. Such regulations could require the Company to acquire expensive remediation equipment or to incur other expenses to comply with environmental regulations. Any failure by the Company to control the use, disposal or storage of, or adequately restrict the discharge of, hazardous substances could subject the Company to future liabilities.

## COMPETITION

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

The Company believes that to be competitive, it 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 the Company's existing and potential competitors, including, among others, Applied Materials, Inc., Lam Research Corporation, Hitachi Ltd. 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 and other production equipment and broader process equipment offerings as well as greater name recognition than the Company. The Company expects its competitors to continue to improve the design and performance of their current systems and processes and to introduce new systems and processes with improved price and performance characteristics. No assurance can be given that the Company will be able to compete successfully in the United States or worldwide.

#### INTELLECTUAL PROPERTY

The Company holds an exclusive license to 25 United States patents, including its dual frequency tri-electrode control system, and 28 corresponding foreign patents covering various aspects of its systems. The Company holds a patent for its etch-rinse-strip-rinse process sequence directly, which process has been designed to address the post-etch corrosion problems faced by semiconductor manufacturers. The Company has also applied for eight additional United States patents and 16 additional foreign patents. The Company believes that the duration of such patents generally exceed the life cycles of the technologies disclosed and claimed therein. The Company believes that although the patents it has exclusively licensed or holds directly will be of value, they will not determine the Company's success, which depends principally upon its engineering, marketing, service and manufacturing skills. However, in the absence of patent protection, the Company may be vulnerable to competitors who attempt to imitate the Company's systems or processes and manufacturing techniques and processes. In addition, other companies and inventors may receive patents that contain claims applicable to the Company's systems and processes. The sale of the Company's systems covered by such patents could require licenses that may not be available on acceptable terms, if at all. The Company also relies on trade secrets and other proprietary technology that it seeks 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 the Company will have adequate remedies for any breach, or that the Company's trade secrets will not otherwise become known to or independently developed by others.

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The original version of the system software for the Company's 6500 series systems was jointly developed by the Company and Realtime Performance, Inc., a third party software vendor. Tegal holds a perpetual, non-exclusive, nonroyalty bearing license to use and enhance this software. The enhanced version of the software currently used on the Company's 6500 series systems has undergone multiple releases of the original software, and such enhancements were developed exclusively by the Company. Neither the software vendor nor any other party has any right to use the Company's current release of the system software.

Although the Company attempts to protect its intellectual property rights through patents, copyrights, trade secrets and other measures, there can be no assurance that the Company will be able to protect its technology adequately or that competitors will not be able to develop similar technology independently. There can be no assurance that any patent applications that the Company may file will be issued or that foreign intellectual property laws will protect the Company's intellectual property rights. There can be no assurance that any patent licensed by or issued to the Company will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide competitive advantages to the Company. Furthermore, there can be no assurance that others will not independently develop similar systems, duplicate the Company's systems or design around the patents licensed by or issued to the Company.

On March 31, 1998, the Company filed a suit in the United States District Court in the Eastern District of Virginia against Tokyo Electron Limited and several of its U.S. subsidiaries (collectively, "TEL") alleging that TEL's current generation of etch equipment infringes certain of the Company's patents. The Company is seeking, among other things, injunctive relief barring TEL from importing or selling such products. No assurance can be given as to the outcome of such legal proceedings or as to the effect of any such outcome on the Company.

the United States District Court for the Northern District of California alleging patent infringement by Austria Mikro Systeme International AG and AMS Austria Mikro Systeme International, Inc. ("AMS") for the sale of integrated circuits manufactured with the Company's dry plasma etch systems. On March 7, 1995, the Company executed an indemnification agreement with AMS, covering certain uses of select equipment sold to AMS. Lucent and AMS have settled the U.S. claim and AMS is now seeking indemnification from the Company through an arbitration proceeding with respect to the U.S. claim. The Company has been informed that Lucent has filed a claim for patent infringement in Germany against AMS for the sale of integrated circuits manufactured with the Company's dry plasma etch systems. AMS has requested indemnification for the German matter. The Company believes that the claims made by AMS are without merit and that the ultimate outcome of such claims is unlikely to have a material adverse effect on the Company. No assurance can be given, however, as to the outcome of such legal proceedings or as to the effect of any such outcome on the Company's results of operations or financial condition.

As is typical in the semiconductor industry, the Company has received notices from time to time from third parties alleging infringement claims. In July 1991, the Company was advised by General Signal Corporation ("GSC") that the Company may need a license under certain U.S. patents owned by GSC relating to "cluster tool" equipment. The Company's 6500 series systems are generally configured with multiple process chambers and, therefore, may be deemed "cluster tool" equipment. A number of companies which were contacted by GSC with regard to licensing these patents formed an ad-hoc committee to investigate the validity of the GSC patents. As a result of such investigation, in November 1992 the committee members, including the Company, jointly notified GSC that they believe the subject patents are invalid and that, accordingly, no license is necessary. In the fall of 1994, GSC filed suit against Applied Materials, a nonmember of the ad-hoc investigative committee, alleging infringement of such patents. To date, GSC has taken no action against the Company in connection with the licensing of these patents. There can be no assurance that GSC will not take any such action in the future or, if any such action is taken, as to the outcome of such action.

Although there are currently no other pending claims or lawsuits by or against the Company regarding possible infringement claims, there can be no assurance that infringement claims by other third parties, or claims for indemnification resulting from infringement claims, will not be asserted in the future or that such

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assertions, if proven to be true, will not materially adversely affect the Company. In the future, additional litigation may be necessary to enforce patents issued or exclusively licensed to the Company, to protect trade secrets or know-how exclusively licensed to or owned by the Company or to defend the Company against claimed infringement of the rights of others and to determine the scope and validity of the proprietary rights of others. Existing litigation and any future litigation could result in substantial cost and diversion of effort by the Company, which by itself could have a material adverse effect on the Company's financial condition and operating results. Further, adverse determinations in such litigation could result in the Company's loss of proprietary rights, subject the Company to significant liabilities to third parties, require the Company to seek licenses from third parties or prevent the Company from manufacturing or selling its systems, any of which could have a material adverse effect on the Company. In addition, there can be no assurance that a license under a third party's intellectual property rights will be available on reasonable terms, if at all.

## **EMPLOYEES**

As of March 31, 1998, the Company had a total of 263 employees consisting of 248 full-time permanent employees and 15 temporary or contract personnel, including 65 in engineering, research and development, 47 in manufacturing, 115 in marketing, sales and customer service and support and 36 in executive and administrative positions. Many of the Company's employees are highly skilled, and the Company's success will depend in part upon its ability to attract, retain and develop such employees. Skilled employees, especially employees with extensive technological backgrounds, are currently in great demand. There can be no assurance that the Company will be able to attract or retain the skilled employees which may be necessary to continue its 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 the Company.

None of the Company's employees are represented by a labor union or covered by a collective bargaining agreement. The Company considers its employee relations to be good.

#### ADDITIONAL RISK FACTORS

Dependence on Recently Introduced Systems for Critical Etch Markets

The Company's 6500 series systems, its generation of critical etch systems, have been designed for sub-0.35 micron critical etch applications in emerging films, polysilicon and metal which the Company believes to be the leading edge of critical etch applications. The Company's 6500 series systems which have been installed are currently being used primarily for research and development activities or in pilot production. For the 6500 series systems to achieve market acceptance, the Company's customers must utilize these systems for volume production. Achieving market acceptance of the Company's 6500 series systems is very important to the Company's future financial results.

Because new product development commitments must be made well in advance of sales, new product decisions must anticipate both the future requirements for etch processes needed by semiconductor manufacturers and the equipment required to address such applications. There can be no assurance that the market for critical etch emerging film, polysilicon or metal etch systems will develop as quickly or to the degree the Company expects. There can be no assurance whether or when the 6500 series systems will achieve market acceptance. In addition, the selling cycles of these new systems are typically lengthy.

In connection with the development and production of the 6500 series, the Company has increased its operating expenses and is likely to invest in increased inventory levels in the future. The failure to complete the commercial introduction of this generation of systems in a timely manner could result in, among other things, an increase in operating expenses and inventory obsolescence without corresponding sales, any of which could have a material adverse effect on the Company's business, financial condition and results of operations.

If the 6500 series does not achieve significant sales or volume production due to a lack of customer acceptance, inability to correct technical, manufacturing or other difficulties which may develop with this

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series, or for any other reason, the Company's business, financial condition and results of operations would be materially adversely affected.

## Impediments to Customer Acceptance

A substantial investment is required to install and integrate capital equipment into a semiconductor production line. The Company believes 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 another vendor's capital equipment has been selected by that customer unless there are compelling reasons to do so, such as significant performance or cost advantages. In addition, certain of the Company's competitors may seek to sell, as an attractively priced package, etch equipment together with other process equipment, such as deposition equipment. Furthermore, some semiconductor manufacturers have already made initial buying decisions for the next generation of sub-0.35 micron etch requirements. Any failure to gain access and achieve sales to new customers will adversely affect the successful commercial acceptance of the Company's 6500 series systems and would have a material adverse effect on the Company.

In addition, the Company believes that its future long term success also depends on its ability to increase sales of its etch systems, particularly its generation 6500 series, to Japanese semiconductor manufacturers. The Japanese semiconductor market represents a substantial percentage of the worldwide market and may pose additional challenges to penetrate successfully. The Company believes that it must invest substantial resources in order to increase its penetration of the Japanese semiconductor market and that, even with such

investments, there can be no assurance that it will be successful in increasing its penetration of this market.

## Fluctuations in Quarterly Operating Results

The Company's 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.

The Company's 900 series etch systems typically sell for prices ranging between \$350,000 and \$600,000, while prices of the Company's 6500 series critical etch systems typically range between \$1.8 million and \$2.5 million. To the extent the Company is successful in selling its 6500 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.

The Company's backlog at the beginning of each quarter does not normally include all systems sales needed to achieve planned revenue for the quarter. Consequently, the Company depends on obtaining orders for shipment within a particular quarter to achieve its revenue objectives for that period. Because the Company builds a portion of its systems according to forecast, the absence of significant backlog for an extended period of time could hinder the Company's ability to plan expense, production and inventory levels, which could materially adversely affect its operating results. Furthermore, a substantial portion of the Company's net revenue has historically been realized near the end of the quarter. Accordingly, the failure to receive anticipated orders or delays in shipments near the end of a quarter, due, for example, to unanticipated customer delays, cancellations or manufacturing difficulties, may cause quarterly net revenue to fall significantly short of the Company's objectives, which could materially adversely affect the Company's operating results.

The timing of new systems and technology announcements and releases by the Company and others may also contribute to fluctuations in quarterly operating results, including cases in which new systems or technology offerings cause customers to defer ordering systems from the Company's existing product lines. The Company's revenue and operating results may also fluctuate due to the timing and mix of systems sold, the volume of service provided and spare parts delivered in a particular quarter and changes in pricing by the Company, its competitors or suppliers. The impact of these and other factors on the Company's revenue and operating results in any future periods are, and will continue to be, difficult for the Company to forecast.

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The need for continued investment in research and development, for capital equipment requirements and for extensive ongoing customer service and support capability worldwide result in significant fixed costs which will be difficult to reduce in the event that the Company does not meet its sales objectives. The Company's expense levels are based, in part, on expectations of future revenue. If revenue in a particular quarter does not meet expectations, fixed operating expenses will adversely affect results of operations. A variety of factors influence the level of revenue in a particular quarter. Those factors include the timing and mix of systems sales, the introduction or announcement of new systems by the Company or the Company's competitors, management decisions to commence or discontinue product lines, the Company's ability to design, introduce and manufacture new systems on a timely basis, the timing of research and development expenditures and expenses attendant to the further development of marketing, process support and service capabilities, specific economic conditions in the semiconductor industry or major global semiconductor markets, general economic conditions and exchange rate fluctuations. The impact of these and other factors on the Company's revenue and operating results in any future periods are, and will continue to be, difficult for the Company to forecast.

## Cyclicality of the Semiconductor Industry

The Company's business depends upon the capital expenditures of semiconductor manufacturers, which in turn depend on the current and anticipated market demand for integrated circuits and systems utilizing 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 systems manufactured by the Company. The semiconductor industry is

currently experiencing such a slowdown. The current and prior semiconductor industry downturns have adversely affected the Company's revenue, gross margins and results of operations. In addition, the need for continued investment in research and development, substantial capital equipment requirements, and extensive ongoing customer service and support requirements worldwide will continue to limit the Company's ability to reduce expenses in response to any such downturn or slowdown. The Company's revenue, gross margin and results of operations may continue to be materially adversely affected by the current slowdown or by future downturns or slowdowns in the rate of capital investment in the semiconductor industry. Moreover, although the semiconductor industry may experience growth that causes significant growth in the semiconductor capital equipment industry, there can be no assurance that such growth can be sustained or that the Company will be positioned to benefit from such growth.

#### Domestic and International Economic Conditions

The Company's business is subject to general economic conditions, both in the United States and abroad. A significant decline in economic conditions in any significant geographic area could have a material adverse effect on the Company. For example, there is currently an economic crisis in Asia, which has led to weak demand for the Company's products in certain Asian economies -- notably Korea and Japan. Furthermore, current price cutting by U.S. personal computer manufacturers are putting pressure on semiconductor manufacturers to contain spending on capital equipment. The Company anticipates that such economic events may continue to adversely affect the Company's results of operations, and a further decline of economic conditions could, in the future, affect demand for the Company's products, which could have a material adverse effect on the Company's sales and operating results.

## Rapid Technological Change; Importance of Timely Product Introduction

The semiconductor manufacturing industry is subject to rapid technological change and new system introductions and enhancements. The Company believes that its future success depends on its ability to continue to enhance its existing systems and their process capabilities, and to develop and manufacture in a timely manner new systems with improved process capabilities. The industry also is subject to fundamental changes in equipment requirements, such as the prior shift from six inch wafer equipment to eight inch wafer equipment and the anticipated shift from eight inch wafer equipment to twelve inch wafer equipment.

The Company must manage system transitions successfully, as introductions of new systems could adversely affect sales of existing systems, including its 6500 series. There can be no assurance that the

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Company will be successful in the introduction and volume manufacture of new systems or that the Company will be able to develop and introduce, in a timely manner, new systems or enhancements to its existing systems and processes which satisfy customer needs or achieve market acceptance. The failure of the Company to accomplish any of the above would adversely affect the Company's business, financial condition and results of operations. In addition, the Company may incur substantial unanticipated costs to ensure product functionality and reliability early in its products' life cycles. If new products have quality or reliability problems, the Company could experience reduced orders, delays in collecting accounts receivable, higher manufacturing costs, and additional service and warranty expenses, any of which could have a material adverse effect on the Company's business, financial condition and operating results.

## Lengthy Sales Cycle

Sales of the Company's 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. The Company often experiences delays in finalizing system sales following initial system qualification while the customer evaluates and receives approvals for the purchase of the Company's systems and completes a new or expanded facility. Due to these and other factors, the Company's systems typically have a lengthy sales cycle (often 12 to 18 months in the case of critical etch systems) during which the Company may expend substantial funds and management effort. Lengthy sales cycles subject the Company to a number of significant risks, including inventory obsolescence and

fluctuations in operating results over which the Company has little or no control.

### Future Capital Needs

The development, manufacture and marketing of etch systems are highly capital intensive. In order to be competitive, the Company must continue to make significant expenditures for, among other things, capital equipment and the manufacture of evaluation and demonstration unit inventory for its 6500 series etch systems. The Company expects that its existing cash balances, anticipated cash flow from operations and funds available under its existing lines of credit will satisfy its financing requirements for the next twelve months. To the extent that such financial resources are insufficient to fund the Company's activities, additional funds will be required. There can be no assurance that additional financing will be available on reasonable terms or at all. To the extent that additional capital is raised through the sale of additional equity or convertible debt securities, the issuance of such securities could result in additional dilution to the Company's stockholders.

## Dependence on Key Employees

The future success of the Company is dependent, in part, on its ability to retain certain key personnel. Many of these key personnel would be difficult to replace. The Company also needs to attract additional skilled personnel in all areas of its business to grow. The competition for these personnel is intense, and 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 the Company's business, financial condition and operating results. There can be no assurance that the Company will be able to retain its existing personnel or attract additional qualified employees in the future.

## **Customer Concentration**

Although the composition of the group comprising the Company's 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 the Company's business, financial condition and results of operations. The Company's ability to increase its sales in the future will depend, in part, upon its ability to obtain orders from new customers as well as the financial condition and success of its existing customers and the general economy of which there can be no assurance.

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## Additional Risks Associated with International Sales and Operations

Sales of the Company's systems in certain countries are billed in local currency, and the Company has two lines of credit denominated in Japanese Yen. The Company generally attempts to offset a portion of its U.S. dollar denominated balance sheet exposures subject to foreign exchange rate remeasurement each period held by its foreign subsidiaries whose books are denominated in currencies other than U.S. dollars by purchasing currency options and forward currency contracts for future delivery. There can be no assurance that the Company's future results of operations will not be adversely affected by foreign currency fluctuations. In addition, the laws of certain countries in which the Company's products are sold may not provide the Company's products and intellectual property rights with the same degree of protection as the laws of the United States.

## Control by Existing Stockholders

The Company's principal stockholders and the Company's executive officers and directors beneficially owned approximately 56.0% of the Company's outstanding shares of common stock as of March 31, 1998. Accordingly, these stockholders are able to elect all of the Company's directors and to determine the outcome of corporate actions requiring stockholder approval, such as mergers and acquisitions, regardless of how other stockholders of the Company may vote. Such a high level of ownership by such persons or entities may have a significant effect in delaying, deferring or preventing a change in control of the Company and may adversely affect the voting and other rights of holders of common stock. In addition to the foregoing, the ability of the Company's Board of Directors to issue preferred stock without further stockholder approval or to

exercise the anti-takeover provisions of its Shareholder Rights Plan in the event of an unsolicited attempt to assume control of the Company could have the effect of delaying, deferring or preventing a change in control of the Company. See "-- Recent Development."

## Volatility of Stock Price

The Company believes that factors such as announcements of developments related to the Company's business, fluctuations in the Company's operating results, sales of the Company's common stock into the market place, failure to meet or changes in analysts' expectations, natural disasters, outbreaks of hostilities, general conditions in the semiconductor industry or the worldwide economy, announcements of technological innovations or new products or enhancements by the Company or its competitors, developments in patents or other intellectual property rights and developments in the Company's relationships with its customers and suppliers could cause the price of the Company's common stock to fluctuate, perhaps 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 the Company's common stock will not experience significant fluctuations in the future, including fluctuations that are unrelated to the Company's performance. See "-- Recent Development."

## Year 2000 Compliance

The Company utilizes a significant number of computer software programs and operating systems across its entire organization. To the extent that the Company's software applications contain source code that is unable to interpret appropriately the upcoming calendar year "2000" and beyond, some level of modification or replacement of such applications will be necessary. The Company is working to identify its applications that are not "Year 2000" compliant and plans to modify or replace such applications, as necessary. Given information known at this time about the Company's systems that are non-compliant, coupled with the Company's ongoing, normal course-of-business efforts to upgrade or replace critical systems, as necessary, management does not expect Year 2000 compliance costs to have any material adverse impact on the Company. Any costs related to the Company's Year 2000 compliance efforts will be expensed as incurred. No assurance can be given, however, that all of the Company's systems will be Year 2000 compliant or that compliance costs or the impact of the Company's failure to achieve substantial Year 2000 compliance will not have a material adverse effect on the Company.

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## RECENT DEVELOPMENT

The Company is a party to an Amended and Restated Information and Registration Rights Agreement dated as of March 31, 1990, as amended (the "Registration Rights Agreement"), with the holders of certain of its securities issued prior the Company's initial public offering in October 1995. One of these holders, Benefit Capital Management Corporation ("Benefit"), as Investment Manager for The Prudential Insurance Company of America, Separate Account No. VCA-GA-5298, has exercised its rights under the Registration Rights Agreement to demand registration of the sale or other transfer ("disposition") of 1,745,813 shares (the "Benefit Shares") of the Company's common stock, pursuant to a registration statement on Form S-3 (the "Registration Statement"). The Registration Statement was filed with the Securities and Exchange Commission on May 8, 1998. As of March 31, 1998, the Benefit Shares represented approximately 16.5% of the issued and outstanding shares of the Company's common stock.

Under the terms of the Registration Rights Agreement, the Company is required to keep the Registration Statement effective until the earlier of 120 days from effectiveness of the Registration Statement or until Benefit has completed the distribution of the Benefit Shares as described in the Registration Statement. There is no limit to the number of times that Benefit may demand registration of the Benefit Shares.

## ITEM 2. PROPERTIES

The Company maintains its headquarters, encompassing its executive office, manufacturing, engineering, research and development operations, in one leased 120,000 square foot facility in Petaluma, California. The Company currently

occupies 90,000 square feet of this building, with the remaining portion sublet or being offered for sublet. The lease expires in March 2004. Other than certain large pieces of capital equipment leased by the Company, the Company owns substantially all of the machinery and equipment used in its facilities. The Company believes that its existing facilities are adequate to meet its requirements for several years.

The Company leases sales, service and process support space in Phoenix, Arizona; Sunnyvale, California; Austin, Texas; Manassas, Virginia; Paris, France; Munich, Germany; Kawasaki, Japan; Catania, Italy; Seoul, Korea and Hsin Chu City, Taiwan. The Company also leases space for administrative offices in Heemstede, The Netherlands.

#### ITEM 3. LEGAL PROCEEDINGS

Except as provided in Item 1. Business -- Intellectual Property, there are no material legal proceedings pending to which the Company is a party.

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### ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matters were submitted to a vote of security holders during the fourth quarter ended March 31, 1998.

## EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information regarding the executive officers and directors of the Company as of March 31, 1998:

<table></table>
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NAME AGE POSITION
<\$>
Robert V. Hery 56 Chairman of the Board and Director
Michael L. Parodi 49 President, Chief Executive Officer and Director
David Curtis
Financial Officer, Secretary and Treasurer
Stephen P. DeOrnellas 43 Vice President, Technology and Corporate Development
and Chief Technical Officer
Diane M. Fennell 53 Vice President, Marketing and Customer Applications
Support
George B. Landreth 43 Vice President, Product Development
James D. McKibben 47 Vice President, Worldwide Sales and Marketing
Mark L. Siegel 59 Vice President, Worldwide Customer Support and
Operations

Robert V. Hery has been a Director of the Company since 1990 and assumed the additional roles of President and Chief Executive Officer of the Company in January 1991 and the Chairman of the Board in March 1995. Effective as of December 17, 1997, Mr. Hery resigned as the President and Chief Executive Officer of the Company. Mr. Hery remains Chairman of the Board of Directors of the Company. From 1987 to 1990, Mr. Hery was President and Chief Executive Officer of AMOT Controls Corporation, an international manufacturer of machinery control components used in explosive and hazardous areas. From 1985 to 1987, Mr. Hery served as Vice President and General Manager of KLA Instruments Corporation ("KLA"), a manufacturer of semiconductor capital equipment, where he started the Wafer Inspection Systems Division. From 1984 to 1985, Mr. Hery was a consultant to high-technology start-ups as Acting Chief Executive Officer and marketing troubleshooter. From 1983 to 1984, he served as Vice President of Marketing and New Business Development, and prior to that, from 1979 to 1983, he served as Vice President of Operations, responsible for product development, manufacturing, quality and cost control functions of MAI Basic Four, a manufacturer of minicomputer equipment. From 1975 to 1979, Mr. Hery was Vice President of Research and Product Development for Dataproducts Corporation, a manufacturer of computer peripherals equipment. From 1965 to 1975, Mr. Hery held various management positions in product development with NCR Corporation and the communications division of Motorola.

Michael L. Parodi joined the Company as Director, President and Chief Executive Officer in December 1997. 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 and the U.S. Display Consortium Boards of Directors.

David Curtis joined the Company in August 1991 as Vice President of Finance and Administration and Chief Financial Officer and from May 1995 until June 1996, he assumed the additional role of Vice President of Operations. Prior to joining the Company, Mr. Curtis served as Chief Financial Officer of AMOT Controls Corporation from 1988 until 1991. Prior to 1991, he held consulting positions with Pittiglio Rabin Todd and

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McGrath, an operations consulting firm specializing in implementing planning and control processes in rapidly growing technology companies and with Arthur Andersen & Co.'s systems consulting division.

Stephen P. DeOrnellas joined the Company 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. 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.

Diane M. Fennell joined the Company in January 1997 as Vice President, Marketing and Customer Applications Support. From 1995 to 1996, Ms. Fennell was Group Manager of Product Management for Unit Instruments responsible for introducing several new products. From 1991 to 1995, she owned and operated Fennell Associates, Inc., a sales representative organization representing multiple lines of semiconductor capital equipment and capital equipment components to the semiconductor and capital equipment industries. From 1987 to 1991, Ms. Fennell held product marketing and sales support management positions with LAM Research Corporation. Prior to 1987, she held several process engineering and lab manager positions with Applied Materials, Inc., Temescal, Signetics Corporation and Texas Instruments.

George B. Landreth joined the Company in November 1992 as Manager of Mechanical Engineering where he was responsible for directing the development of the Company's 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 the Company, 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 the Company in June 1996 as Vice President, Worldwide Sales. From July 1996 until January 1997 he assumed the additional role of Vice President, Marketing and Customer Applications Support. Since September 1997, he has re-assumed the additional role of Vice President, Marketing. Prior to joining the Company, 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.

Mark L. Siegel joined the Company in June 1996 as Vice President,
Operations. In April 1997, he assumed the additional role of Vice President of
Worldwide Customer Support responsible for the Company's field service, spare
parts and refurbished systems businesses. From 1991 to 1996 he was Vice
President, Operations at Megatest Corporation up through its merger with
Teradyne Corporation. From 1989 to 1991 he served as President of SSI, a unit of
General Signal. From 1987 to 1989 he served as Vice President and General
Manager for VLSI Technology, Inc.'s ASIC Memory Division and from 1984 to 1987,
was Vice President and General Manager of Signetics Corporation's Application
Specific Products Division. Prior to 1984, Mr. Siegel held several senior
management positions with, Motorola, Xerox and Univac.

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#### PART II

## ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY AND RELATED SHAREHOLDER MATTERS

Since October 19, 1995, Tegal's common stock has been traded on the Nasdaq National Market System under the symbol TGAL. The following table sets forth the range of high and low sales prices for the Company's common stock for the periods indicated since the Company's initial public offering on October 19, 1995

<TABLE> <CAPTION> HIGH LOW <S> <C> <C> FISCAL YEAR 1996 FISCAL YEAR 1997 FISCAL YEAR 1998 </TABLE>

The approximate number of record holders of the Company's common stock as of March 31, 1998 was 136. Tegal has not paid any cash dividends since its inception and does not anticipate paying cash dividends in the foreseeable future. Further, the Company's domestic lines of credit restrict the declaration and payment of cash dividends.

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## ITEM 6. SELECTED FINANCIAL DATA

<TABLE> <CAPTION>

<S>

## (IN THOUSANDS, EXCEPT PER SHARE DATA) YEAR ENDED MARCH 31,

1998 1997 1996 1995 1994 ------ <----- <----- <------ <-----

## CONSOLIDATED STATEMENTS OF OPERATIONS DATA:

Net income (loss) per share:(1)

Shares used in per share computation:

Basic	10,380	10,124	4,506	502	357				
Diluted	10,380	10,764	4 8,76	0 502	357				
CONSOLIDATED BALANCI	CONSOLIDATED BALANCE SHEET DATA:								
Cash and cash equivalents		\$25,660	\$30,32	3 \$23,28	3 \$ 2,351	\$ 3,462			
Working capital	39,	574 45	,392 4	1,726 1	1,432 11,	,297			
Total assets	. 55,14	6 63,52	24 64,6	33,7	44 27,46	8			
Short-term notes payable to b	anks and	d							
others	285	252	243	8,164	3,947				
Long-term obligations		101	301	356 4,	338 3,74	.9			
Redeemable preferred stock		0	0	0 21,6	95 22,38	2			
Stockholders' equity (deficit).		44,804	50,542	47,626	(11,633)	(12,018)			

  |  |  |  |  |  ||  |  |  |  |  |  |  |
(1) The Company adopted Statement of Accounting Standard No. 128 ("FAS 128"), Earnings Per Share ("EPS"), which was issued in February 1997. FAS 128 requires presentation of both basic and diluted EPS on the income statement. For all periods presented, basic EPS is computed by dividing net income 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 and potential common stock equivalent shares outstanding during the period, except when antidilutive. In computing diluted EPS, the average stock price for the period is used in determining the number of shares assumed to be purchased from the exercise of stock options.

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## 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.

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## RESULTS OF OPERATIONS

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

<TABLE> <CAPTION>

	MARCH 31,			
	1998 1997 1996			
<s></s>	<c> <c> <c></c></c></c>			
Revenue	100.0% 100.0% 100.0%			
Cost of sales	58.8 54.9 53.9			
Gross profit	41.2 45.1 46.1			
Operating expenses:				
Research and development				
Sales and marketing	14.7 10.8 10.7			
General and administrative	16.0 10.5 8.7			
Total operating expenses	57.3 39.6 35.5			
Operating income	(16.1) 5.5 10.6			
Other income (expense), net				
Income before income taxes	(13.4) 7.2 10.0			
Provision for income taxes	. ,			
Net income	(13.4)% 5.5% 9.0% ===== ======			

### YEARS ENDED MARCH 31, 1998, 1997 AND 1996

The Company's revenue is derived from sales of new and refurbished systems, spare parts and non-warranty service. Revenue declined 27.7 percent in fiscal 1998 from fiscal 1997 (to \$41.5 million from \$57.4 million). Revenue declined 7.4 percent in fiscal 1997 from fiscal 1996 (to \$57.4 million from \$62.0 million). The revenue decline in fiscal 1998 as compared to fiscal 1997 and the decline in backlog from \$8.3 million as of March 31, 1997 to \$3.4 million as of March 31, 1998 were principally attributable to a decline in the number of 900 and 6500 series etch systems sold as the semiconductor industry further curtailed its capital equipment expenditures in the face of a continued industry slowdown. The Company believes that sales of its 6500 series systems were adversely affected in its fourth quarter by the Asian financial crisis which became apparent in the fall of 1997. The revenue decline in fiscal 1997 as compared to fiscal 1996 was principally attributable to a decline in the number of 900 series etch systems sold as the semiconductor industry curtailed its capital equipment expenditures for capacity expansion in the face of an industry-wide over-supply of manufacturing capacity. The Company's sales of spare parts also declined in fiscal 1997 over fiscal 1996, which the Company believes was primarily caused by customers depleting their supplies of spare parts during the industry slowdown. Revenues derived from the sale of the Company's 6500 series critical etch systems increased as a result of both increased unit sales and higher average selling prices in fiscal 1997, partially offsetting the declines experienced in 900 series etch systems and spare parts sales. International sales accounted for approximately 61, 69 and 63 percent of total revenue in fiscal 1998, 1997 and 1996, respectively. The Company expects that international sales will continue to account for a significant portion of its revenue.

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## Gross Profit

The Company's gross profit as a percentage of revenue declined to 41.2 percent in fiscal 1998 from 45.1 percent in fiscal 1997 and 46.1 percent in fiscal 1996. The gross margin decline in fiscal 1998 as compared to fiscal 1997 was principally attributable to a decline in gross margins in the service business as the Company invested in additional field service engineering support for its major 6500 series systems customers that was above and beyond contractually required installation and warranty support. The Company believes that such investments are required to support customer's decisions to reorder its 6500 series systems in the future. The one percent decline in gross profit as a percentage of revenue in fiscal 1997 as compared to fiscal 1996 was principally attributable to a change in product mix in which sales of non-critical etch systems and spare parts, which carry higher gross margins, declined and sales of the Company's 6500 series systems, which continue to carry lower start-up related gross margins, increased.

The Company's 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 the Company's new systems are typically lower than those of its more mature products due to the inefficiencies associated with the start-up of manufacturing operations, smaller vendor discounts due to lower order volumes and increased service installation and warranty support. As a result of such factors and an anticipation that the semiconductor industry slowdown will continue for several more quarters, the Company does not expect that its gross margin for fiscal 1999 is likely to improve over the fiscal 1998 level.

## Research and Development

Research and development expenses consist primarily of salaries, prototype material and other costs associated with the Company's research and product development efforts. In absolute dollars, research and development expenses increased to \$11.0 million in fiscal 1998 from \$10.5 million in fiscal 1997 and \$10.0 million in fiscal 1996. Research and development as a percentage of revenue increased to 26.6 percent in fiscal 1998 from 18.3 percent in fiscal 1997 and 16.1 percent in fiscal 1996, as the Company continued to enhance and support its new 6500 series systems in spite of the overall revenue decline in both fiscal years. The absolute dollar increase in fiscal 1998 and 1997 expenses

over fiscal 1996 expenses was attributable to the hiring of additional personnel in the applications engineering customer support area and increased spending on prototype material for product enhancement programs. The Company anticipates that fiscal 1999 research and development expenses in absolute dollars will continue at or increase slightly from fiscal 1998 levels to permit the Company to support new product applications at its new 6500 series customer installations and to further enhance that product line.

## 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 declined to \$6.1 million in fiscal 1998 from \$6.2 million in fiscal 1997 and \$6.6 million in fiscal 1996. As a percentage of revenue, sales and marketing expenses increased to 14.7 percent in fiscal 1998 from 10.8 percent in fiscal 1997 and 1996. The decline in sales and marketing expenses in fiscal 1998 and fiscal 1997 over fiscal 1996 was principally due to declines in systems sales volumes, resulting in lower commission spending and to reduced spending on advertising. The Company expects to maintain or increase slightly its absolute dollar spending on sales and marketing in fiscal 1999 to fund public relations, advertising and sales literature 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 increased to \$6.6 million in fiscal 1998 from \$6.0 million in fiscal 1997 and \$5.4 million in fiscal 1996. As a percentage of revenues, general and administrative expenses increased to 16.0 percent in fiscal 1998 from 10.5 percent in

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fiscal 1997 and 8.7 percent in fiscal 1996. The increase in general and administrative expenses in fiscal 1998 over fiscal 1997 was primarily attributable to the Company incurring additional legal fees and expenses in connection with its patent disputes with AMS and TEL. The increase in general and administrative expenses in fiscal 1997 over fiscal 1996 was attributable to the Company incurring the expenses of being a public company for the full year of fiscal 1997 that only partially impacted fiscal year 1996. In addition, the Company incurred approximately \$0.2 million in the first quarter of fiscal 1997 to complete the business system upgrade begun in late fiscal 1996. The Company anticipates that its general and administrative expenses for fiscal 1999 will be significantly higher than fiscal 1998 spending due primarily to additional legal costs associated with its intellectual property.

## Other Income (Expense), Net

Other income (expense), net, consists principally of interest income, interest expense, and gains and losses on foreign exchange and the sale of fixed assets. The Company recorded net non-operating income of \$1.1 million and \$1.0 million in fiscal 1998 and 1997, respectively. Net non-operating expenses of \$0.4 million were recorded in fiscal 1996. In fiscal 1998 and 1997, net non-operating income was primarily attributable to interest income on outstanding cash balances. In fiscal 1996, such expenses reflected interest expenses incurred on loan balances outstanding until the Company's initial public offering ("IPO") in the middle of fiscal 1996 and foreign exchange losses offset, in part, by interest income on the unused portion of the proceeds from the public offering.

## Provision for Income Taxes

The Company's effective tax rate was 0.0 percent, 25.0 percent and 10.0 percent in fiscal 1998, 1997 and 1996, respectively. Effective tax rates for fiscal 1996 and 1997 were materially lower than the statutory tax rate due to extensive operating loss carryforwards generated in prior years.

## Liquidity and Capital Resources

For fiscal 1998, the Company financed its operations from available cash balances. In fiscal 1997, the Company financed its operations through cash generated from operations. In fiscal 1996, the Company financed its operations

through bank borrowings and net proceeds from its IPO.

Net cash used in operations was \$2.1 million in fiscal 1998, due principally to a net loss of \$3.1 million after adjusting for depreciation, a decline in accrued expenses and an increase in inventories offset, in part, by a decline in accounts receivable. Net cash provided by operations was \$9.1 million in fiscal 1997, due principally to net income in the period net of non-cash depreciation expense totaling \$5.5 million and a decrease in accounts receivable and inventories offset, in part, by a decrease in accounts payable. Operating activities generated approximately \$0.2 million in cash flow for fiscal 1996. Approximately \$5.4 million of net cash was generated from net income plus depreciation, senior term loan accretion, purchase credit redemptions and accounts receivable reserve accruals, which was almost entirely offset by increases in working capital due to the Company's increased sales volume in that year. Included in net cash from operations were purchase credits for preferred stock redemptions of \$0, \$1.6 million and \$1.9 million in fiscal 1998, 1997 and 1996, respectively. Such credits apply to prior financing from Motorola which has been fully repaid.

Net capital expenditures totaled \$1.3 million, \$1.4 million and \$2.1 million in fiscal 1998, 1997 and 1996, respectively. Capital expenditures in all three years were incurred principally for demonstration equipment, leasehold improvements and to acquire design tools, analytical equipment and computers.

Net cash provided by financing activities totaled \$0.1 million for fiscal 1998, due principally to proceeds from the exercise of employee stock options and the Company's stock purchase plan offset, in part, by the repayment of borrowings under the Company's two Japanese promissory note borrowing facilities. Net cash used in financing activities for fiscal 1997 were immaterial. Net cash provided by financing activities totaled \$23.3 million in fiscal 1996, due principally to the sale of the Company's common stock from its IPO that year.

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As of March 31, 1998, the Company had approximately \$25.7 million of cash and cash equivalents. In addition to cash and cash equivalents, the Company's other principal sources of liquidity consisted of unused portions of several bank borrowing facilities. At March 31, 1998, the Company had an aggregate borrowing capacity of \$20.0 million available under a domestic line of credit secured by substantially all of the Company's assets. The facility is available until August 15, 1998. In addition to the foregoing facility, as of March 31, 1998, the Company's Japanese subsidiary had available a 562 million Yen (approximately \$4.2 million at exchange rates prevailing on March 31, 1998) unused portion of two Japanese bank lines of credit totaling 600 million Yen (approximately \$4.5 million at exchange rates prevailing on March 31, 1998) secured by Japanese customer promissory notes held by such subsidiary in advance of payment on customers' accounts receivable.

The Company believes that anticipated cash flow from operations, funds available under its lines of credit and existing cash and cash equivalent balances will be sufficient to meet the Company's cash requirements for the next twelve months.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

Not applicable.

## ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

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

## 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 the Registrant will file a definitive proxy statement pursuant to Regulation 14A (the "Proxy Statement") not 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 the Company's directors required by this Item is incorporated by reference to the Company's Proxy Statement under the caption "Election of Directors."

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The information required by this Item relating to the Company's 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 the Company's 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 the Company's Proxy Statement under the captions "Principal Stockholders" and "Ownership of Stock by Management."

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

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

## PART IV

## ITEM 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

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

See Index to Consolidated Financial Statements on page 23 of this Form 10-K.

(2) Financial Statement Schedules

The following consolidated financial statement schedule is included herein:

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

</TABLE>

The following exhibits are referenced or included in this report:

<TABLE>
<CAPTION>
EXHIBIT DESCRIPTION
------

<S> <C>

- 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 Information and Registration Rights Agreement between the Registrant and the investors listed on Schedule A thereto dated December 19, 1989, as amended to date
- \*10.1 Amended and Restated Equity Incentive Plan

</TABLE>

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<TABLE> <CAPTION> EXHIBIT

DESCRIPTION

<S> <C>

\*10.2 1990 Stock Option Plan

- \*10.4 Employee Qualified Stock Purchase Plan
- \*10.5 Stock Option Plan for Outside Directors
- \*10.6 Amended and Restated Agreement of Purchase and Sale between the Registrant, Nazem & Company III, L.P. and Motorola, Inc. dated December 18, 1989
- \*10.7 Restructuring Agreement between the Registrant and Motorola, Inc. Dated October 31, 1991
- \*10.8 Conversion Agreement between the Registrant and Motorola, Inc. dated August 31, 1994 and amendment thereto dated August 8, 1995
- 10.10 Employment Agreement between the Registrant and Stephen P. DeOrnellas dated December 16, 1997
- \*10.11 Lease dated August 15, 1986, as amended, between the Registrant and South McDowell Investments
- \*10.12 Technology License Agreement between the Registrant and Motorola, Inc. dated December 19, 1989
- 10.14 Security and Loan Agreement between the Registrant, Imperial Bank and Sanwa Bank dated as of August 15, 1997
- \*10.15 Supplemental Source Code License Agreement with the Registrant and Realtime Performance, Inc. dated as of November 1, 1991
- \*10.16 Incentive Stock Option Agreement between the Registrant and Robert V. Hery dated as of September 28, 1993
- 10.18 Employment Agreement between Registrant and Michael L. Parodi dated as of December 17, 1997
- \*21 List of Subsidiaries of the Registrant
- 23.1 Consent of Independent Accountants

- 23.2 Consent of Independent Auditors
- 24.1 Power of Attorney (included on page 42 of this Report)
- 27.1 Financial Data Schedule for the year ended March 31, 1998
- 27.2 Financial Data Schedule Six Months Ended September 30, 1997
- 27.3 Financial Data Schedule Three Months Ended June 31, 1997
- 27.4 Financial Data Schedule Year Ended March 31, 1997
- 27.5 Financial Data Schedule Nine Months Ended December 31, 1996
- 27.6 Financial Data Schedule Six Months Ended September 30, 1996
- 27.7 Financial Data Schedule Three Months Ended June 30, 1996
- 27.8 Financial Data Schedule Year Ended March 31, 1996

</TABLE>

## (b) Reports on Form 8-K.

No reports on Form 8-K were filed during the Company's fourth quarter ended March 31, 1998. On May 8, 1998, the Company filed a Form 8-K announcing the filing of a registration statement on Form S-3 to register shares of the Company's Common Stock beneficially owned by a stockholder of the Company. The selling stockholder exercised its demand registration rights pursuant to a certain registration rights agreement with the Company.

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## TEGAL CORPORATION

## CONSOLIDATED BALANCE SHEETS

(IN THOUSANDS, EXCEPT SHARE DATA)

<TABLE> <CAPTION> MARCH 31, <S><C> <C> **ASSETS** Current assets: Accounts receivable, less allowance for doubtful accounts 7,482 12,322 of \$542 and \$764..... 2,274 -----\$55,146 \$63,524 LIABILITIES AND STOCKHOLDERS' EQUITY Current liabilities: Notes payable...... \$ 285 \$ 252 Accrued expenses and other current liabilities............... 7,265 8,987 Total current liabilities...... 10,241 12,681 Long term portion of capital lease obligations............... 101 301 -----Commitments and contingencies Stockholders' equity:

Preferred stock; \$0.01 par value; 5,000,000 shares authorized.....

<sup>\*</sup> 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.

authorized; 10,566,0	par value; 35,000,000 shares 106 103 038 and 10,279,721 shares issued and
outstandingAdditional paid-in car	pital
Cumulative translation	n adjustment (529) 23
Accumulated deficit	(9,950) (4,405)
Total stockholde	rs' equity
	\$55,146 \$63,524

 ====== ====== || See accompanying | ng notes to consolidated financial statements. 26 |
TEG	GAL CORPORATION
CONSOL	IDATED STATEMENTS OF OPERATIONS
(IN THOU	USANDS, EXCEPT PER SHARE DATA)
	YEAR ENDED MARCH 31,
	1998 1997 1996
	<
Revenue	\$41,472 \$57,423 \$62,046
Cost of sales	
Gross profit	
Sales and marketing General and administr	ment
	e (6,673) 3,180 6,572 ss), net 1,128 1,000 (386)
	acome taxes
Net income (loss	s)\$(5,545) \$ 3,140 \$ 5,566
Net income (loss) per s	hare:
	\$ (.54) \$ .31 \$ 1.14
Shares used in per shar	
Basic	
Diluted	
See accompanying	ng notes to consolidated financial statements. 27
TEG	GAL CORPORATION
CONSOLIDAT	TED STATEMENTS OF STOCKHOLDERS EQUITY (DEFICIT)
(IN THO	OUSANDS, EXCEPT SHARE DATA)
	COMMON STOCK ADDITIONAL CUMULATIVE TOTAL
Si	PAID-IN TRANSLATION ACCUMULATED STOCKHOLDERS' HARES AMOUNT CAPITAL ADJUSTMENTS DEFICIT EQUITY (DEFICIT)
~~<~~	
\u0-	

Balances at March 31, 1995 Common stock issued under option and stock purchase	650,780	\$ 7	\$ 123	\$ 939	\$(12,702)	\$(11,633)
plans 358,245	3	124			127	
Net proceeds from IPO 3,			34,153		34,1	85
Contribution of paid-in capital through conversion of Motorola			, and the second		Ź	
preferred stock		891			891	
Conversion of redeemable						
preferred stock to common						
stock at IPO 5,876,0	)79 59	19,1	.64		19,223	
Cumulative translation						
adjustment			(324)		(324)	
Accretion of Series B						
preferred stock				(409)	(409)	
Net income				5,566	5,566	
Balances at March 31, 1996 1 Common stock issued under option and stock purchase	0,064,404	 4 101	54,45	5 615	(7,545)	47,626
plans 215,317	2	366			368	
Cumulative translation						
adjustment			(592)		(592)	
Net income				3,140	3,140	
Balances at March 31, 1997 1 Common stock issued under option and stock purchase	.0,279,72	1 103	54,82	1 23	(4,405)	50,542
plans 286,317	3	356			359	
Cumulative translation			/			
adjustment			(552)		(552)	
Net income (loss)				(5,545)	(5,545)	
Balances at March 31, 1998 1	0,566,038		6 \$55,1	77 \$(529	\$ (9,950)	\$ 44,804

  | === |  |  |  |  |See accompanying notes to consolidated financial statements. 28

## **TEGAL CORPORATION**

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(IN THOUSANDS)

<TABLE> <CAPTION>

<S>

## YEAR ENDED MARCH 31,

1997 1996 1998 <C> <C> <C>

Cash flows from operating activities:

Adjustments to reconcile net income to net cash

provided by (used in) operating activities:

Deferred tax asset..... --(638) (900)

Accretion of senior term loan..... --303

Purchase credit for preferred stock redemptions..... (1,587) (1,857)

Allowance for doubtful accounts and sales return

(22) allowances...... (222) 311

Changes in operating assets and liabilities:

Accounts receivable...... 5,062 3,559 (1,540)

Inventory...... (1,952) 3,967 (6,509)

Prepaid expenses and other current assets....... (171) 435

Accounts payable and other current liabilities.... (2,343) (2,467) 3,474

Net cash provided by (used in) operating

activities.....(2,872) 9,069

Cash flows used in investing activities for the purchases of property and equipment
Cash flows from financing activities:  Proceeds from issuance of common stock
Net cash provided by (used in) financing
activities
Effect of exchange rates on cash and cash equivalents (552) (593) (324)
Net increase (decrease) in cash and cash equivalents (4,663) 7,040 20,932 Cash and cash equivalents at beginning of year 30,323 23,283 2,351
Cash and cash equivalents at end of year
Supplemental disclosures of cash paid during the year: Interest
Income taxes\$ \$1,727 \$ 45
Supplemental disclosure of noncash investing and financing activities:
Accretion of Series B preferred stock \$ \$ 409
Transfer of demo lab equipment from inventory to fixed assets\$ 682 \$ 127 \$ 2,230

See accompanying notes to consolidated financial statements.

## TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
MARCH 31, 1998, 1997, AND 1996
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

## NOTE 1. DESCRIPTION OF BUSINESS AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## DESCRIPTION OF BUSINESS

Tegal Corporation (the "Company") designs, manufactures, markets, and services plasma etch systems used in the fabrication of integrated circuits ("ICs") and related devices in the thin film head, small flat panel and printer head applications. Etching constitutes one of the principal IC and related device production process steps and must be performed numerous times in the production of such devices.

## BASIS OF PRESENTATION

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. Gains and losses from foreign currency translation are included as a separate component of other income (expense).

These financial statements have been prepared on the accrual basis of accounting in accordance with generally accepted accounting principles. This 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.

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, 1998 and 1997, all of the Company's investments are classified as cash equivalents on the balance sheet. The investment portfolio at March 31, 1998 and 1997 is comprised of money market funds. At March 31, 1998 and 1997, the fair value of the Company's investments approximated cost.

#### FAIR VALUE OF FINANCIAL INSTRUMENTS

The carrying amount of the Company's financial instruments, including accounts receivable, approximates fair value.

#### CONCENTRATION OF CREDIT RISK

Financial instruments that potentially subject the Company to significant concentration 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 the Far East. 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, 1998, two customers accounted for approximately 24% and 16% of the accounts receivable balance. As of March 31, 1997, two customers accounted for approximately 22% and 14% of the accounts receivable balance.

## TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
MARCH 31, 1998, 1997, AND 1996
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

## INVENTORY

Inventory is stated at the lower of cost or market, with cost being determined under the first-in, first-out method.

## 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.

## FOREIGN EXCHANGE HEDGING

At March 31, 1998, the Company had forward exchange contracts maturing at various dates throughout fiscal 1999 to exchange 62,000 Yen into \$473 and 14,000 New Taiwanese Dollars (NTD) into \$425 which also represented the fair value of these instruments at March 31, 1998. The Company uses hedge accounting to account for these contracts as they are a hedge against currency exposures related to firm sales commitments. The counterparties to these contracts consist of U.S. financial institutions.

The Company enters into foreign exchange options to hedge partially net accounts receivable or payable U.S. dollar positions on the books of its subsidiaries which are subject to periodic remeasurement. Foreign exchange options permit, but do not require, the Company to exchange currencies at a future date with another party at a contracted exchange rate. The expense of the premiums paid for such options is amortized on a straight-line basis over the term of the option (generally two to three months in duration) as a foreign currency expense. Gains on the options that offset any losses on the underlying balance sheet exposures are recognized as a foreign exchange gain over the term of the options. To date, foreign currency gains on foreign exchange options have been immaterial, and the only expenses incurred have been the premium cost of the options. At March 31, 1998, the Company had no foreign exchange options outstanding.

Product revenue is recognized generally upon shipment, except in Japan where revenue is generally recognized upon delivery. A provision for installation costs and estimated future warranty costs is recorded at the time revenue is recognized. Service revenue is recognized on a monthly basis as billed, 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.

#### EARNINGS PER SHARE

The Company adopted Statement of Accounting Standard No. 128 ("FAS 128"), Earnings Per Share ("EPS"), which was issued in February 1997. FAS 128 requires presentation of both basic and diluted EPS on the income statement. For all periods presented, basic EPS is computed by dividing net income 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 and potential common stock equivalent shares outstanding during the period, except when antidilutive. In computing diluted EPS, the average stock price for the period is used in determining the number of shares assumed to be purchased from the exercise of stock options.

#### 31 TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
MARCH 31, 1998, 1997, AND 1996
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

## 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. 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. The Company provides additional pro forma disclosures as required under Statement of Financial Accounting Standard No. 123 (SFAS 123), "Accounting for Stock-Based Compensation" (see Note 7).

## NOTE 2. BALANCE SHEET AND INCOME STATEMENT DETAIL

Inventory consisted of:

<table> <caption></caption></table>	MARCH 31,
	1998 1997
<s> Raw materials  Work in process  Finished goods and spares</s>	
	\$14,424 \$13,154

	Property and equipment consists	ed of:
	MARCH 31,	
	1998 1997	
~~Machinery and equipment~~	```  ```	
 Less accumulated depreciation and amortization....... (9,042) (6,786) \$4,982 \$5,298 \_\_\_\_ </TABLE> Machinery and equipment at March 31, 1998 and 1997 includes approximately \$1,388 and \$1,370, respectively, of assets under leases that have been capitalized. Accumulated depreciation for such equipment approximated \$1,045 and \$700, respectively. A summary of accrued expenses and other current liabilities follows: <TABLE> <CAPTION> MARCH 31, 1998 1997 <C> <C> <S>Accrued compensation costs...... \$ 1,591 \$ 1,554 \$ 7,265 \$ 8,987 </TABLE> **TEGAL CORPORATION** NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) MARCH 31, 1998, 1997, AND 1996 (ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED) Other income (expenses), net, consisted of the following: <TABLE> <CAPTION> YEAR ENDED MARCH 31, 1998 1997 1996 -----<S> <C> <C> <C> Foreign currency exchange gain (loss), net....... (138) (186) (383) \$1,128 \$1,000 \$(386) </TABLE> NOTE 3. EARNINGS PER SHARE FAS 128 requires the reconciliation of the numerators and the denominators of the basic and diluted per share computation as follows: <TABLE> <CAPTION> 1998 1997 PER SHARE PER SHARE PER SHARE INCOME SHARES AMOUNT INCOME SHARES AMOUNT INCOME SHARES AMOUNT <S> Net income (loss):...... \$(5,545) \$3,140 \$5,566 Less accretion of Series B Preferred Stock...... (409)Basic EPS:

Net income available to

14,024 12,084

\$(5,545) 10,364 \$(0.54) \$3,140 10,124 \$0.31 \$5,157 4,506 \$1.14

Effects of dilutive

securities:

Stock Options..... Preferred Stock..... 640 409 3,428

826

Diluted EPS:

\_\_\_\_\_

Net income (loss)....... \$(5,545) 10,364 \$(0.54) \$3,140 10,764 \$0.29 \$5,566 8,760 \$0.64 ..... ===== ..... ===== .....

</TABLE>

Options to purchase 2,036,000 shares of common stock were outstanding at March 31, 1998, but were not included in the computation of diluted EPS as the Company was in a loss situation and to do so would have been antidilutive. Options to purchase 53,000 and 310,000 were outstanding at March 31, 1997 and 1996, respectively, but were not included in the computation of diluted EPS as their average exercise price was higher than the average market price of the stock.

#### NOTE 4. NOTES PAYABLE TO BANKS AND OTHERS

The Company has a line of credit totaling \$20,000 with two U.S. banks. The line bears interest at prime (8.50 percent as of March 31, 1998), is secured by a blanket security in all of the Company's assets, and is available until August 15, 1998. No amount was outstanding on this line of credit at March 31, 1998 and 1997. 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 financial ratios and covenants. The Company was in compliance with such covenants as of March 31, 1998 and 1997.

The Company's Japanese subsidiary has two lines of credit available for 300,000 Yen each (approximately \$4,504 at exchange rates prevailing as of March 31, 1998), bearing interest at .0125 percent, in excess of Japanese prime (1.625 percent as of March 31, 1998). Both lines of credit are available until November

TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) MARCH 31, 1998, 1997, AND 1996 (ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

1998, and are secured by Japanese customer promissory notes provided in advance of payment. Outstanding balances on these lines in U.S. dollars as of March 31, 1998 and 1997, were \$285 and \$252, respectively.

## NOTE 5. INCOME TAXES

The components of income before income taxes are as follows:

<TABLE> <CAPTION>

YEAR ENDED MARCH 31,

1998 1997 1996 <C> <C> <C> 

\$(5,545) \$4,180 \$6,186

</TABLE>

<S>

The components of the provision for income taxes are as follows:

<TABLE>

<CAPTION>

YEAR ENDED MARCH 31,

	1998 1997 1996	
<s> Current:</s>	<c> <c> <c> <c></c></c></c></c>	100
U.S. federal State and local Foreign	432 200	100
	(939) 1,678 1,520	
Deferred:		
U.S. federal State and local		))
	939 (638) (900)	
Total	\$ \$1,040 \$ 620	

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

<TABLE> <CAPTION>

## 

## 34 TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
MARCH 31, 1998, 1997, AND 1996
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

The components of deferred taxes are as follows:

<TABLE> <CAPTION>

<caption></caption>	
	MARCH 31,
	1998 1997
<\$>	<c> <c></c></c>
Revenue recognized for tax and det	ferred for book \$ 378 \$ 556
Non-deductible accruals and reserv	res 2,702 2,910
Foreign net operating loss carryfore	ward 968 1,601
Credits	1,550
Uniform cap adjustment	130 330
Other	
	5,702 5,480
Valuation allowance	(5,463) (4,302)
Net deferred tax asset	\$ 239 \$ 1,178

The Company has recorded net deferred tax assets of approximately \$239 and \$1,178 at March 31, 1998 and 1997, respectively. Management's evaluation of the recoverability of the Company's deferred tax is based upon the Company's ability to carry back temporary differences for future tax deductions against previously taxed income.

At March 31, 1998, the Company has operating loss carryforwards in foreign jurisdictions amounting to approximately \$2,400, which begin to expire on March 31, 1999.

#### NOTE 6. LEASE COMMITMENTS

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:

<TABLE> <CAPTION>

#### YEAR ENDED MARCH 31,

## CAPITAL LEASES OPERATING LEASES

<s></s>	<c></c>	<c></c>	
1999	\$223	\$1,846	
2000	66	1,799	
2001	32	1,718	
2002	3	34	
2003			
Total minimum lease payments		\$324	\$5,397
Less amount representing interes	est	(31)	
	\$293		

</TABLE>

The above schedule of minimum payments excludes minimum annual sublease rentals payable to the Company totaling \$391 through January 31, 2001, under operating subleases. In addition, most leases provide for the Company to pay real estate taxes and other maintenance expenses. Rent expense for operating leases was \$1,949, \$2,406, and \$2,613 during the years ended March 31, 1998, 1997, and 1996, respectively.

#### 35 TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
MARCH 31, 1998, 1997, AND 1996
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

## NOTE 7. 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 may be granted to management and consultants. The exercise price of options and the purchase price of stock purchase rights generally is 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 10 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. As of March 31, 1998, 612,303 shares were available for issuance under the Equity Incentive Plan.

1990 Stock Option Plan

Pursuant to the terms of the Company's 1990 Stock Option Plan ("Option Plan"), options and stock purchase rights to purchase 550,000 shares of common stock may be granted to employees of the Company or its affiliates. Incentive stock options are exercisable for a period of up to 10 years from the date of grant of the option and nonqualified stock options are exercisable for a period of up to 10 years and 2 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. As of March 31, 1998, 56,788 shares were available for issuance under the Option Plan.

## Directors Stock Option Plan

Pursuant to the terms of the Stock Option Plan for Outside Directors ("Directors Plan"), up to 300,000 shares of common stock may be granted to Directors. Under the Directors Plan, each Outside Director who was a member of the Board at the date of the Company's initial public offering ("IPO") received 30,000 shares, of which 10,000 shares vested immediately and the right to purchase the remaining 20,000 shares vesting over the next three years in equal annual installments on the anniversary of such effective date. Any shares granted subsequent to the date of the IPO will vest annually over four years, contingent upon continued service as a director. As of March 31, 1998, 180,000 shares were available for issuance under the Directors Plan.

The following table summarizes the Company's stock option activity for the three plans described above and weighted average exercise price within each transaction type for each of the years ended March 31, 1998, 1997, and 1996 (number of shares in thousands):

<TABLE>

<caption></caption>						
	1998	199	97	1996		
	SHARES	S PRICE	SHARES	S PRICE	SHARES	PRICE
<s></s>	<c></c>	<c> &lt;</c>	<c> &lt;(</c>	C> <c></c>	<c></c>	
Options outstanding at beg	ginning of					
year	1,413	\$4.36 1,	163 \$4.	90 996	\$0.40	
Options canceled	(	(101) 6.07	(183)	9.52 (6	55) 0.27	
Options granted	9	942 6.01	595	5.50 590	0 10.25	
Options exercised	(	(219) 0.47	(162)	0.33 (3	58) 0.36	
Options outstanding March	h 31	2,036	\$5.46	,413 \$4	36 1,163	\$4.90
			=====	=========	==== ===	===

  |  |  |  |  |  |36 TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
MARCH 31, 1998, 1997, AND 1996
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

At March 31, 1998, the repurchase right associated with 542,534 of the options outstanding had elapsed.

Significant option groups outstanding at March 31, 1998, and related weighted average exercise price of options granted for which the Company no longer has the right to repurchase and contractual life information are as follows (share information in thousands):

<TABLE> <CAPTION>

OPTIONS NO LONGER
SHARES SUBJECT TO
OUTSTANDING REPURCHASE RIGHTS
----- REMAINING

EXERCISE PRICE RANGE # PRICE # PRICE LIFE (YEARS)

\$4.25 - \$5.50	1,10	04 4.7	7 152	5.23	9.67
\$6.13 - \$6.25	12	9 6.20	25	6.25	11.43
\$6.88 - \$8.75	50	7 8.14	4 92	6.97	11.42
\$12.00	67	12.00	53	12.00	8.13

  |  |  |  |  |As described in Note 1, the Company has adopted the disclosure provisions as required by SFAS 123. Accordingly, no compensation cost has been recognized in the Company's statements of operations as all options were granted at an exercise price equal to the market value of the Company's common stock at the date of grant.

As required by SFAS 123 for pro forma disclosure purposes only, the Company has calculated the estimated grant date fair value 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, which significantly differ from the Company's stock option awards. 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 weighted average assumptions are included in the estimated grant date fair value calculations for the Company's stock option awards:

<table></table>			
<caption></caption>			
	1998	1997	
<s></s>	<c></c>	<c></c>	>
Expected life (years)	'	4 years	4 years
Risk-free interest rate		6.16%	6.07%
Volatility	60	)% (	50%
Dividend yield		0%	0%

  |  |  |The weighted average estimated grant date fair value, as defined by SFAS 123, for options granted during 1998 and 1997 was \$2.66 and \$3.67 per option, respectively. The estimated fair value, as defined by SFAS 123, attributable to options canceled and reissued during 1998 and 1997 were \$0 and \$1.53 per option, respectively. In addition, included in pro forma net income for fiscal year 1998 and 1997 is an adjustment of \$81 and \$104, respectively, related to the cancellation of vested options not exercised due to employee terminations.

## Stock Purchase Plan

Since 1996, the Company has offered an Employee Qualified Stock Purchase Plan ("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 twelve month offering period or at the end of that twelve month period. Beginning in 1997, the offering period has been reduced from twelve months to six months. Under the Employee Plan, the Company is authorized to grant options to purchase up to 250,000 shares of common

#### 37 TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
MARCH 31, 1998, 1997, AND 1996
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

stock. 61,371 common stock shares were purchased in fiscal 1998 and 53,633 common shares were purchased in 1997. Shares available for future purchase under the Employee Plan were 134,996 at March 31, 1998.

Compensation cost (included in pro forma net income and net income per share amounts only) for the grant date fair value, as defined by SFAS 123, of the purchase rights granted under the Employee Plan was calculated using the Black-Scholes model. Included in the pro forma net income for fiscal year 1996 is compensation expense related to purchase rights granted during the period December 15, 1995 through March 31, 1996. Fiscal years 1997 and 1998 reflect purchase rights earned for the full fiscal year. The weighted average estimated grant date fair value per share for rights granted under the Employee Plan, as defined by SFAS 123, for stock purchased under the Employee Plan during 1998,

#### Pro Forma Net Income and Net Income Per Share

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 stock purchase plan, the Company's net income and earnings per share would have been reduced to the pro forma amounts below for the years ended March 31, 1998, 1997 and 1996:

<table></table>				
<caption></caption>				
	1998	1997	1996	
<s></s>	<c></c>	<c></c>	<c></c>	
Pro forma net income		\$(6,674)	\$1,865	\$5,155
Pro forma net income (loss) pe	er share:			
Basic	\$ (0.6	4) \$ 0.18	8 \$ 1.14	
Diluted	\$ (0.6	54) \$ 0.1	7 \$ 0.59	

  |  |  |  |The pro forma effect on net income and net income per share takes into consideration pro forma compensation related only to grants made after December 15, 1995. Consequently, the pro forma effect on net income and net income per share for 1998 and 1997 is not necessarily representative of the pro forma effect on net income in future years.

## 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 4% of each covered employee's compensation will be matched by the Company based upon a percentage to be determined annually by the Board of Directors ("Board"). Employees may contribute up to 15% of their compensation, not to exceed a prescribed maximum amount. The Company made contributions to the plan of \$31, \$28, and \$27 in the years ended March 31, 1998, 1997, and 1996, respectively.

## NOTE 8. SHAREHOLDER RIGHTS PLAN

On June 11, 1996, the Board adopted a Preferred Shares Rights Agreement ("Agreement") and pursuant to the 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 acquiror 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.

## 38 TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
MARCH 31, 1998, 1997, AND 1996
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

## NOTE 9. CUSTOMERS AND FOREIGN OPERATIONS

The Company's sales are primarily to domestic and international semiconductor manufacturers. The top five customers accounted for approximately 41%, 46%, and 42% of the Company's total net sales for the years ended March 31, 1998, 1997, and 1996, respectively. Two customers accounted for approximately 16% and 8%, respectively, of net sales for the year ended March 31, 1998, two customers accounted for approximately 17% and 10%, respectively, of net sales for the year ended March 31, 1997, and two customers accounted for 14% and 13%, respectively, of the Company's net sales for the year ended March 31, 1996.

The Company's operations by geographical region were as follows:

<table></table>				
<caption></caption>	VEA	D ENIDE	DMADC	II 21
				п эт,
		1997	1996	
<s> Revenues:</s>	<c></c>	<c></c>	<c></c>	
Sales to unaffiliated customer	rs:			
United States: Customers in United State				
Customers in Asia Europe				
Japan		50 10,9		533
Total external sales	\$	541,472		
Intercompany sales among geo	graphic	areas:		
From United StatesFrom Europe		940	684	562
Consolidation eliminations		(9,99′		36) (19,963)
Net intercompany sales.			\$ \$ ==== =	

				Intercompany sales among basis of intercompany prices e				
		R ENDE	D MARC	Н 31,				
		1997						
<\$>								
Operating income (loss): United States								
EuropeJapan	47  27	78 11 4 687	.5 594 7 1,513	4 3				
Operating income								
		====	=== ==					
		MARC	Н 31,					
	-	1998	1997					
<\$>								
Identifiable assets at year-end:			Ü					
United States Europe								
Japan Consolidation eliminations		4,424	4,215					
Total identifiable assets.	-							
Total identifiable assets.		De		==				
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</TABLE>

## INDEPENDENT ACCOUNTANTS' REPORT

To the Board of Directors and Stockholders of Tegal Corporation

In our opinion, the consolidated financial statements listed in the index appearing under item 14(a)(1) on page 24 present fairly, in all material respects, the financial position of Tegal Corporation and its subsidiaries at March 31, 1998 and 1997 and the results of its operations and cash flows for

each of the two years in the period ended March 31, 1998 in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audits of these statements in accordance with generally accepted auditing standards 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 the opinion expressed above.

The consolidated financial statements of Tegal Corporation for the year ended March 31, 1996 included herein, were audited by other independent accountants whose report dated April 23, 1996 expresses an unqualified opinion on those statements.

/s/ Price Waterhouse LLP

San Jose, California April 24, 1998

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## INDEPENDENT AUDITORS' REPORT

The Board of Directors Tegal Corporation:

We have audited the accompanying consolidated statements of operations, stockholders' equity (deficit) and cash flows of Tegal Corporation and subsidiaries for the year ended March 31, 1996. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with generally accepted auditing standards. Those standards 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. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the results of operations and cash flows of Tegal Corporation and subsidiaries for the year ended March 31, 1996, in conformity with generally accepted accounting principles.

/s/ KPMG Peat Marwick LLP

Mountain View, California April 23, 1996

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## **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 President & Chief Executive Officer

Dated: May 18, 1998

## POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Michael L. Parodi and David Curtis, jointly and severally, his attorneys-in-fact, each with the powers of substitution, for him 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.

<table< th=""><th></th><th></th><th></th><th></th></table<>				
C111 11	SIGNATURE		TITLE	DATE
<c></c>	 <s< td=""><td>&gt;</td><td><c></c></td><td></td></s<>	>	<c></c>	
	/s/ ROBERT V. HERY			tor May 18, 1998
	Robert V. Hery		-	
	/s/ MICHAEL L. PARODI		President, Chief E	xecutive May 18, 1998
	Michael L. Parodi	Executive Officer)		
	/s/ DAVID CURTIS		Chief Financial Offic	er May 18, 1998
	David Curtis		- (Fillicipai Fillanciai	Officer)
	/s/ WILLIAM F. O'SHEA		Corporate Controll	er (Principal May 18, 1998
	William F. O'Shea		- Accounting Officer	)
	/s/ FRED NAZEM			May 18, 1998
	Fred Nazem		-	
	/s/ JEFFREY KRAUSS			May 18, 1998
	Jeffrey Krauss		-	
	/s/ THOMAS R. MIKA			May 18, 1998
	Thomas R. Mika		-	
	/s/ EDWARD A. DOHRING		Director	May 18, 1998
<td>Edward A. Dohring E&gt;</td> <td></td> <td>-</td> <td></td>	Edward A. Dohring E>		-	
	42			

SCHEDULE II

# TEGAL CORPORATION

VALUATION AND QUALIFYING ACCOUNTS YEARS ENDED MARCH 31, 1996, 1997, 1998 (IN THOUSANDS)

<TABLE> <CAPTION> BALANCE AT CHARGED TO CHARGED **BALANCE** BEGINNING COSTS AND TO OTHER AT END DESCRIPTION OF YEAR EXPENSES ACCOUNTS DEDUCTIONS OF YEAR <S> <C> <C> <C> <C> <C> Year ended March 31, 1996: Product warranty..... \$1,155 \$3,634 \$ (4) \$(2,199) \$2,586

Doubtful accounts	261 185	262	(94)	` /	
Cash discounts	183	298 87	(78)	(229) (29)	9 83
Year ended March 31, 1997:	2)	07	(70)	(2))	
Product warranty	2,586	4,406	(118)	(4,623)	2,251
Doubtful accounts	361	13		$(54) \qquad 3$	320
Sales returns and allowances	83	532	(1)	(211)	403
Cash discounts	9	51 .	(1	19) 41	
Year ended March 31, 1998:					
Product warranty	2,251	2,706	(31)	(2,670)	2,256
Doubtful accounts	320	154		(177)	297
Sales returns and allowances	444	214		(420)	238
Cash discounts	41	31	(	(65) 7	

  |  |  |  |  |S-1

## INDEPENDENT ACCOUNTANTS' REPORT ON SCHEDULE

The Board of Directors Tegal Corporation:

Our audit of the consolidated financial statements for the years ended March 31, 1998 and 1997 referred to in our report dated April 23, 1998, appearing on page 40 in the 1998 Annual Report on Form 10-K also included an audit of the Financial Statement Schedule for each of the years in the two-year period ended March 31, 1998 listed in Item 14(a) of this Form 10-K. In our opinion, the Financial Statement Schedule presents fairly, in all material respects, the information set forth therein when read in conjunction with the related consolidated financial statements.

/s/ Price Waterhouse LLP

San Jose, California April 24, 1998

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## INDEPENDENT AUDITORS' REPORT ON SCHEDULE

The Board of Directors Tegal Corporation:

Under date of April 23, 1996, we reported on the consolidated statements of operations, stockholders' equity (deficit), and cash flows of Tegal Corporation and subsidiaries for the year ended March 31, 1996, which are included herein. In connection with our audit of the aforementioned consolidated financial statements, we also audited the related consolidated financial statement schedule as listed in the accompanying index in Item 14, as of and for the year ended March 31, 1996. This consolidated financial statement schedule is the responsibility of the Company's management. Our responsibility is to express an opinion on this consolidated financial statement schedule based on our audits.

In our opinion, the consolidated financial statement schedule, referred to above, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ KPMG Peat Marwick LLP

Mountain View, California April 23, 1996

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## INDEX TO EXHIBITS

<TABLE>
<CAPTION>
EXHIBIT
NUMBER
DESCRIPTION OF EXHIBIT
-----<C> <S>

- 10.10 Employment Agreement between Registrant and Stephen P. DeOrnellas dated December 16, 1997
- 10.14 Security and Loan Agreement between the Registrant, Imperial Bank and Sanwa Bank dated as of August 15, 1997
- 10.18 Employment Agreement between Registrant and Michael L. Parodi dated as of December 17, 1997
- 23.1 Consent of Independent Accountants
- 23.2 Consent of Independent Auditors
- 24.1 Power of Attorney (included on page 42)
- 27.1 Financial Data Schedule for the year ended March 31, 1998
- 27.2 Financial Data Schedule Six Months Ended September 30,
- 27.3 Financial Data Schedule Three Months Ended June 31, 1997
- 27.4 Financial Data Schedule Year Ended March 31, 1997
- 27.5 Financial Data Schedule Nine Months Ended December 31, 1996
- 27.6 Financial Data Schedule Six Months Ended September 30, 1996
- 27.7 Financial Data Schedule Three Months Ended June 30, 1996
- 27.8 Financial Data Schedule Year Ended March 31, 1996

</TABLE>

#### EXHIBIT 10.10

## EMPLOYMENT AGREEMENT

This EMPLOYMENT AGREEMENT, dated as of 12-16-97, is entered into between Tegal Corporation ("Company") and Steve DeOrnellas (the "Employee").

## RECITALS:

- A. WHEREAS, Employee is currently in the job position of Chief Technical Officer and Vice President of Corporate Development, and Company desires to retain Employee in that position, and
- B. WHEREAS, the Employee is willing to continue employment with the Company on the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the promises and the mutual covenants set forth in this Agreement, Company and Employee agree as follows:

- 1. TERM OF EMPLOYMENT. Subject to the termination provisions hereinafter set forth, the Company will continue to employ the Employee, and the Employee accepts continued employment with the Company, for a period of three years ("Term") commencing on the date this Agreement is signed (the "Effective Date").
- 2. DUTIES. The Employee will serve as Chief Technical Officer and Vice President of Corporate Development of the Company and will discharge such duties and responsibilities, and enjoy such authorities, as are customary for such position. The Employee will devote his full time and attention to the affairs of the Company and will not enter the employ of or serve as a consultant to, or in any way perform any services, with or without compensation, for any other person, business or organization, where such contact would be inconsistent with, or prevent Employee from carrying out, his duties under this Agreement.

## 3. COMPENSATION AND EXPENSES.

- (a) Salary. During the Term, the Company will pay the Employee an annual salary of \$165,000 (one hundred sixty-five thousand dollars) (the "Base Salary"); provided that Employee's Base Salary may be reduced to the extent that the Employee elects to defer any portion thereof under the terms of any deferred compensation or savings plan maintained by the Company. During the Term, Employee shall be entitled to annual merit increases of his Base Salary in accordance with Company policy. Employee's Base Salary may also be reduced, during the Term, consistent with reductions made to the salaries of other executive Officers of the Company. The Company will pay the Employee his Base Salary in equal installments no less frequently than monthly.
- (b) Incentive Payment. Employee shall be eligible for an annual incentive bonus payment in accordance with any incentive bonus program then in effect.

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- (c) Expenses. The Company will reimburse the Employee for all reasonable travel, entertainment and miscellaneous expenses incurred in connection with the performance of his duties under this Agreement, provided that the Employee properly accounts for such expenses in accordance with the Company's practices.
- (d) Home Office. The Company recognizes that Employee's health may not permit him to work at the Company's corporate offices. In order to facilitate Employee's continued productive employment, Company shall provide Employee with computer, facsimile, and other equipment that Employee may reasonably require in order to perform his duties from home. All equipment made available to Employee pursuant to this paragraph shall be returned to Company by Employee upon any termination of Employee's employment.
- 4. BENEFITS. The Employee will be entitled during the term of this Agreement to participate in any vacation, stock option, pension, insurance or other benefit plan that is maintained by the Company for executive-level employees.

## 5. TERMINATION.

- (a) Termination by the Company Without Cause. The company may terminate the Employee's employment under this Agreement without cause at any time by giving no less than 30 days written notice to the Employee. However, in the event that the company desires to terminate Employee's employment without cause, the company agrees that it will permit Employee to apply for disability. The Company further agrees that it will take no action to oppose or undermine Employee's claim for disability insurance benefits. Upon any termination by Company without cause, the Company shall pay Employee's salary and benefits through the date of termination of his employment and any severance pay to which the Employee may be entitled under the Company's policies.
- (b) Termination by the Company for Cause. The Company may immediately terminate the Employee's employee at any time for cause by giving written notice to the Employee. Upon any such termination for cause, the Employee shall have no right to compensation or benefits, except as required by law, for any period subsequent to the date of termination. For purposes of this Section 5(b), "cause" shall mean: the Employee wilfully engages in an act or omission which is in bad faith and to the detriment of the Company, engages in misconduct or willful malfeasance, or engages in any act of dishonesty, disclosure of Company confidential information not required by the duties of Employee, commercial bribery, criminal act or perpetration of fraud.
- (c) Termination by Death or Disability. In the event that Employee dies or becomes completely disabled from performing his duties during the Term of this Agreement, the Company shall be relieved of all obligations under this Agreement, except for payment of salary and the provision of benefits through the date of Employee's death or until Employee goes out on full-time disability, whichever is earlier.

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(d) Termination by Employee. The Employee may terminate his/her employment under this Agreement at any time by giving written notice to the Company. Such termination will become effective upon the date specified in such notice, provided that such date is at least 14 days after the date of delivery of the notice. Upon any such termination, the Company shall be relieved of all of its obligations under this Agreement, except for payment of salary and the provisions of benefits through the effective date of termination.

## 6. ARBITRATION.

The Company and Employee agree that any controversy or claim (contract, tort or statutory) under federal, state or local law between company and Employee arising out of Employee's employment with the Company including, without limitation, the construction or application of any of the terms, provisions or conditions of this Agreement, shall, on written request of either party served upon the other, be submitted to final and binding arbitration. Such arbitration shall be conducted according to the Model Employment Arbitration Procedures of the American Arbitration Association, except as otherwise provided herein. The arbitration shall be conducted before the American Arbitration Association or such other arbitration service as the parties may, by mutual agreement, select. The arbitrator shall be appointed by agreement of the parties hereto or, if no agreement can be reached, by the American Arbitration Association pursuant to its rules.

Judgment on the award the arbitrator renders may be entered in any court having jurisdiction over the parties. The arbitration shall be conducted in Portland, Oregon or such other jurisdiction as the Company's headquarters may be located. Costs, including attorney's fees, may be sought by the prevailing party and awarded by the Arbitrator. This paragraph shall survive the expiration or termination of this Agreement. If any part of this paragraph is found to be void as a matter of law or public policy, the remainder of the paragraph will continue to be in full force and effect.

## 7. MISCELLANEOUS.

(a) Assignment. The rights and obligations of the parties under this Agreement shall inure to the benefit of and be binding upon their respective successors and assigns. The Employee agrees that the Company may assign its rights and obligations under this Agreement to any successor-in-interest. The Employee may assign his/her rights and obligations hereunder only with the express written consent of the Company, except that the

rights under this Agreement shall inure to the benefit of the Employee's heirs or assigns in the event of his/her death. Except as expressly provided in this paragraph, no party may assign its/his/her rights and obligations hereunder; and any attempt to do so will be void.

(b) Severability. If any provision of this Agreement otherwise is deemed to be invalid or unenforceable or is prohibited by the laws of the state or jurisdiction where it is to be performed, this Agreement shall be considered divisible as to such provision, and such provision shall be inoperative in such state or jurisdiction and shall not be part of the consideration moving from any of the parties to any other. The remaining provisions of this

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Agreement shall be valid and binding and of like effect as though such provision were not included.

- (c) Notice. Notices given pursuant to the provisions of this Agreement shall be delivered personally or sent by certified mail, postage pre-paid, or by overnight courier, or by telex, telecopier or telegraph, charges prepaid, to the Company's then-current business address or, in the event the notice is to Employee, the address that Employee has represented to Company as current.
- (d) Governing Law. This Agreement shall be governed by and construed and enforced in accordance with laws of the State of California, without giving effect to the conflict of laws rules thereof.
- (e) Waiver; Amendment. The waiver by any party to this Agreement of a breach of any provision hereof by any other party shall not be construed as a waiver of any subsequent breach. No provision of this Agreement may be terminated, amended, supplemented, waived or modified other than by an instrument in writing, signed by the party against whom the enforcement of the termination, amendment, supplement, waiver or modification is sought.
- (f) Entire Agreement. This Agreement represents the entire agreement between the parties with respect to the subject matter of this Agreement and supersedes any previous agreement or understanding.
- (g) Execution in Counterparts. This Agreement may be executed in counterparts with the same force and effectiveness as though executed as a single document.

IN WITNESS WHEREOF, the Company and the Employee have executed this Agreement as of the day and year first above written.

TEGAL CORPORATION

By: ROBERT V. HERY	STEVE DEORNELLAS
Robert V. Hery Title: Chairman, CEO and Preside	Steve DeOrnellas

## TEGAL CORPORATION

#### LOAN AND SECURITY AGREEMENT

## DATED AS OF AUGUST 15, 1997 LOAN AND SECURITY AGREEMENT

This Loan and Security Agreement ("Agreement") is made and entered into as of August 15, 1997, by and among Imperial Bank ("Imperial") as Collateral Agent and a Bank, and Sanwa Bank California ("Sanwa"). Imperial and Sanwa are referred to individually herein as a "Bank" and collectively as the "Banks") and Tegal Corporation ("Borrower").

#### RECITALS

Borrower wishes to obtain credit from time to time from Banks, and Banks desire to extend credit to Borrower. This Agreement sets forth the terms on which Banks will advance credit to Borrower, and Borrower will repay the amounts owing to Banks.

## **AGREEMENT**

The parties agree as follows:

## SECTION 1. DEFINITIONS AND CONSTRUCTION.

1.1 DEFINITIONS. As used in this Agreement, the following terms shall have the following definitions:

"ACCOUNTS" means all presently existing and hereafter arising accounts, contract rights, and all other forms of obligations owing to Borrower arising out of the sale or lease of goods (including, without limitation, the licensing of software and other technology) or the rendering of services by Borrower, whether or not earned by performance, and any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by Borrower and Borrower's Books relating to any of the foregoing.

"ACQUISITION" means any transaction, or series of transactions, by which Borrower or any of its Subsidiaries directly or indirectly acquires all or substantially all of any ongoing business, whether through the purchase of stock or assets for cash, a cash merger, or consolidation.

"ADVANCE" or "ADVANCES" means an advance or advances under the Committed Revolving Line.

"AFFILIATE" means, with respect to any Person, any Person that owns or controls directly or indirectly such Person, and Person that controls or is under common control with such Person, and each of such Person's senior executive officers, directors, and partners.

"BANK EXPENSES" means all reasonable costs or expenses (including reasonable attorneys' fees and expenses) incurred in connection with the preparation, negotiation, administration, amendment, and enforcement of the Loan Documents; and each Bank's reasonable attorneys' fees and expenses incurred in enforcing or defending the Loan Documents, whether or not suit is brought.

"BORROWER'S BOOKS" means all of Borrower's books and records including ledgers; records concerning Borrower's assets or liabilities, the Collateral, business operations or financial condition; and all computer programs, or tape files, and the equipment containing such information.

"BUSINESS DAY" means any day that is not a Saturday, Sunday, or other day on which banks in the State of California are authorized or required to

"CLOSING DATE" means the date of this Agreement.

"CODE" means the California Uniform Commercial Code.

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"COLLATERAL" means the property described on EXHIBIT A attached hereto.

"COLLATERAL AGENT" means Imperial or such entity as may succeed to such position.

"COMMITTED REVOLVING LINE" means Twenty Million Dollars (\$20,000,000).

"CONTINGENT OBLIGATION" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any indebtedness, lease, dividend, letter of creditor other obligation of another, including, without limitation, any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit issued for the account of that Person, and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

"CURRENT LIABILITIES" means, as of any applicable date, all amounts that should, in accordance with GAAP, be included a current liabilities on the consolidated balance sheet of the Borrower and its Subsidiaries, as at such date, plus, to the extent not already included therein, all outstanding Advances made under this Agreement, but including all other Indebtedness that is payable upon demand or within one year from the date of determination thereof unless such Indebtedness is renewable or extendable at the option of Borrower or any Subsidiary to a date more than one year from the date of determination, but excluding Subordinated Debt.

"DAILY BALANCE," means the amount of the Obligation owed at the end of a given day.

"EQUIPMENT" means all present and future machinery, equipment, tenant improvements, furniture, fixtures, vehicles, tools, parts and attachments in which Borrower has any interest.

"ERISA" means the Employment Retirement Income Security Act of 1974, as amended, and the regulation thereunder.

"EVENT OF DEFAULT" has the meaning set forth in Section 8.

"FEDERAL FUNDS RATE" means, for any period, the rate set forth in the weekly statistical release designated as H.15(519) or any successor publication, published by the Federal Reserve Board (including any such successor, "H.15(519)") for such day opposite the caption "Federal Funds (Effective)". If on any relevant day such rate is not yet published in H.15(519), the rate for such day will be the rate set forth in the daily statistical release designated as the Composite 3:30 p.m. Quotations for U.S. Government Securities, or any successor publication published by the Federal Reserve Bank of New York (including any such successor, the "Composite" 3:30 p.m. Quotation") for such day under the caption "Federal Funds Effective Rate."

"FEDERAL RESERVE BOARD" means the Board of Governors of the Federal Reserve System and any successor thereto.

"GAAP" means generally accepted accounting principles as in effect from time to time.

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"Indebtedness" means (a) all indebtedness for borrowed money or the deferred purchase price of property or services (other than trade payables not past due incurred in the ordinary course of business), including without limitation reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations and (d) all Contingent Obligations.

"Insolvency Proceeding" means any proceeding commenced by or against any person or entity under any provision of the United States Bankruptcy Code, as amended, or under any other bankruptcy or insolvency law, including assignments for the benefit of creditors, formal or informal moratoria, compositions, extension generally with its creditors, or proceedings seeking reorganization, arrangement, or other relief.

"Inventory" means all present and future inventory in which Borrower or its Subsidiaries has any interest, including merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and finished products intended for sale or lease or to be furnished under a contract of service, of every kind and description now or at any time hereafter owned by or in the custody or possession, actual or constructive, of Borrower, including such inventory as is temporarily out of its custody or possession or in transit and including any returns upon any account or other proceeds, including insurance proceeds, resulting from the sale or disposition of any of the foregoing and any documents of title representing any of the above, and Borrower's Books relating to any of the foregoing.

"Investing" means any beneficial ownership of (including stock, partnership interest or other securities) any Person, or any loan, advance or capital contribution to any Person.

"IRC" Means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

"Lien" means any mortgage, lien, deed of trust, charge, pledge, security interest or other encumbrance.

"Loan Documents" means, collectively, this Agreement, any note or notes executed by Borrower, the Disclosure Letter and any other agreement entered into between Borrower and Banks in connection with this Agreement, all as amended or extended from time to time.

"Material Adverse Effect" means a material adverse effect on (i) the business operations or condition (financial or otherwise) of Borrower and its Subsidiaries taken as a whole or (ii) the ability of Borrower to repay the Obligations or otherwise perform its obligations under the Loan Documents.

"Negotiable Collateral" means all of Borrower's present and future letters of credit of which it is a beneficiary, notes, drafts, instruments, securities, documents of title, and chattel paper, and Borrower's books relating to any of the foregoing.

"Obligations" means all debt, principal, interest, Bank Expenses and other amounts or obligations owed to either Banks by Borrower pursuant to this Agreement or any other agreement, whether absolute or contingent, due or to become due, now existing or hereafter arising including any interest that accrues after the commencement of an Insolvency Proceeding and including any debt, liability, or obligation owing from Borrower to others that either Bank may have obtained by assignment or otherwise.

"Payment Date" means the fifteenth (15th) calendar day of each month.

"Percentage Share" means, as to each Bank, the percentage calculated in accordance with SECTION 12.6 hereof.

"Periodic Payments" means all installments or similar recurring payments that Borrower may now or hereafter become obligated to pay to either Bank pursuant to the terms and provisions of any instrument, or agreement now or hereafter in existence between Borrower and such Bank.

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## "PERMITTED INDEBTEDNESS" means:

- (a) Indebtedness of Borrower in favor of Banks arising under this Agreement or any other Loan Document;
- (b) Indebtedness existing on the Closing Date and disclosed in the Schedule:
- (c) Indebtedness in Japan under the note discount facility as disclosed in the Schedule;
  - (d) Subordinated Debt;
  - (e) Letters of credit;
- (f) Indebtedness incurred in connection with mortgage financing and purchase money security interests as defined in Section 9-107 of the UCC;
- (g) Guaranties of Indebtedness or other obligations permitted hereunder:
- (h) Obligations related to stock options, provided that such stock options have been approved by the Borrower's Board of Directors;
- (i) Extensions, renewals or refinancings of Indebtedness permitted under this Loan Agreement, other than clause (d) above; and
- (j) Other Indebtedness in the aggregate amount not exceeding Three Million Dollars (\$3,000,000).

## "PERMITTED INVESTMENT" means:

- (a) Investments existing on the Closing Date disclosed in the Schedule;
- (b) (i) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one (1) year from the date of acquisition thereof, (ii) commercial paper maturing no more than one (1) year from the date of creation thereof and currently having one of the two highest ratings obtainable from either Standard & Poor's Corporation or Moody's Investors Service, Inc., (iii) any Investments permitted by Borrower's investment policy, as amended from time to time, provided that such investment policy (and any amendment thereto) has been approved in writing by Banks, which approval shall not be unreasonably withheld, and (iv) certificates of deposit maturing no more than one (1) year from the date of investment therein issued by either Bank; and
- (c) Investments constituting Acquisitions permitted under Section 7.3 hereof.

## "PERMITTED LIENS" means the following:

- (a) Any Liens existing on the Closing Date and disclosed in the Schedule or arising under this Agreement or the other Loan Documents;
- (b) Liens for taxes, fees, assessments or other governmental charges or levies, either not delinquent or being contested in good faith by appropriate proceedings, provided the same have no priority over any of Collateral Agent's or either Bank's security interests;

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(c) Liens (i) upon or in any equipment acquired or held by Borrower or any of its Subsidiaries to secure the purchase price of such equipment or indebtedness incurred solely for the purpose of financing the acquisition of such equipment, or (ii) existing on such equipment at the time of its acquisition, provided that the Lien is confined solely to the property so acquired and improvements thereon, and the proceeds of such equipment;

- (d) Liens incurred for the purchase or improvement of real property;
- (e) Liens for taxes, assessments or governmental charges or claims the payment of which is not at the time required hereunder;
- (f) Statutory Liens of landlords and depository institutions and Liens of carriers, warehousemen, mechanics, materialmen and other Liens imposed by law incurred in the ordinary course of business for sums not delinquent for a period of more than sixty (60) days or being contested in good faith, provided, however, that Borrower shall have made such reserve or other provision therefor as may be required by GAAP;
- (g) Liens incurred or deposits made in the ordinary course of business in connection with workers' compensation, unemployment insurance and other types of social security, or to secure the performance of tenders, statutory obligations, surety and appeal bonds, bids, leases, government contracts, performance and return-of-money bonds and other similar obligations (exclusive of obligations for the payment of borrowed money);
- (h) Any attachment or judgment Lien, if the judgment it secures shall, within sixty (60) days after the entry thereof, have been discharged or execution thereof stayed pending appeal, or shall have been discharged within sixty (60) days after the expiration of any such stay;
- (i) Easements, rights-of-way, zoning and similar restrictions and other encumbrances affecting real property which do not in any case materially interfere with the ordinary conduct of the business of Borrower or any of its Subsidiaries;
- (j) Any interest or title of a lessor under any lease not prohibited hereunder; and
- (k) Liens incurred in connection with the extension, renewal or refinancing of the indebtedness secured by Liens of the type described in clauses (a) through (j) above, provided that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the indebtedness being extended, renewed or refinanced does not increase.

"PERSON" means any individual, sole proprietorship, partnership, limited liability company, joint venture, trust, unincorporated organization, association, corporation, institution, public benefit corporation, firm, joint stock company, estate, entity or governmental agency.

"PRIME RATE" means either (i) the variable rate of interest, per annum, most recently announced by Imperial, as its "prime rate," or (ii) the variable rate of interest, per annum, most recently announced by Sanwa as its "reference rate," whichever rate is higher, as applicable to the Advances made hereunder by the Banks whether or not such announced rate is the lowest available from such Bank.

"QUICK ASSETS" means, at any date as of which the amount thereof shall be determined, the consolidated cash, cash-equivalents, accounts receivable and investments of Borrower determined to be quick assets in accordance with GAAP.

"RESPONSIBLE OFFICER" means each of the Chief Executive Officer, the Chief Financial Officer and the Controller of Borrower.

"REVOLVING MATURITY DATE" means August 15, 1998.

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"SCHEDULE" means the schedule of exceptions attached hereto.

"SUBORDINATED DEBT" means any debt incurred by Borrower that is subordinated to the debt owing by Borrower to Banks on terms reasonably acceptable to each Bank (and identified as being such by Borrower and each Bank), where the subordinated lender has executed a subordination agreement (in a form provided by the Banks) in favor of each of the Banks.

"SUBSIDIARY" means any corporation or partnership in which (i) any general partnership interest or (ii) more than 50% of the stock of which by the terms thereof ordinary voting power to elect the Board of Directors, managers or trustees of the entity shall, at the time as of which any determination is

being made, be owned by Borrower, either directly of through an Affiliate.

"TANGIBLE NET WORTH" means at any date as of which the amount thereof shall be determined, the consolidated total assets of Borrower and its Subsidiaries minus, without duplication, (i) the sum of any amounts attributable to (a) goodwill, (b) intangible items such as unamortized debt discount and expense, parents, trade and service marks and names, copyrights and research and development expenses except prepaid expenses, and (c) all reserves not already deducted from assets, and (ii) Total Liabilities.

- "TOTAL LIABILITIES" means at any date as of which the amount thereof shall be determined, all obligations that should, in accordance with GAAP be classified as liabilities on the consolidated balance sheet of Borrower, including in any event all Indebtedness, but specifically excluding Subordinated Debt.
- 1.2 ACCOUNTING TERMS. All accounting terms not specifically defined herein shall be construed in accordance with GAAP and all calculations made hereunder shall be made in accordance with GAAP. When used herein, the terms "financial statements" shall include the notes and schedules thereto.

## SECTION 2. LOAN AND TERMS OF PAYMENT

2.1 ADVANCES. Subject to and upon the terms and conditions of this Agreement, each Bank severally agrees to make its Percentage Share of each Advance to Borrower in an aggregate amount not to exceed such Bank's Percentage Share of the Committed Revolving Line. Subject to the terms and conditions of this Agreement, amounts borrowed pursuant to this SECTION 2.1 may be repaid and reborrowed at any time during the term of this Agreement.

Whenever Borrower desires an Advance, Borrower will notify each Bank by facsimile transmission or telephone no later than 11:00 a.m. Pacific time, on the Business Day that the Advance is to be made. Each such notification shall be promptly confirmed by a Payment/Advance Form in substantially the form of EXHIBIT B hereto. Each Bank is authorized to make Advances under this Agreement, based upon instructions received from a Responsible Officer. Each Bank shall be entitled to rely on any telephonic notice given by a person who such Bank reasonably believes to be a Responsible Officer, and Borrower shall indemnify and hold such Bank harmless for any damages or loss suffered by such Bank as a result of such reliance. Such Bank will credit the amount of Advances made under this SECTION 2.1 to Borrower's deposit account held by Imperial or Collateral Agent not later than 3:00 p.m. Pacific time on the Business Day such Advance is to be made. Borrower's Obligations under the Committed Revolving Line shall be evidenced by this Agreement and by a Promissory Note, executed in favor of each Bank, in the form attached hereto as EXHIBIT D.

The Committed Revolving Line shall terminate on the Revolving Maturity Date, at which time all Advances under this SECTION 2.1 and other amounts due under this Agreement (except as otherwise expressly specified herein) shall be immediately due and payable.

# 2.2 INTEREST RATES, PAYMENTS, AND CALCULATIONS.

(a) INTEREST RATE. Except as set forth in SECTION 2.2(b), any Advances of each Bank shall bear interest, on the average Daily Balance, at a rate equal to the Prime Rate.

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- (b) LATE PAYMENT RATE. All Obligations which have not been paid when due shall bear interest at a rate equal to two (2) percentage points above the interest rate applicable immediately prior to the date such payment was due.
- (c) (i) PAYMENTS. Interest hereunder shall be due and payable on the Payment Date of each month during the term hereof. Borrower hereby authorizes Imperial or Collateral Agent to debit any accounts with Imperial or Collateral Agent, including, without limitation, Account Number 00017057057 for payments of principal and interest due on the Obligations and any other amounts owing by Borrower to Banks. Imperial or Collateral Agent will promptly notify Borrower of all debits which Imperial or Collateral Agent makes against

Borrower's accounts. Any such debits against Borrower's accounts in no way shall be deemed a set-off. Any interest not paid when due shall be compounded by becoming a part of the Obligations, and such interest shall thereafter accrue interest at the rate then applicable hereunder.

- (ii) DISTRIBUTION OF PAYMENTS. All amounts received by Imperial or Collateral Agent shall be allocated and paid to Banks as necessary to ensure a sharing of all amounts received by Imperial or Collateral Agent as set forth in SECTION 12.6. Imperial or Collateral Agent shall immediately distribute to each Bank, at such address as each Bank shall designate, such Bank's interest in all repayments and prepayments of principal and all payments of interest, loan fees, commitment fees and other fees, expenses and costs received by Imperial or Collateral Agent on the same day and in the same type of funds as payment was received. In the event Agent does not distribute such payments on the same day received, such payment shall accrue interest at the Federal Funds Rate, which shall be payable by Imperial or Collateral Agent. Imperial or Collateral Agent shall indemnify and hold Borrower harmless from any claim for overnight interest by any Lender under this SECTION 2.2(c)(ii).
- (D) COMPUTATION. In the event the Prime Rate is changed from time to time hereafter, the applicable rate of interest hereunder shall be increased or decreased effective as of 12:01 a.m. on the day the Prime Rate is changed, by an amount equal to such change in the Prime Rate. All interest chargeable under the Loan Documents shall be computed on the basis of a three hundred sixty (360) day year for the actual number of days elapsed.
- 2.3 CREDITING PAYMENTS. Prior to the occurrence of an Event of Default, each Bank shall credit a wire transfer of funds, check, or other item of payment to such deposit account held at such Bank or Obligation as Borrower specifies. After the occurrence of an Event of Default, the receipt by a Bank of any wire transfer of funds, check, or other item of payment shall be immediately applied to conditionally reduce Obligations, but shall not be considered a payment on account unless such payment is of immediately available federal funds or unless and until such check or other item of payment is honored when presented for payment. Notwithstanding anything to the contrary contained herein, any wire transfer or payment received by a Bank after 2:00 p.m. Pacific time shall be deemed to have been received by such Bank as of the opening of business on the immediately following Business Day. Whenever any payment to a Bank under the Loan Documents would otherwise be due (except by reason of acceleration) on a date that is not a Business Day, such payment shall instead be due on the next Business Day, and additional fees or interest, as the case may be, shall accrue and be payable for the period of such
  - 2.4 FEES. Borrower shall pay to Banks the following:
- (a) FACILITY FEE. A Facility Fee equal to Twelve Thousand Five Hundred Dollars (\$12,500.00), which fee shall be payable to Imperial on the Closing Date and shall be fully earned and non-refundable; and a Facility Fee equal to Seven Thousand Five Hundred Dollars (\$7,500.00), which fee shall be payable to Sanwa on the Closing Date and shall be fully earned and non-refundable;
- (b) LOAN FEE. A Loan Fee equal to three-eighths of one percent (0.375%) per annum of the average unused amount of the Committed Revolving Line which fee shall be due quarterly, beginning September 30, 1997, payable in arrears to each Bank based upon such Bank's Percentage Share of the Committed Revolving Line.

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- (c) FINANCIAL EXAMINATION AND APPRAISAL FEES. Bank's customary and reasonable fees and out-of-pocket expenses for such Bank's audits of Borrower's Accounts, and for each appraisal of Collateral and financial analysis and examination of Borrower performed from time to time and, if an Event of Default does not exists, at reasonable intervals by such Bank or its agents; and
- (d) BANK EXPENSES. Upon the date hereof, all Bank Expenses incurred through the Closing Date, including reasonable attorneys' fees and expenses, and, within thirty (30) days of demand, other Bank Expenses as they become due from time to time hereunder.

- 2.5 Additional Costs. In case any law, regulation, treaty or official directive or the interpretation or application thereof by any court or any governmental authority charged with the administration thereof, in any such case enacted or made effective after the date hereof, or the compliance with any guideline or request of any central bank or other governmental authority (whether or not having the force of law) made effective after the date hereof:
- (a) subjects either Bank to any tax with respect to payments of principal or interest or any other amounts payable hereunder by Borrower or otherwise with respect to the transactions contemplated hereby (except for taxes on the overall net income of such Bank imposed by the United States of America or any political subdivision thereof);
- (b) imposes, modifies or deems applicable any deposit insurance, reserve, special deposit or similar requirement against assets held by, or deposits in or for the account of, or loans by any Bank; or
- (c) imposed upon any Bank any other condition with respect to its performance under this Agreement,

and the result of any of the foregoing is to increase the cost to such Bank, reduce the income receivable by such Bank or impose any expense upon such Bank with respect to any Advances, such Bank shall notify Borrower thereof. Borrower agrees to pay to such Bank the amount of such increase in cost, reduction in income or additional expense as and when such cost, reduction or expense is incurred or determined, upon presentation by such Bank of a statement of the amount and setting forth such Bank's calculation thereof, all in reasonable detail, which statement shall be deemed true and correct absent manifest error. No Bank shall be entitled to any compensation pursuant to this Section 2.5 in respect of any such event (i) for any period of time in excess of ninety (90) days prior to such notice or (ii) for any period of time prior to such notice if such Bank shall not have given such notice within ninety (90) days of the date on which such event shall have been enacted, promulgated, adopted or issued in definitive or final form unless such event is retroactive.

2.6 TERM. Except as otherwise set forth herein, this Agreement shall become effective on the Closing Date and, subject to SECTION 13.7, shall continue in full force and effect for a term ending on the Revolving Maturity Date. Notwithstanding the foregoing, Banks shall have the right to terminate any obligation to make Advances under this Agreement immediately and without notice upon the occurrence and during the continuance of an Event of Default. Notwithstanding termination (but subject to SECTION 13.7), Collateral Agent and Banks shall retain their Lien on the Collateral which remain in effect for so long as any Obligations are outstanding.

## SECTION 3. CONDITIONS OF LOANS

- 3. CONDITIONS PRECEDENT TO INITIAL ADVANCE. The obligation of either Bank to make the initial Advance is subject to the condition precedent that such Bank shall have received, in form and substance satisfactory to such Bank, the following:
  - (a) this Agreement;
- (b) a certificate of the Secretary of Borrower with respect to incumbency and resolutions authorizing the execution and delivery of this Agreement;

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- (c) a certificate of the Secretary of State of State of Delaware and California with respect to Borrower's standing (and foreign qualification);
  - (d) financing statements (Forms UCC-1 and UCC-2);
  - (e) insurance certificate;
- (f) payment of the fees and Bank Expenses then due (to the extent invoiced) specified in SECTION 2.4 hereof; and
- (g) such other documents, and completion of such other matters, as Banks may reasonably request prior to the Closing Date.

- 3.2 CONDITIONS PRECEDENT TO ALL ADVANCES. The obligation of either Bank to make each Advance, including the initial Advance, is further subject to the following conditions;
- (a) receipt by each Bank of the Payment/Advance Form as provided in SECTION 2.1; and
- (b) the representations and warranties contained in SECTION 5 shall be true and correct in all material respects on and as of the date of such Payment/Advance Form and on the effective date of each Advance as though made at and as of each such date, provided, however, that those representations and warranties expressly referring to another date shall be true, correct and complete in all material respects as of such date, and no Event of Default shall have occurred and be continuing, or would result from such Advance, or with the lapse of time or the giving of notice or both would constitute an Event of Default. The making of each Advance shall be deemed to be a representation and warranty by Borrower on the date of such Advance as to the accuracy of the facts referred to in this SECTION 3.2(b).

## SECTION 4. CREATION OF SECURITY INTEREST

- 4.1 GRANT OF SECURITY INTEREST. Borrower grants and pledges to Collateral Agent on behalf of Banks a continuing security interest in all presently existing and hereafter acquired or arising Collateral in order to secure prompt repayment of any and all Obligations and in order to secure prompt performance by Borrower of each of its covenants and duties under the Loan Documents. Such security interest constitutes a valid, first priority security interest in the presently existing Collateral, and will constitute a valid, first priority security interest in Collateral a "hold" on any Deposit Account pledged as Collateral to secure the Obligations.
- 4.2 DELIVERY OF ADDITIONAL DOCUMENTATION REQUIRED. Borrower shall from time to time execute and deliver to Collateral Agent, at the request of either Bank, all Negotiable Collateral, all financing statements and other documents that either Bank may reasonably request, in form satisfactory to such Bank, to perfect and continue perfect Bank's security interest in the Collateral.
- 4.3 RIGHT TO INSPECT. Either Bank (through any of its officers, employees, or agents) shall have the right, upon reasonable prior notice, from time to time during Borrower's usual business hours, and, if an Event of Default does not exist, at reasonable intervals, to inspect Borrower's Books and to make copies thereof and to check, test, and appraise the Collateral in order to verify Borrower's financial condition or the amount, condition of, or any other matter relating to, the Collateral.

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# SECTION 5. REPRESENTATIONS AND WARRANTIES

Borrower represents and warrants as follows:

- 5.1 DUE ORGANIZATION AND QUALIFICATION. Borrower and each Subsidiary is a corporation duly existing and in good standing under the laws of its state of incorporation and qualified and licensed to do business in, and is in good standing in, any state in which the conduct of its business or its ownership of property required that it be so qualified except where the failure to be so qualified would not reasonably be expected to have a Material Adverse Effect.
- 5.2 DUE AUTHORIZATION; NO CONFLICT. The execution, delivery, and performance of the Loan Documents are within Borrower's powers, have been duly authorized, and are not in conflict with nor constitute a breach of any provision contained in Borrower's Certificate of Incorporation or Bylaws, nor will they constitute an event of default under any material agreement to which Borrower is a party or by which Borrower is bound. Borrower is not in default under any agreement to which it is a party or by which it is bound, which default would reasonably be expected to have a Material Adverse Effect.
- 5.3 NO PRIOR ENCUMBRANCES. Borrower has good and indefeasible title to the Collateral, free and clear of Liens, except for Permitted Liens.
  - 5.4 MERCHANTABLE INVENTORY. All Inventory (net of reserves) is in all

material respects of good and marketable quality, free from all material defects.

- 5.5 NAME; LOCATION OF CHIEF EXECUTIVE OFFICE. Except as disclosed in the Schedule, Borrower has not done business under any name other than that specified on the signature page hereof. The chief executive office of Borrower is located at the address indicated in SECTION 10 hereof.
- 5.6 Litigation. Except as set forth in the Schedule, there are no actions or proceedings pending by or against Borrower or any Subsidiary before any court of administrative agency in which an adverse decision would reasonably be expected to have a Material Adverse Effect or a material adverse effect on Borrower's interest or Bank's security interest in the Collateral. Borrower does not have knowledge of any such pending or threatened actions or proceedings.
- 5.7 NO MATERIAL ADVERSE CHANGE IN FINANCIAL STATEMENTS. All consolidated financial statements related to Borrower and any Subsidiary that have been delivered by Borrower to Banks fairly present in all material respects Borrower's consolidated financial condition as of the date thereof and Borrower's consolidated results of operations for the period then ended. There has not been a change in the consolidated financial condition of Borrower since the date of the most recent of such financial statements submitted to Banks, which in the reasonable determination of Banks has a Material Adverse Effect. For the quarters ending September 30, 1997, December 31, 1997, and March 31, 1998, the Banks shall determine whether there has been a Material Adverse Effect in accordance with the terms of the disclosure letter provided by Borrower of even date herewith the "DISCLOSURE LETTER").
- 5.8 SOLVENCY. Borrower is solvent and able to pay its debts (including trade debts) as they mature.
- 5.9 REGULATORY COMPLIANCE. Borrower and each Subsidiary has met the minimum funding requirements of ERISA with respect to any applicable employee benefit plans subject to ERISA. No events has occurred resulting from Borrower's failure to comply with ERISA that is reasonably likely to result in Borrower's incurring any liability that would reasonably be expected to have a Material Adverse Effect. Borrower is not an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940. Borrower is not engaged principally, or as one of its important activities, in the business of extending credit for the purpose of purchasing or carrying margin stock (within the meaning of Regulations G, T and U of the Board of Governors of the Federal Reserve System). Borrower has complied with all applicable

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provisions of the Federal Fair Labor Standards Act to the extent failure to comply would reasonably be expected to have a Material Adverse Effect. Borrower has not violated any statutes, laws, ordinances or rules applicable to it, violation of which would reasonably be expected to have a Material Adverse Effect.

5.10 ENVIRONMENTAL CONDITION. None of Borrower's or any Subsidiary's properties or assets has ever been used by Borrower or any Subsidiary or, to the best of Borrower's knowledge, by previous owners or operators, in the disposal of, or to produce, store, handle, treat, release, or transport, any hazardous waste or hazardous substance other than in accordance with applicable law except where failure to act in accordance with applicable law would not reasonably be expected to have a Material Adverse Effect as determined by the Banks; to the best of Borrower's knowledge, none of Borrower's properties or assets has ever been designated or identified in any manner pursuant to any environmental protection statute as a hazardous waste or hazardous substance disposal site, or a candidate for closure pursuant to any environmental protection statute; no lien arising under any environmental protection statute has attached to any revenues or to any real or personal property owned by Borrower or any Subsidiary which would reasonably be expected to have a Material Adverse Effect as determined by the Banks; and neither Borrower nor any Subsidiary has received a summons, citation, notice, or directive from the Environmental Protection Agency or any other federal, state or other governmental agency concerning any action or omission by Borrower or any Subsidiary resulting in the releasing, or otherwise disposing of hazardous waste or hazardous substances into the environment that would reasonably be expected to have a Material Adverse Effect as determined by the Banks.

- 5.11 TAXES. Borrower and cash Subsidiary has filed or caused to be filed all tax returns required to be filed, and has paid, or has made adequate provision for the payment of, all taxes reflected therein.
- 5.12 SUBSIDIARIES. Borrower does not own any stock, partnership interest or other equity securities of any Person, except for Permitted Investments.
- 5.13 GOVERNMENT CONSENTS. Borrower and each Subsidiary has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all governmental authorities that are necessary for the continued operation of Borrower's business as currently conducted in all material respects.
- 5.14 FULL DISCLOSURE. No representation, warranty or other statement made by Borrower in any certificate or written statement furnished to Banks contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading.

## Section 6. AFFIRMATIVE COVENANTS

Borrower covenants and agrees that, until payment in full of all outstanding Obligations, and for so long as any Bank may have any commitment to make an Advance hereunder, Borrower shall do all of the following:

- 6.1 GOOD STANDING. Borrower shall maintain its and each of its Subsidiaries' corporate existence and good standing in its jurisdiction of incorporation and maintain qualification in each jurisdiction in which the failure to so qualify would reasonably be expected to have a Material Adverse Effect. Borrower shall maintain, and shall cause each of its Subsidiaries to maintain, to the extent consistent with prudent management of Borrower's business, in force all licenses, approvals and agreements, the loss of which would reasonably be expected to have a Material Adverse Effect.
- 6.2 GOVERNMENT COMPLIANCE. Borrower shall meet, and shall cause each Subsidiary to meet, the minimum funding requirements of ERISA with respect to any employee benefit plans subject to ERISA. Borrower shall comply, and shall cause each Subsidiary to comply, with all statutes, laws, ordinances and government rules and regulations to which it is subject, noncompliance with which would reasonably be expected to have a Material Adverse Effect or a material adverse effect on the Collateral or the priority of Banks' Lien on the Collateral.

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6.3 FINANCIAL STATEMENTS, REPORTS, CERTIFICATES. Borrower shall deliver to Banks: (a) as soon as available, but in any event within forty-five (45) days after the end of each quarter, a company prepared consolidated and consolidating balance sheer and income statement covering Borrower's consolidated operations during such period, certified by an officer of Borrower reasonably acceptable to Bank; (b) as soon as available, but consolidating financial statements of Borrower prepared in accordance with GAAP, consistently applied, together with an unqualified opinion on such financial statements of an independent certified public accounting firm reasonably acceptable to Bank; (c) within five (5) days of filing, copies of all statements, reports and notices sent or made available generally by Borrower to its security holders or to any holders or to any holders of Subordinated Debit and all reports on Form 10-K, 10-Q and 8-K filed with the Securities and Exchange Commission; (d) promptly upon receipt of notice thereof, a report of any legal actions pending or threatened against Borrower or any Subsidiary that would reasonably be expected to result in damages or costs to Borrower or any Subsidiary of Two Hundred and Fifty Thousand Dollars (\$250,000) or more; and (e) upon the reasonable request of either Bank, such budgets, sales projections, operating plans, consolidating financial statements or other financial information as Bank may reasonably request from time to time.

Borrower shall deliver to Banks with the quarterly financial statements a Compliance Certificate signed by a Responsible Officer in substantially the form of EXHIBIT C hereto.

Any Bank shall have a right from time to time hereafter to audit Borrower's Accounts at Borrower's expense, provided that such audits will be conducted no more often than every twelve (12) months unless an Event of Default has occurred and is continuing.

- 6.4 INVENTORY; RETURNS. Borrower shall keep all Inventory (net of reserves) in good and marketable condition, free from all material defects. Returns and allowances, if any, as between Borrower and its account debtors shall be on the same basis and in accordance with the usual customary practices of Borrower, as they exist at the time of the execution and delivery of this Agreement. Borrower shall promptly notify Bank of all returns and recoveries and of all disputes and claims, where the return, recovery, dispute or claim involves more than Two Hundred and Fifty Thousand Dollars (\$250,000).
- 6.5 TAXES. Borrower shall make, and shall cause each Subsidiary to make, due and timely payment or deposit of all material federal, state, and local taxes, assessments, or contributions required of it by law, and will execute and deliver to Banks, on demand, appropriate certificates attesting to the payment or deposit thereof; and Borrower will make, and will cause each Subsidiary to make, timely payment or deposit of all material tax payments and withholding taxes required of it by applicable laws, including, but not limited to, those laws concerning F.I.C.A., F.U.T.A., state disability, and local, state, and federal taxes, and will, upon request, furnish each Bank with proof satisfactory to such Bank indicating that Borrower or a Subsidiary has made such payments or deposits; provided that Borrower or a Subsidiary need not make any payment if the amount or validity of such payment is contested in good faith by appropriate proceedings and is reserved against (to the extent required by GAAP) by Borrower.

## 6.6 INSURANCE.

- (a) Borrower, at its expense, shall keep the Collateral insured against loss or damage by fire, theft, explosion, sprinklers, and all other hazards and risks, and in such amounts, as ordinarily insured against by other owners in similar businesses conducted in the locations where Borrower's business is conducted on the date hereof. Borrower shall also maintain insurance relating to Borrower's ownership and use of the Collateral in amounts and of a type that are customary to businesses similar to Borrower's.
- (b) All such policies of insurance shall be in such form, with such companies, and in such amount as reasonably satisfactory to Banks. All such policies of property insurance shall contain a lender's loss payable endorsement, in a form satisfactory to Banks, showing Banks as an additional loss payees thereof and all liability insurance policies shall show the Banks as additional insureds, and shall specify that the insurer must give

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at least twenty (20) days notice to Banks before canceling its policy for any reason. Borrower shall deliver to Banks certified copies of such policies of insurance and evidence of the payments of all premiums therefor. All proceeds payable under nay such policy shall, at the option of Banks, be payable to Banks to be applied on account of the Obligations.

- 6.7 PRINCIPAL DEPOSITORY. Borrower shall maintain in principal depository and operating accounts, other than cash management accounts, with Imperial or Collateral Agent.
- 6.8 QUICK RATIO. Borrower shall maintain, as of the last day of each calendar month, a ratio of Quick Assets to Current Liabilities of at least 1.25 to 1.00.
- 6.9 DEBT-NET WORTH RATIO. Borrower shall maintain, as of the last day of each calendar month, a ratio of Total Liabilities to Tangible Net Worth of not more than 0.75 to 1.00.
- 6.10 TANGIBLE NET WORTH. Borrower shall maintain, as of the last day of each calendar month, a Tangible Net Worth of not less than Forty Million Dollars (\$40,000,000).
- 6.11 MAXIMUM QUARTERLY LOSS. Beginning July 1, 1997, Borrower shall not suffer a pre-tax loss in excess of Three Million Dollars (\$3,000,000), measured as of the end of each fiscal quarter for the two quarter period then ended. For

purposes of this calculation, the pre-tax loss shall exclude (i) non-recurring income and expenses as determined by the Banks and (ii) research and development costs in excess of Five Million Dollars (\$5,000,000) for the two quarter period then ended.

6.12 FURTHER ASSURANCES. At any time and from time to time Borrower shall execute and deliver such further instruments and take such further action as may reasonably be requested by Banks to effect the purposes of this Agreement.

## SECTION 7. NEGATIVE COVENANTS

Borrower covenants and agrees that, so long as any credit hereunder shall be available and until payment in full of the outstanding Obligations or for so long as any Bank may have any commitment to make any Advances, Borrower will not do any of the following without the prior written consent of Banks:

- 7.1 DISPOSITIONS. Convey, sell, lease, transfer or otherwise dispose of (collectively, a "TRANSFER"), or permit any of its Subsidiaries to Transfer, all or any part of its business or property, other than: (i) Transfers of Inventory in the ordinary course of business; (ii) Transfer of non-exclusive licenses and similar arrangements for the use of the property of Borrower or its Subsidiaries; (iii) Transfers of worn-out or obsolete Equipment; or (iv) Transfers in the aggregate amount not to exceed One Million Five Hundred Thousand Dollars (\$1,500,000) in any fiscal year.
- 7.2 CHANGE IN BUSINESS. Engage in any business, or permit any of its Subsidiaries to engage in any business, other than the businesses currently engaged in by Borrower and any business substantially similar or related thereto (or incidental thereto), or suffer a material change in Borrower's ownership or directors. Borrower will not, without thirty (30) days prior written notification to Banks, relocate its chief executive office.
- 7.3 MERGERS OR ACQUISITIONS. Enter into any Acquisition, or permit any of its Subsidiaries to enter into any Acquisition, having an aggregate cash purchase price in excess of Twenty Million Dollars (\$20,000,000) for any fiscal year, provided, however, that the aggregate cash purchase price for such Acquisitions shall be subject to SECTION 7.8 hereof. Borrower or its Subsidiaries may enter into such Acquisitions at or under the Twenty Million Dollar (\$20,000,000) per fiscal year limitation, provided that no Event of Default has occurred and is continuing or would result from such Acquisition. Concurrently with any Acquisition, Borrower or its Subsidiaries shall execute and deliver to Banks such documentation, in form and substance satisfactory to Banks, as Banks may request to perfect their security interest in such assets.

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- 7.4 INDEBTEDNESS. Create, incur, assume or be or remain liable with respect to any Indebtedness or any Contingent Obligations, or permit any Subsidiary so to do, other than Permitted Indebtedness.
- 7.5 ENCUMBRANCES. Create incur, assume or suffer to exist any Lien with respect to any of its property, or assigns or otherwise convey any right to receive income, including the sale of any Accounts, or permit any of its Subsidiaries so to do, except for Permitted Liens.
- 7.6 DISTRIBUTIONS. Pay any cash dividends or make any other distribution or payment on account of or in redemption, retirement or purchase of any capital stock, provided, however, Borrower may (i) make such distributions or payments subject to the terms of employee stock option plans which have been approved by Borrower's Board of Directors, or (ii) repurchase capital stock in an amount not to exceed Five Million dollars (\$5,000,000) per fiscal year.
- 7.7 INVESTMENTS. Directly or indirectly acquire or own, or make any Investment in or to any Person, or permit any of its Subsidiaries so to do, other than Permitted Investments.
- 7.8 LOANS. Make any loans or advances to any person or other entity other than in the ordinary and normal course of its business as now conducted, provided, however, that Borrower may make such loans or advances to its Subsidiaries in an amount not to exceed Eleven Million Dollars (\$11,000,000) net of any loans or advances made by such Subsidiaries to Borrower.

permit to exist any material transaction with any Affiliate or Borrower except for transactions that are in the ordinary course of Borrower's business, upon fair and reasonable terms that are no less favorable to Borrower than would be obtained in an arm's length transaction with a nonaffiliated Person.

- 7.10 SUBORDINATED DEBT. Make any payment in respect of any Subordinated Debt, or permit any of its Subsidiaries to make any such payment, except in compliance with the terms of such Subordinated Debt, or amend any provision contained in any documentation relating to the Subordinated Debt without Banks' prior written consent.
- 7.11 INVENTORY. Store the Inventory with a bailee, warehouseman, or similar party unless Bank has received a pledge of the warehouse receipt covering such Inventory. Except for Inventory sold in the ordinary course of business and except for such other locations as Banks may approve in writing, Borrower shall keep the Inventory only at the locations set forth in SECTION 10 hereof and such other locations of which Borrower gives Banks prior written notice and as to which Borrower signs and files a financing statement where needed to perfect Collateral Agent's security interest on behalf of and for the benefit of Banks.
- 7.12 CAPITAL EXPENDITURES. Except as permitted under SECTION 7.3, make capital expenditures in excess of Two Million Five Hundred Thousand Dollars (\$2,500,000) per fiscal quarter.
- 7.13 COMPLIANCE. Become an "investment company" controlled by an "investment company," within the meaning of the Investment Company Act of 1940, or become principally engaged in, or undertake as one of its important activities, the business of extending credit for the purpose of purchasing or carrying margin stock, or use the proceeds of any Advance for such purpose. fail to meet the minimum funding requirements of ERISA, permit a Reportable Event or Prohibited Transaction, as defined in ERISA, to occur, fail to comply with the Federal Fair Labor Standards Act or violate any law or regulation, which violation would reasonably be expected to have a Material Adverse Effect or a material adverse effect on the Collateral or the priority of Collateral Agent's Lien on the Collateral, or permit any of its Subsidiaries to do any of the foregoing.

# 14. SECTION 8. EVENTS OF DEFAULT

Any one or more of the following events shall constitute an Event of Default by Borrower under this Agreement:

## 8.1 PAYMENT DEFAULT.

- (a) If Borrower fails to pay, when due, any principal; and
- (b) If Borrower fails to pay, within five (5) days of the invoice payment date, any of the Obligations, exclusive of principal.

## 8.2 COVENANT DEFAULT.

- (a) If Borrower fails to perform any obligation under SECTIONS 6.7, 6.8, 6.9, 6.10 or 6.11 or violates any of the covenants contained in Article 7 of this Agreement, or
- (b) If Borrower fails or neglects to perform, keep, or observe any other material term, provision, condition, covenant, or agreement contained in this Agreement, in any of the Loan Documents, or in any other present or future agreement between Borrower and any Bank and as to any default under such other term, provision, condition, covenant or agreement that can be cured, has failed to cure such default with in thirty (30) days after Borrower receives notice thereof or any officer of Borrower becomes aware thereof;
- 8.3 MATERIAL ADVERSE CHANGE. If there is a change in Borrower's business, assets, liabilities, financial condition, operations or affairs, other than changes in the ordinary course of business, or if there is a material impairment of the prospect of repayment of any portion of the Obligations or a material impairment of the value or priority of Banks' security interests in the Collateral, which in the reasonable determination of Banks has, either individually or in the aggregate, a Material Adverse Effect.

- 8.4 ATTACHMENT. If any material portion of Borrower's assets is attached, seized, subjected to a writ or distress warrant, or is levied upon, or comes into the possession of any trustee, receiver or person acting in a similar capacity and such attachment, seizure, writ or distress warrant or levy has not been removed, discharged or rescinded within thirty (30) days, or if Borrower is enjoined, restrained, or in any way prevented by court order from continuing to conduct all or any material part of its business affairs, or if a judgment or other claim becomes a lien or encumbrance upon any material portion of Borrower's assets, or if a notice of lien, levy, or assessment is filed of record with respect to any material portion of borrower's assets by the United States government, or any department, agency, or instrumentality thereof, or by any state, county, municipal, or governmental agency, and the same is not paid within thirty (30) days after Borrower receives notice thereof, provided that none of the foregoing shall constitute an Event of Default where such action or event is stayed or an adequate bond has been posted pending a good faith contest by Borrower (provided that no Advances will be required to be made during such cure period);
- 8.5 INSOLVENCY. If borrower is not Solvent, or if an Insolvency Proceeding is commenced by Borrower, or if an Insolvency Proceeding is commenced against Borrower and is not dismissed or stayed within forty-five (45) days (provided that no Advances will be made prior to the dismissal of such Insolvency Proceeding); "Solvent," meaning (a) the fair market value of Borrower's assets will be in excess of the amount that will be required to be paid on or in respect of the existing debts and other liabilities (including contingent liabilities) of Borrower as they mature; (b) Borrower shall not have unreasonably small capital to carry on its business as conducted or as proposed to be conducted; (c) Borrower does not intend to or believe that it will incur debts beyond its ability to pay such debts as they mature (taking into account the timing and amounts of cash to be received by it and the amounts to be payable on or in respect of its obligations); (d) Borrower does not intend to hinder, delay or defraud either present or future creditors; and (e) Borrower will have received fair consideration and reasonably

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equivalent value in exchange for incurring its Obligations under the Loan Documents and Borrower will be a direct beneficiary of the full proceeds of the credit made available by Banks pursuant to this Loan Agreement.

- 8.6 OTHER AGREEMENTS. If there is a default in any agreement to which Borrower is a party with a third party or parties resulting in a right by such third party or parties, whether or not exercised, to accelerate the maturity of any Indebtedness in an amount in excess of Two Hundred and Fifty Thousand Dollars (\$250,000) or that would reasonably be expected to have a Material Adverse Effect;
- 8.7 JUDGMENTS. If a judgment or judgments for the payment of money in an amount, individually or in the aggregate, of at least One Hundred and Twenty Five Thousand Dollars (\$125,000) shall be rendered against Borrower and shall remain unsatisfied and unstayed for a period of thirty (30) days (provided that no Advances will be made prior to the satisfaction or stay of such judgment); or
- 8.8 MISREPRESENTATIONS. If any material misrepresentation or material misstatement exists now or hereafter in any warranty or representation set forth herein or in any certificate delivered to any Bank by any Responsible Officer pursuant to this Agreement or to induce Bank to enter into this Agreement or any other Loan Document.

SECTION 9. BANK'S RIGHTS AND REMEDIES Upon the occurrence and during the continuance of an Event of Default, an enforcing Bank may be appointed by the Banks to enforce the rights and remedies herein on behalf of itself and as agent for the other Bank(s) (the "ENFORCING BANK"). Appointment of the Enforcing Bank shall be subject to the approval of either (i) both Banks, as long as there are only two Banks whose combined Pro Rata Share (and voting interest with respect thereto) of all amounts outstanding under this Agreement, or, in the event there are no amounts outstanding, the Committed Revolving Line, total one hundred percent (100.0%) of all such amounts outstanding or the Committee Revolving Line, as the case may be, or (ii) if there are more than two Banks, any combination of Banks whose combined Pro Rata Share (and voting interest with respect thereto) of all amounts outstanding under this Agreement, or, in the event there are no amounts outstanding, the Committed Revolving Line, as the case may be. Upon such appointment of the Enforcing Bank, the

Collateral Agent will transfer all of its rights under this Loan Agreement to the Enforcing Bank.

- 9.1 RIGHTS AND REMEDIES. Upon the occurrence and during the continuance of an Event of Default, the Enforcing Bank, or any Bank, if applicable, may, subject to Article 12, at its election, without notice of its election and without demand, do any one or more of the following, all of which are authorized by Borrower:
- (a) Declare all Obligations, whether evidenced by this Agreement, by any of the other Loan Documents, or otherwise, immediately due and payable (provided that upon the occurrence of an Event of Default described in SECTION 8.5 all Obligations shall become immediately due and payable without any action by any Bank);
- (b) Cease advancing money or extending credit to or for the benefit of Borrower under this Agreement or under any other agreement between Borrower and any Bank:
- (c) Settle or adjust disputes and claims directly with account debtors for amounts, upon terms and in whatever order that Enforcing Bank or such Bank reasonably considers advisable;
- (d) Without notice to or demand upon Borrower, make such payments and do such acts as Enforcing Bank or such Bank considers necessary or reasonable to protect its security interest in the Collateral. Borrower agrees to assemble the Collateral if Enforcing Bank or such Bank so requires, and to make the Collateral available to Enforcing Bank or such Bank as Enforcing Bank or such Bank may designate. Borrower authorizes Enforcing Bank or such Bank to enter the premises where the Collateral is located, to take and maintain possess of the Collateral, or any part of it, and to pay, purchase, contest, or compromise any encumbrance, charge, or lien which in Enforcing Bank's or such Bank's determination appears to be prior or superior to its security interests and

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to pay all expenses incurred in connection therewith. With respect to any of Borrower's owned premises, Borrower hereby grants Enforcing Bank or such Bank a license to enter into possession of such premises and to occupy the same, without charge, for up to one hundred twenty (120) days in order to exercise any of Enforcing Bank's or such Bank's rights or remedies provided herein, at law, in equity, or otherwise;

- (e) Without notice to Borrower set off and apply to the Obligations any and all (i) balances and deposits of Borrower held by such Bank, or (ii) indebtedness at any time owing to or for the credit or the account of Borrower held by such Bank;
- (f) Ship, reclaim, recover, store, finish, maintain, repair, prepare for sale, advertise for sale, and sell (in the manner provided for herein) the Collateral. Enforcing Bank or such Bank is hereby granted a license or other right, solely pursuant to the provisions of this SECTION 9.1, to use, without charge, Borrower's labels, patents, copyrights, rights of use of any name, trade secrets, trade names, trademarks, service marks, and advertising matter, or any property of a similar nature, as it pertains to the Collateral, in completing production of, advertising for sale, and selling any Collateral and, in connection with Enforcing Bank's or such Bank's exercise of its rights under this SECTION 9.1, Borrower's rights under all licenses and all franchise agreements shall inure to Enforcing Bank's or such Bank's benefit;
- (g) Sell the Collateral at either a public or private sale, or both,by way of one or more contracts or transactions, for cash or on terms, in such manner and at such places (including Borrower's premises) as Enforcing Bank or such Bank determines is commercially reasonable;
- (h) Enforcing Bank or such Bank may credit bid and purchase at any public sale; and
- (i) Any deficiency that exists after disposition of the Collateral as provided above will be paid immediately by Borrower.

- 9.2 POWER OF ATTORNEY. Effective only upon the occurrence and during the continuance of an Event of Default, Borrower hereby irrevocably appoints Enforcing Bank or Banks (and any of their designated officers, or employees) as Borrower's true and lawful attorney to: (a) send requests for verification of Accounts or notify account debtors of Collateral Agent's or Enforcing Bank's security interest in the Accounts, on behalf of and for the benefit of Banks; (b) endorse Borrower's name on any checks or other forms of payment or security that may come into any Collateral Agent's or Enforcing Bank's possession; (c) sign Borrower's name on any invoice or bill of lading relating to any Account, drafts against account debtors; schedules and assignments of Accounts, verification of Accounts, and notices to account debtors;(d) make, settle, and adjust all claims under and decisions with respect to Borrower's policies of insurance; and (e) settle and adjust disputes and claims respecting the accounts directly with account debtors, for amounts and upon terms which Enforcing Bank or such Bank determines to be reasonable; provided Enforcing Bank or such Bank may exercise such power of attorney to sign the name of Borrower on any of the documents described in SECTION 4.2 regardless of whether an Event of Default has occurred. The appointment of Enforcing Bank or Banks as Borrower's attorney in fact, and each and every one of Enforcing Bank's or Bank's rights and powers, being coupled with an interest, is irrevocable until all of the Obligations have been fully repaid and performed and Banks' obligation to provide advances hereunder is terminated.
- 9.3 ACCOUNTS COLLECTION. At any time from the date of this Agreement, Enforcing Bank or Banks may notify any Person owing funds to Borrower of Collateral Agent's or Enforcing Bank's security interest in such funds, on behalf of and for the benefit of Banks, and verify the amount of such Account. Borrower shall collect all amounts owing to Borrower for Bank, receive in trust all payments as Enforcing Bank's or Bank's trustee, and immediately deliver such payments to Enforcing Bank or Banks in their original form as received from the account debtor, with proper endorsements for deposit.
- 9.4 BANK EXPENSES. If Borrower fails to pay any amounts or furnish any required proof of payment due to third persons or entities, as required under the terms of this Agreement, then Banks may do any or all of the following: (a) make payment of the same or any part thereof; (b) set up such reserves under the Committed

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Revolving Line as Banks reasonably deem necessary to protect Banks from the exposure created by such failure; or (c) obtain and maintain insurance policies of the type discussed in SECTION 6.6 of this Agreement, and take any action with respect to such policies as Banks deem prudent. Any amounts so paid or deposited by Banks shall constitute Bank Expenses, shall be immediately due and payable, and shall bear interest at the then applicable rate hereinabove provided, and shall be secured by the Collateral. Any payments made by Bank shall not constitute an agreement by such Bank to make similar payments in the future or a waiver by such Bank of any Event of Default under this Agreement.

- 9.5 BANK'S LIABILITY FOR COLLATERAL. So long as each Bank complies with prudent banking practices, such Bank shall not in any way or manner be liable or responsible for: (a) the safekeeping of the Collateral; (b) any loss or damage thereto occurring or arising in any manner or fashion from any cause; (c) any diminution in the value thereof; or (d) any act or default of any carrier, warehouseman, bailee, forwarding agency, or other person whomsoever. All risk of loss, damage or destruction of the Collateral shall be borne by Borrower.
- 9.6 REMEDIES CUMULATIVE. Subject to Article 12, Banks' rights and remedies under this Agreement, the Loan Documents, and all other agreements shall be cumulative. Subject to Article 12, Banks shall have all other rights and remedies not inconsistent herewith as provided under the Code, by law, or in equity. No exercise by any Bank of one right or remedy shall be deemed an election, and no waiver by any Bank of any Event of Default on Borrower's part shall be deemed a continuing waiver. No delay by any Bank shall constitute a waiver, election, or acquiescence by it. No waiver by any Bank shall be effective unless made in a written document signed on behalf of such Bank and then shall be effective only in the specific instance and for the specific purpose for which it was given.
- 9.7 DEMAND; PROTEST. Borrower waives demand, protest, notice of protest, notice of default or dishonor, notice of payment and nonpayment, notice of any default, nonpayment at maturity, release, compromise, settlement, extension, or renewal of accounts, documents, instruments, chattel paper, and guarantees at

any time held by any Bank on which Borrower may in any way be liable.

## SECTION 10. NOTICES

Unless otherwise provided in this Agreement, all notices or demands by any party relating to this agreement or any other agreement entered into in connection herewith shall be in writing and (except for financial statements and other informational documents which may be sent by first-class mail, postage prepaid) shall be personally delivered or sent by a recognized overnight delivery service, certified mail, postage prepaid, return receipt requested, or by telefacsimile to Borrower or to each Bank, as the case may be, at its addresses set forth below:

If to Borrower: Tegal Corporation

2201 South McDowell Boulevard

Petaluma, CA 94955 Attn: David Curtis Fax: 707/763-0436

If to Banks: Imperial Bank

2460 Sand Hill Road, Suite 102 Menlo Park, CA 94025

Attn: Steve Kattner Fax: 415/233-3020

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Sanwa Bank California 444 Market Street, 23rd Floor San Francisco, CA 94111 Attn: Victoria Hankins

Fax: 415/597-5435

The parties hereto may change the address at which they are to receive notices hereunder, by notice in writing in the foregoing manner given to the other. NOTICES TO ONE BANK SHALL NOT BE DEEMED NOTICE TO THE OTHER BANK.

## SECTION 11. CHOICE OF LAW AND VENUE; JURY TRIAL WAIVER

This Agreement shall be governed by, and construed in accordance with, the internal laws of the State of California, without regard to principles of conflicts of law. Each of Borrower and Banks hereby submits to the exclusive jurisdiction of the state and Federal courts located in the County of Santa Clara, State of California. BORROWER AND BANKS EACH HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF ANY OF THE LOAN DOCUMENTS OR ANY OF THE TRANSACTIONS CONTEMPLATED THEREIN, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW OR STATUTORY CLAIMS, EACH PARTY RECOGNIZED AND AGREES THAT THE FOREGOING WAIVER CONSTITUTES A MATERIAL INDUCEMENT FOR IT TO ENTER INTO THIS AGREEMENT. EACH PARTY REPRESENTS AND WARRANTS THAT IT HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL AND THAT IT KNOWINGLY AND VOLUNTARILY WAIVERS ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

## SECTION 12. INTERCREDITOR PROVISIONS

- 12.1 OWNERSHIP OF ADVANCES. Notwithstanding any other terms of this Agreement, each Bank shall be the holder and the sole owner of the respective Advances made by such Bank, and no Bank shall have any interest in the Advances of any other Bank.
- 12.2 LIMITATION ON FURTHER LOANS. Except for daily cash transfers that arise out of the ordinary course of Borrower's cash management operations, neither Bank may make loans to or otherwise extend credit to Borrower without the consent of the other Bank, which consent will not be unreasonably withheld. Except as otherwise expressly provided herein, the provisions of this Agreement apply only to Advances arising under this Agreement.
- 12.3 DISBURSEMENTS. All Advances shall be made pro rata by Banks. Each Bank shall make the funds it is to lend under this Agreement available to Borrower no later than 3:00 p.m. Pacific time on the date of disbursement by payment to such account at Imperial, Collateral Agent or Enforcing Bank as Borrower specific. No Bank is obligated to advance any funds in lieu of or for the account of the other Bank if the latter Bank fails to make such Advance.

(A) CONSENT. If an Event of Default does not exist, no Bank may sell or otherwise transfer any of its interest in this Agreement without the prior written consent of the other Bank and the Borrower, which consent shall not be unreasonably withheld, provided that either Bank may grant to up to two (2) other financial institutions (including any Affiliate of such Bank) participations in all or any part of such Bank's obligations, rights and benefits hereunder without obtaining the other Bank's consent. The grant of a participation interest shall be on such terms as the Bank granting the participation determines are appropriate, provided only that (1) the holder of such a participation interest shall not have any of the rights of a Bank under this Agreement except, if the participation agreement so provides, rights to demand the payment of costs of the type described in SECTION 2.5,

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provided that the aggregate amount that the Borrower shall be required to pay under SECTION 2.5 with respect to any ratable share of the Committed Revolving Line or any Advance (including amounts paid to participants) shall not exceed the amount that Borrower would have had to pay if no participation agreements had been entered into, and (2) the consent of the holder of such a participation interest shall not be required for amendments or waivers of provisions of the Loan Agreement other than those which (i) increase the amount of the Committed Revolving Line, (ii) extend the term of this Agreement, (iii) decrease the rate of interest or the amount of any fee or any other amount payable to such participant under this Agreement. Notwithstanding the grant of participation, the Bank granting the participation shall remain solely responsible for the performance of its obligations under this Agreement, and Borrower shall continue to deal with such Bank in connection with this Agreement. Each proposed transferee shall satisfy all of the requirements of this SECTION 12.4 as a condition to any such transfer.

- (b) ASSUMPTION OF OBLIGATIONS. Each assignee (other than a participant) shall assume all obligations of the transferring Bank with respect to the portion of the transferor's interest under this Agreement so assigned pursuant to documentation substantially in the form of EXHIBIT E hereto. Upon such assumption, Borrower shall be deemed to release and discharge the transferor from the transferor's obligations to Borrower under this Agreement with respect to the portion of the transferor's obligations assumed by the transferee, and such transferee shall be deemed a Bank hereunder.
- (c) LEGAL AUTHORITY AND FINANCIAL ABILITY. The transferee shall provide to the remaining Bank(s) and the Borrower evidence satisfactory to the remaining Bank(s) and the Borrower that the proposed transferee has the legal authority and financial ability to assume and perform all obligations of the transferring Bank under this Agreement and the Loan Documents.
- (d) RECEIVE AND HOLD INTEREST. The transferee shall agree in writing (in form satisfactory to the remaining Bank and Borrower) to receive and hold the transferred interest subject to all of the provisions of this Agreement.
- (e) CONFIDENTIALITY. Subject to SECTION 13.8 hereof, Borrower authorizes each Bank to disclose to any prospective transferee and any actual transferee any and all information designated by Borrower as confidential, in such Bank's possession concerning Borrower and this Agreement, subject to such prospective transferee or actual transferee agreeing to hold such information confidential, in accordance with SECTION 13.8 hereof. Provided that such prospective transferee or actual transferee has executed a confidentiality agreement in favor of the Borrower agreeing to the provisions of SECTION 13.8 hereof, neither Bank shall be responsible if such prospective transferee or actual transferee fails to hold such information confidentially.
- (f) VOIDABILITY. Any sale or transfer of an interest in this Agreement shall be voidable at the option of the remaining Bank or Borrower unless the provisions of this SECTION 12.4 are satisfied.
- 12.5 INFORMATION. Each Bank shall use efforts that are reasonable under the circumstances to deliver to the other Bank copies of reports and all other documents received from Borrower or otherwise relating to this Agreement, and to share all other material information relating to Borrower or to this

Agreement that such Bank receives. Neither Bank shall be responsible for the accuracy, of any information shared pursuant to this SECTION 12.5, nor shall either Bank be liable to the other for any damages incurred as a result of any reliance on such shared information.

12.6 PROPORTIONATE INTERESTS. Except as otherwise provided in this Agreement, the rights, interests, and obligations of each Bank under this Agreement and the Loan Documents at any time shall be shared in the ratio (expressed as a percentage) of (a) the maximum amount the Bank has committed to advance as set forth on the signature page signed by the Bank to (b) the Committed Revolving Line (the "PERCENTAGE SHARE"). Any reference in this Agreement or the Loan Documents to an allocation between or sharing by the Banks of any right, interest, or duty "ratably," "proportionally," "pro rata" or in similar terms shall refer to this ratio.

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12.7 ALLOCATION OF PAYMENTS. All amounts received by Banks for the account of Borrower, whether by payment, set-off, counterclaim, or otherwise, shall be allocated and paid to Banks as necessary to ensure a sharing of all amounts received on account of the Advances as contemplated in SECTION 12.6. Each Bank shall promptly remit to Collateral Agent or Enforcing Bank for disbursement to the other Banks such sums (whether received by the Bank for the account of Borrower or otherwise) as may be necessary to ensure a sharing of all amounts received on account of the Advances as contemplated in SECTION 12.6. The Banks likewise shall contribute in such proportions as are necessary to ensure a sharing as contemplated in SECTION 12.6 if any amount received for the account of Borrower is required to be returned as a voidable transfer or otherwise. All amounts received with respect to any other obligations at the time when Borrower is not in compliance with all of the material provisions of this Agreement and the Loan Documents shall be applied to the Obligations hereunder unless the Banks agree otherwise.

12.8 DETERMINATION OF A COURSE OF ACTION UPON DEFAULT. Each Bank will promptly advise the other if it acquires knowledge that an Event of Default has occurred or with the passage of time, will occur, or that Borrower is not likely to be in compliance with any financial covenant as of any measurement date. Banks shall use efforts that are reasonable under the circumstances to consult with each other before taking any action to enforce this Agreement or the Loan Documents or to collect or enforce the Obligations under the Loan Documents. In connection therewith, the Enforcing Bank may engage such attorneys and other agents as it may deem appropriate. The Enforcing Bank may deduct from the gross proceeds of any action or other collective effort any reasonable costs and expenses, including reasonable attorneys fees, incurred in connection with such action or effort. The Enforcing Bank will not be liable to the other Bank for any act or omission in the absence of the Enforcing Bank's gross negligence or willful misconduct.

## 12.9 FORECLOSURE.

- (a) CREDIT BID BY BANKS. The Enforcing Bank shall have the exclusive right to enter a credit bid at any foreclosure sale or other sale of any of the Collateral on behalf of both the Enforcing Bank and the other Bank. If the Banks cannot agree on the amount of an opening credit bid, the Bank advocating the lower bid shall prevail in the use of such lower bid as the opening credit bid. If the Banks are the successful bidder at the sale, then (a) the amount to be credited against the Credit shall be allocated between the Banks in proportion to the balances of their respective Obligations under the Loan Documents; and (b) the Banks shall take title to the Collateral so purchased together, each holding an undivided interest in that Collateral in proportion to the amount credited against its Obligations under the Loan Documents.
- (b) CASH BID FOR ACCOUNT OF ONE BANK. Either Bank shall have the right to enter a cash bid for such Bank's own account at any sale. If such bid is the successful one, then (a) the proceeds of the sale shall be allocated and paid to each Bank in proportion to the outstanding balance of its Obligations under the Loan Documents, and (b) the Bank that entered the bid shall acquire the Collateral so purchased for its own account, and the other Bank shall have no further interest in that Collateral upon payment to such other Bank of its proportionate share of the sale proceeds in cash.
- (c) THIRD PARTY BID. If the successful bid is entered by a third party, then the sale proceeds shall be shared by the Banks as provided in

- 12.10 OTHER OBLIGATIONS. A Bank shall not obtain any interest in any property of the Borrower taken as security for any loan made or acquired by such Bank outside of this Agreement, or in any property in the possession or control of such Bank, unless such other property or the proceeds thereof is applied to an Obligation arising under this Agreement or the Loan Documents, in which case banks shall share proportionately in such property or proceeds.
- 12.11 INDEPENDENT REVIEW. Each Bank has reviewed this Agreement and the Loan Documents, the financial statements of Borrower, and such other materials as the Bank has deemed appropriate. Each Bank has made its decision to execute this Agreement and the Loan Documents based upon its review and its independent

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evaluation of Borrower's creditworthiness. No Bank has made any representation, and no Bank shall rely on any alleged representation by any other Bank, as to the form, substance, or enforceability of this Agreement or any of the Loan Documents or the ability of any party thereto to pay any debt or perform any obligation. Each Bank is a sophisticated commercial bank experienced in making loans to companies similar to Borrower. Subject to SECTION 12.5, each Bank shall make its own decision as how to perform its obligations hereunder. Each Bank has the capacity to protect its own interests in connection with, and evaluate the merits and risks of, the transactions contemplated by this Agreement. Each Bank has had an opportunity to ask questions of the Borrower and its officers, employees, accountants, and representatives concerning Borrower's business operations, financial condition, assets, liabilities, and all other matters the Bank deems appropriate in connection with the transactions contemplated by this Agreement, and has based its decision to enter into those transactions on such information.

- 12.12 DUE AUTHORIZATION. The execution, delivery, and performance of this Agreement and the Loan Documents have been duly authorized by all requisite corporate or other actions of each Bank. This Agreement and each Loan Document to which each Bank is a party, is a valid and binding obligation of such Bank, legally enforceable in accordance with its terms.
- 12.13 DESIGNATION OF COLLATERAL AGENT. To facilitate the administration of this Agreement, Imperial shall act as "COLLATERAL AGENT" for itself and Sanwa. Collateral Agent or Enforcing Bank shall have only such duties as are expressly set forth in this Agreement, or as otherwise agreed in writing by the Banks. Collateral Agent or Enforcing Bank shall be deemed to act on behalf of both Banks whenever Collateral Agent or Enforcing Bank acts under this Agreement.
- 12.14 RESIGNATION. Collateral Agent may resign as Collateral Agent, upon thirty (30) day's written notice to the other Banks and to Borrower and appointment of a successor Collateral Agent. Upon receipt of notice of resignation, the Banks shall appoint a successor Collateral Agent which, if an Event of Default does not exist, shall be reasonably acceptable to Borrower. The resigning Collateral Agent shall cooperate fully in delivering to the successor Collateral Agent the Loan Documents and copies of all records relating to the Advances and payments made hereunder that the successor Collateral Agent reasonably requests.
- 12.15 NO REAL ESTATE COLLATERAL. Each Bank agrees with, and for the benefit of, the other Bank (which agreement shall not be for the benefit of Borrower or any of its Subsidiaries) that Borrower's Obligations to such Bank under this Agreement and the other Loan Documents are not and shall not be secured by any real property collateral now or hereafter acquired by such Bank.
- 12.16 LOAN COLLECTIONS. Subject to the provisions of this Agreement, Collateral Agent or Enforcing bank shall have the right, and shall use reasonable efforts, to collect all sums due under this Agreement. All sums collected by any Bank shall be held in trust by that Bank as trustee for the benefit of all Banks in accordance with this Agreement.
- 12.17 REPORTS. Collateral Agent or Enforcing Bank shall use reasonable efforts to deliver to Banks notices from Borrower and reports concerning Borrower that Collateral Agent receives pursuant to this Agreement. Collateral Agent shall have no obligation to deliver any such notices or reports that Borrower or a third party simultaneously has forwarded to Banks.

Agent and Enforcing Bank shall act or refrain from acting in accordance with the instructions of the Banks. In so doing, Collateral Agent and Enforcing Bank may engage such attorneys and other agents to act on behalf of the Banks as Collateral Agent or the Enforcing Bank may deem appropriate and shall make reasonable efforts to keep Banks appraised of all material actions taken. Action taken by Collateral Agent or Enforcing Bank pursuant to the instruction of Banks shall not be deemed to be discretionary action. In any case where this Agreement, the Loan Documents, or the Banks have not directed Collateral Agent or Enforcing Bank to perform specific acts or omissions, Collateral Agent or Enforcing Bank may take or omit such actions as Collateral Agent or Enforcing Bank deems to be appropriate, and in the absence of gross negligence or willful misconduct, Banks shall not later bring a claim against Collateral Agent or

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Enforcing Bank if, in hindsight, they disagree with Collateral Agent's or Enforcing Bank's acts or omissions. Collateral Agent and Enforcing Bank shall not be liable to Banks for any act or omission in the absence of Collateral Agent's or Enforcing Bank's, respectively, own gross negligence or willful misconduct.

12.19 EXPENSES. Upon request, Banks shall promptly reimburse Collateral Agent and Enforcing Bank for their ratable share of any reasonable fees, costs, and expenses Collateral Agent or Enforcing Bank may incur in connection with this Agreement. Upon request, Collateral Agent or Enforcing Bank shall provide to Banks written evidence of such fees, costs, and expenses. If any Bank fails to so reimburse Collateral Agent or Enforcing Bank, Collateral Agent or Enforcing Bank may deduct the amount due from any amount to be remitted to such Banks. If the funds due a non-reimbursing Bank are not sufficient to pay the non-reimbursing Bank's share of Collateral Agent's or Enforcing Bank's fees, costs, and expenses, the other Banks shall make up the unreimbursed amount in accordance with the Bank's proportionate interests as set forth in SECTION 12.6.

12.20 COMMUNICATION. Collateral Agent and Enforcing Bank shall promptly inform Banks if Collateral Agent or Enforcing Bank receives any communication from Borrower calling for action on the part of Banks, or if Collateral Agent or Enforcing Bank concludes that an Event of Default has occurred under this Agreement.

12.21 LIMITED LIABILITY OF COLLATERAL AGENT AND ENFORCING BANK. Except as provided in SECTION 12.18 in this Agreement, Collateral Agent and Enforcing Bank shall not be liable or answerable to Banks for anything whatsoever in connection with this Agreement or the Loan Documents, including responsibility in respect to the execution, construction, or enforcement of this Agreement or the Loan Documents, except to the extent of Collateral Agent's or Enforcing Bank's Percentage Share of such liability. Collateral Agent and Enforcing Bank have no duties or obligations to Banks other than as provided in this Agreement. Collateral Agent and Enforcing Bank may rely on any opinion of counsel (including counsel for Borrower) in relations to this Agreement and the Loan Documents, and upon statements and communications received from Borrower, or from any other person believed by Collateral Agent or Enforcing Bank to be authentic. Collateral Agent and Enforcing Bank shall not be liable for any action taken or omitted on such reliance.

12.22 INDEMNIFICATION OF COLLATERAL AGENT AND ENFORCING BANK. Each Bank shall indemnify, defend, and hold Collateral Agent and Enforcing Bank harmless (to the extent not reimbursed by Borrower), according to its pro rata interest, from and against any and all liabilities, obligations, losses, damages, penalties, claims, actions, judgments, suits, costs, expenses, and disbursements of any kind or nature whatsoever (including attorneys fees) that may be imposed on, incurred by, or asserted against Collateral Agent or Enforcing Bank in any way relating to or arising out of this Agreement or the Loan Documents, except that Collateral Agent and Enforcing Bank shall not be indemnified against its own gross negligence or willful misconduct.

12.23 COLLATERAL AGENT AND ENFORCING BANK AS BANK. Collateral Agent and Enforcing Bank shall have the same rights and powers under this agreement as any other Bank and may exercise the same as though it were not Collateral Agent or Enforcing Bank. The term "Banks" includes Collateral Agent in Collateral Agent's individual capacity and Enforcing Bank in Enforcing Bank's individual capacity. Subject to the provisions of SECTION 12.2, Collateral Agent or Enforcing Bank and their Subsidiaries and Affiliates may accept deposits from, lend money to, act as agent or trustee for other lenders to, and generally engage in any kind of banking, trust, or other business with, Borrower or any Subsidiary or

Affiliates as if Collateral Agent were not Collateral Agent and as if Enforcing Bank were not Enforcing Bank.

12.24 CREDIT DECISION. Each Bank shall make its own independent investigations of the financial condition and affairs of Borrower and its own appraisal of the credit-worthiness of Borrower in connection with its interest this Agreement. Except as set forth in this Agreement, Agent has no duty to provide any Bank with any information (other than information provided pursuant to this Agreement), whether coming into Agent's possession before the Closing Date or at any time thereafter.

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12.25 NO AGENCY. EXCEPT AS SPECIFIED HEREIN, NEITHER BANK IS AN AGENT OF THE OTHER. NEITHER BANK HAS ANY AUTHORITY TO ACT OR FAIL TO ACT FOR THE OTHER. THE OBLIGATIONS OF EACH BANK HEREUNDER ARE SEVERAL. NO BANK SHALL BE LIABLE FOR THE FAILURE OF ANY OTHER BANK TO PERFORM ITS OBLIGATIONS HEREUNDER.

12.26 NO RELIANCE. The provisions of this Article 12 (except for SECTIONS 12.3, 12.4, AND 12.14) are solely for the benefit of Banks in specifying their rights and obligations with respect to each other, and not for the benefit of Borrower or its assigns or successors.

## SECTION 13. GENERAL PROVISIONS

- 13.1 SUCCESSORS AND ASSIGNS. This Agreement shall bind and inure to the benefit of the respective successor and permitted assigns of each of the parties; provided, however, that neither this Agreement nor any rights hereunder may be assigned by Borrower without each Bank's prior written consent, which consent may be granted or withheld in each Bank's sole discretion, provided further, that assignment by each Bank is subject to SECTION 12.4 hereof.
- 13.2 INDEMNIFICATION. Borrower shall defend, indemnify and hold harmless Collateral Agent, Enforcing Bank and each Bank and it officers, employees, and agents against: (a) all obligations, demands, claims, and liabilities claimed or asserted by any other party in connection with the transactions contemplated by this Agreement; and (b) all losses or Bank Expenses in any way suffered, incurred, or paid by such Bank as a result of or in any way arising out of, following, or consequential to transactions between such Bank and Borrower whether under this Agreement, or in connection with any matter related hereto (including without limitation reasonable attorneys fees and expenses), except for losses caused by such Bank's gross negligence or willful misconduct.
- 13.3 TIME OF ESSENCE. Time is of the essence for the performance of all obligations set forth in this Agreement.
- 13.4 SEVERABILITY OF PROVISIONS. Each provision of this Agreement shall be severable from every other provision of this Agreement for the purpose of determining the legal enforceability of any specific provision.
- 13.5 AMENDMENTS IN WRITING, INTEGRATION. This Agreement cannot be amended or terminated orally. All prior agreements, understanding, representations, warranties, and negotiations between the parties hereto with respect to the subject matter of this Agreement, if any, are merged into this Agreement and the Loan Documents.
- 13.6 COUNTERPARTS. This Agreement may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, shall be deemed to be an original, and all of which, when taken together, shall constitute but one and the same Agreement.
- 13.7 SURVIVAL. All covenants, representations and warranties made in this Agreement shall continue in full force and effect so long as any Obligations remain outstanding. The obligations of Borrower to indemnify Banks with respect to the expenses, damages, losses, costs and liabilities described in SECTION 13.2 shall survive until all applicable statute of limitations periods with respect to actions that may be brought against Banks have run, provided that so long as the obligations set forth in the first sentence of this SECTION 13.7 have been satisfied, and neither bank has a commitment to make any Advances or to make any other loans to Borrower hereunder, Collateral Agent, Enforcing Bank and Banks shall release all security interests granted hereunder and redeliver all Collateral held by it in accordance with applicable law.

13.8 CONFIDENTIALITY. In handling any confidential information each Bank shall exercise the same degree of care that it exercises with respect to its own proprietary information of the same types to maintain the confidentiality of any non-public information received or received pursuant to this Agreement except that disclosure of such information may be made (i) to the subsidiaries or affiliates of such Bank in connection with their present

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or prospective business relations with Borrower, (ii) to prospective transferees or purchasers of any interest in the Loans, provided that they have entered into a comparable confidentiality agreement in favor of Borrower and have delivered a copy to Borrower, (iii) as required by law, regulations, rule or order, subpoena, judicial order or similar order and (iv) as may be required in connection with the examination, audit or similar investigation of such Bank. Confidential information hereunder shall not include information that either: (a) is in the public domain or becomes part of the public domain after disclosure to such Bank through no fault of such Bank; or (b) is disclosed to such Bank by a third party, provided such Bank does not have actual knowledge that such third party is prohibited from disclosing such information.

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IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the date first above written.

TEGAL CORPORATION

By: [SIG]
Title: President & CEO
By: /s/ DAVID CURTIS
Title: Vice President & CFO
IMPERIAL BANK
By:
Title:
Maximum Commitment Amount: \$12,500,000 (62.5%)
SANWA BANK CALIFORNIA
By:
Title:

Maximum Commitment Amount: \$7,500,000 (37.5%)

26. EXHIBIT A The Collateral shall consist of all right, title and interest of Borrower in and to the following:

- (a) All goods and equipment now owned or hereafter acquired, including, without limitation, all machinery, fixtures, vehicles (including motor vehicles and trailers), and any interest in any of the foregoing, and all attachments, accessories, accessions, replacements, substitutions, additions, and improvements to any of the foregoing, wherever located;
- (b) All inventory, now owned or hereafter acquired, including, without limitation, all merchandise, raw materials, parts, supplies, packing and shipping materials, work in process and financial products including such inventory as is temporarily out of Borrower's custody or possession or in transit and including any returns upon any accounts or other proceeds, including insurance proceeds, resulting from the sale or disposition of any of the foregoing and any documents of title representing any of the above;
- (c) All contract rights and general intangibles now owned or hereafter acquired, including, without limitation, goodwill, trademarks, servicemarks, trade styles, trade names, patents, patent applications, leases, license agreements, franchise agreements, blueprints, drawings, purchase orders, customer lists, route lists, infringements, claims, computer programs, computer discs, computer tapes, literature, reports, catalogs, design rights, income tax refunds, payments of insurance and rights to payment of any kind;
- (d) All now existing and hereafter arising accounts, contract rights, royalties, license rights and all other forms of obligations owing to Borrower arising out of the sale or lease of goods, the licensing of technology or the rendering of services by Borrower, whether or not earned by performance, and any and all credit insurance, guaranties, and other security therefor, as well as all merchandise returned to or reclaimed by Borrower;
- (e) All documents, cash, deposit accounts, securities, investment property, letters of credit, certificates of deposit, instruments and chattel paper now owned or hereafter acquired and Borrower's Books relating to the foregoing;
- (f) All copyright rights, copyright applications, copyright registrations and like protections in each work of authorship and derivative work thereof, whether published or unpublished, now owned or hereafter acquired; all trade secret rights, including all rights to unpatented inventions, know-how, operating manuals, license rights and agreements and confidential information, now owned or hereafter acquired; all mask work or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired; all claims for damages by way of any past, present and future infringement of any of the foregoing; and
- (g) All Borrower's Books relating to the foregoing and any and all claims, rights and interests in any of the above and all substitutions for, additions and accessions to and proceeds thereof.

#### 1. EXHIBIT B

LOAN PAYMENT/ADVANCE TELEPHONE REQUEST FORM DEADLINE FOR SAME DAY PROCESSING IS 11:00 A.M., P.S.T.

TO: FAX#:	DATE: TIME:
FROM:	CLIENT NAME(BORROWER)
REQUESTED BY:	AUTHORIZED SIGNER'S NAME
AUTHORIZED SIGNATURI	E:

PHONE NUMBER:

FROM ACCOUNT #	TO ACCOUNT #
<table> <caption> REQUESTED TRANSACTION TYPE</caption></table>	REQUEST DOLLAR AMOUNT
<pre><s></s></pre>	\$ \$ \$ \$
PRINCIPAL AND INTEREST (PAYMENT)	

 \$ || OTHER INSTRUCTIONS: |  |
All representations and warranties of Borr Security Agreement are true, correct and comp of the date of the telephone request for and Ac Borrowing Certificate; provided, however, the warranties expressly referring to another date complete in all material respects as of such date	plete in all material respects as dvance confirmed by this at those representations and shall be true, correct and
BANK USE ONLY	
TELEPHONE REQUEST:	
The following person is authorized to request advance on the advance designated account ar	
Phone #	
Authorized Requester	
Phone #	
Received By (Bank)	
Authorized Signature (Bank)	
1.	
EXHIBIT C	
COMPLIANCE CERTIFIC	CATE
The consolidated financial statements dated as CORPORATION ("Borrower") attached heret ("Imperial") and SANWA BANK CALIFORN	to and submitted to IMPERIAL BANK
CORPORATION ("Borrower") attached hereto and submitted to IMPERIAL BANK ("Imperial") and SANWA BANK CALIFORNIA ("Sanwa," collectively, the "Banks pursuant to that certain Loan and Security Agreement dated as of August 15, 1997 entered into between Borrower and Banks (the "Loan Agreement"), shows compliance with all financial covenants (unless otherwise noted below) as

specified therein, as follows:		
<table> <caption> QUARTERLY COVENANT <s></s></caption></table>	Γ: <c></c>	ACTUAL:
a. Minimum Tangible No	et Worth of:	
\$40,000,000		
b. Maximum Liabilities	to Tangible Net Worth Rat	tio:
0.75:1.00		
c. Minimum Quick Ratio	o:	
1.25:1.00		
d. Maximum Pre-Tax Lo	osses not greater than:	
	luding (i) non-recurring and (ii) R&D expense in	
Exceptions: (if none, so state	e):	
The undersigned authorized of capacity that Borrower is in of the Loan Agreement for the date of this Compliance Certiferein are true, accurate and those representations and was date and except as noted about the undersigned further certification may cause an Event of in the next thirty (30) days. The certification are attached and accepted accounting principles.	complete compliance with the period ending ificate the representations complete as of the date he tranties which specifically ve).  ifies that s/he knows of no f Default (as defined in the The required support documents) for the prepared in accordance with the properties of the properties o	the terms and conditions
Date:	TEGAL CORPORAT	ΓΙΟΝ
	By: Name: Title:	
1.		
EXHIE	BIT D	
NOT	 E	

On the Revolving Maturity Date, and as hereinafter provided, for value received, the undersigned promises to pay to ("Bank"), a California banking corporation, or order, at its San Jose, California office, the lesser of (i) the principal sum of \$ sums up to such maximum as the Bank may now or hereafter advance to or for the benefit of the undersigned in accordance with the terms of that certain Loan and Security Agreement by and among the undersigned, Bank, and Sanwa Bank of California of even date herewith, as amended from time to time (the "Loan Agreement"), together with interest from date of disbursement on the unpaid principal balance at the Prime Rate (as defined in the Loan Agreement), which shall vary concurrently with any change in such Prime Rate. Interest shall be computed at the above rate on the basis of the actual number of days during which the principal balance is outstanding, divided by 360, which shall, for interest computation purposes, be considered one year. All capitalized terms not otherwise defined herein shall have the meanings given to such terms in the Loan Agreement.

Interest shall be payable monthly in arrears beginning September 15, 1997, and if not so paid shall become a part of the principal. All payments shall be applied first to interest, and the remainder, if any, on principal. Advances not to exceed any unpaid balance owing at any one time equal to the maximum amount specified above, may be made at the option of Bank.

Should any Event of Default occur and be continuing, the entire balance of principal and accrued interest then remaining unpaid may become immediately due and payable in accordance with the terms of the Loan Agreement. Should an Event of Default occur and be continuing under Section 8.1 of the Loan Agreement, all principal and accrued interest then due and remaining unpaid shall thereafter bear interest, until paid, at the increased rate of 2% per year in excess of the rate provided for above, as it may vary from time to time.

If this note is not paid when due, Borrower promises to pay all costs and expenses of collection and reasonable attorney fees incurred by the holder hereof on account of such collection, plus interest at the rate applicable to principal, whether or not suit is filed hereon. Borrower shall be liable hereon and consents to renewals, replacements and extensions of time for payment hereof, before, at, or after maturity; consents to the acceptance, release or substitution of security for this note; and waives demand and protest and the right to assert any statute of limitations. The indebtedness evidenced hereby shall be payable in lawful money of the Untied States. In any action brought under or arising out of this note, Borrower, including successor(s) or assign(s) hereby consents to the application of California law, to the jurisdiction of any competent court within the State of California, and to service of process by any means authorized by California law.

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No single or partial exercise of any power hereunder, or under any deed of trust, security agreement or other agreement in connection herewith shall preclude other or further exercises thereof or the exercise of any other such power. Subject to the terms of the Loan Agreement, the holder hereof shall at all times have the right to proceed against any portion of the security for this note in such order and in such manner as such holder may consider appropriate, without waiving any rights with respect to any of the security. Any delay or omission on the part of the holder hereof in exercising any right hereunder, or under any deed of trust, security agreement or other agreement, shall not operate as a waive of such right, or of any other right, under this note or any deed of trust, security agreement or other agreement in connection herewith.

**TEGAL CORPORATION** 

Ву:			
Title			

By:	
Title:	
2. EXHIBIT E	
ASSIGNMENT AND ACCEPTANCE	
ASSIGNMENT AND ACCEPTANCE dated, between	
("Assignor") and	
"Assignee").	
PRELIMINARY STATEMENT	
A. Reference is made to the Loan and Security Agreement dated as of August 15, 1997 (as the same may from time to time hereafter be amended, modified, supplemented or restated, the "Loan Agreement"), among Tegal Corporation (the "Borrower"), Imperial Bank and Sanwa Bank (the "Banks"), and Imperial Bank as the Collateral Agent for the Banks. Capitalized terms used but not otherwise defined herein have the meanings given them in the Loan Agreement.	
B. Assignor is a Bank under and as defined in the Loan Agreement and, as such, presently has the following Commitment to Borrower:	
Committed Revolving Line \$	
C. On the terms and conditions set forth below, Assignor desires to sell and assign to Assignee, and Assignee desires to purchase and assume from Assignor, a% interest (the "Revolving Line Assigned Percentage") in and to all of Assignor's rights and obligations under the Committed Revolving Line as of the effective Date (as defined below), representing a Commitment under the Committed Revolving Line of Dollars \$	
D. After giving effect to the assignments described in Section C above, he respective Loans of Assignor and Assignee under the Loan Agreement will be:	
Assignor	
Committed Revolving Line \$	
Assignee	
Committed Revolving Line \$	
NOW, THEREFORE, Assignor and Assignee hereby agree as follows:	
1. Assignor hereby sells and assigns to Assignee, WITHOUT RECOURSE, and Assignee hereby purchases and assumes from Assignor, the Revolving Line Assigned Percentage of Assignor's rights and obligations under the Loan Agreement as of the Effective Date.	
1.	
2. ASSIGNOR:	
(a) represents and warrants that as of the date hereof its principal amount outstanding under the Committed Revolving Line (without giving effect to assignments thereof which have not yet become effective) are as follows:	
Committed Revolving Line \$	
(b) managed and managed that it is the local and beneficial	

(b) represents and warrants that it is the legal and beneficial owner of the interest being assigned by it hereunder and that such interest is free and clear of any adverse claim;

- (c) makes no representations or warranty and assumes no responsibility with respect to any statements, warranties or representations made in or in connection with the Loan Agreement or the execution, legality, validity, enforceability, genuineness, sufficiency or value of the Loan Agreement or any other Loan Document furnished pursuant thereto; and
- (d) makes no representations or warranty and assumes no responsibility with respect to the financial condition of the borrower or the performance or observance by the Borrower or any of its obligations under the Loan Agreement or any other Loan Document furnished pursuant thereto.

#### 3. ASSIGNEE:

- (a) confirms that it has received a copy of the Loan Agreement, together with copies of such other documents and information as it has deemed appropriate to make its own credit analysis and decision to enter this Assignment and Acceptance;
- (b) agrees that it will, independently and without reliance upon the Assignor or any other Bank and based on such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action under the Loan Agreement and any other Loan Documents:
- (c) represents and warrants that commercial loans of money made by Assignee of the type contemplated by the Loan Agreement are exempt from the "usury" restrictions of Section 1 of Article XV of the California Constitution; and
- (d) agrees that it will perform in accordance with their terms all of the obligations which by the terms of the Loan Agreement and the other Loan Documents are required to be performed by Bank hereunder.
- 4. Following the execution of this Assignment and Acceptance by Assignor and Assignee, it will be delivered to the Banks for acceptance and recording by the Banks and acceptance by the Borrower. The effective date for this Assignment and Acceptance shall be \_\_\_\_\_\_, \_\_\_\_ (the "Effective Date"), subject to acceptance by the Banks and the Borrower.

- 5. Subject to and upon such acceptance and recording as the Effective Date, (a) Assignee shall be a party to the Loan Agreement and shall be entitled to the rights and benefits of the Loan Documents and, to the extent of the percentage assigned in this Assignment and Acceptance, have the rights and obligations of a Bank thereunder and (b) Assignor shall, to the extent of the percentage assigned in this Assignment and Acceptance, relinquish its rights and be released from its obligations under the Loan Agreement and the other Loan Documents. Assignor shall retain all rights applicable to it under the Loan Agreement relating to credits extended, acts or omissions made, or other matters arising, prior to the Effective Date.
- 6. Upon such acceptance and recording, from and after the Effective Date, Imperial or the Collateral Agent shall make all payments under the Loan Agreement which are payable by Imperial or the Collateral Agent for the account of the appropriate Bank to the appropriate Banks severally in proportion to their respective percentages determined after giving effect to this assignment, when payment is due. Assignor and Assignee shall make all appropriate adjustments in payments under the Loan Agreement and the other Loan Documents for periods prior to the Effective Date directly between themselves.
- 7. Assignee's address for the purpose of receiving notices under the Loan Agreement is as set forth below Assignee's signature below.

	<i>5.</i>
8.	This Assignment and Acceptance shall be governed by, and construed in
accord	dance with, the law of the State of California.

-			
By:			
-			

	Printed Name:
	Title:
	By:
	Printed Name:
	Title:
	Address for notices:
ACCEPTED this,	
TEGAL CORPORA	
a Delaware corporation	on
By:	
Printed Name:	
Title	
	4.
TEGAL CORPORA	ΓΙΟΝ
	DEBTEDNESS EXISTING ON AUGUST 15, 1997
Telogy	3,538.00
Phoenixcor	319,614.39
Xerox Tokai Financing	63,436.96 132,057,28
Hewlett Packard	9,922.95
Total 5:	28,569.58 

	VESTMENTS EXISTING ON AUGUST 15, 1997	
~~<< Monarch Fund Balan~~	C> ce	
August 15, 1997	\$ 27,312,590	
===		
\/ TABLE>		
Schedule 2		
Indebtedness in Japan	n under Note Discount Facility on August 5, 1992	
TEGAL CORPORA	ΠΟΝ	
Japan line of credit A	august 15, 1997	
	ount Credit used Credit available	
Sumitomo bank 30	00,000,000 116,961,161 183,038,839	
Sanwa bank 300	,000,000 163,857,984 136,142,016	
600,000,000 280,819,145 319,180,855 U.S.D. U.S.D. U.S.D. Sumitomo bank 2,528,445 985,766 1,542,679 Sanwa bank 2,528,445 1,381,020 1,147,425 5,056,890 2,366,786 2,690,104

</TABLE>

note: additional note payable to vendor EDWARDS 1,648,500 yen equals EDWARDS 1,648,500 yen 13.894

2,380,680 tegal trial balance

Page 1

**SCHEDULE 4** 

**TEGAL CORPORATION** 

SCHEDULE OF LIENS

#OF

<TABLE> <CAPTION>

**DEBTOR** SECURED PARTY STATEMENT DESCRIPTION DATE <S> <C> <C> <C> <C> **Tegal Corporation** Advanta Leasing Corp. 92164161 July 27, 1992 Security System **Tegal Corporation** IBM Credit Corp. 93010582 January 19, 1993 Computer Equipment **Tegal Corporation** IBM Credit Corp. 93025753 February 4, 1993 Computer Equipment **Tegal Corporation** Imperial Bank 93060947 March 26, 1993 Tencor Thin Film Monitor **Tegal Corporation** Telogy Inc. 93105519 May 25, 1993 Equipment as specified on Financing Statement June 3, 1993 **Tegal Corporation** Vendor Funding Co. Inc. 93106749 Computer Printer **Tegal Corporation** First Trust Natl. Assoc. 94052673 March 25, 1994 Tencor Thin Film Monitor as Trustee et al Natl. Westminster BK USA as Agent May 18, 1994 Computer Equipment **Tegal Corporation** Hewlett-Packard Co. 94099133 May 2, 1995 **Tegal Corporation** IBM Credit Corporation 9512460008 Computer Equipment IBM Credit Corporation **Tegal Corporation** 9512460013 May 2, 1995 Computer Equipment **Tegal Corporation** Master Lease Div. of Tokai 9515160413 May 26, 1995 Telephone Equipment Financial Serv. **Tegal Corporation** Phoenixcor, Inc. 9518060408 June 27, 1995 Electron Microscope **Tegal Corporation** Phoenixcor, Inc. 9522960906 August 15, 1995 Long Scan Profiler **Tegal Corporation** Phoenixcor, Inc. 9522960920 Film Surface Analysis System August 15, 1995 **Tegal Corporation** Master Lease Div. of Tokai 9604460275 February 8, 1996 Telephone System Financial Serv. </TABLE>

**TEGAL CORPORATION** 

WORLDWIDE INVENTORY LOCATIONS

DOMESTIC

California

2201 S. McDowell Blvd. Petaluma, CA 94955

1095 E. Duane Avenue

Suite 103

Sunnyvale, CA 94086

Arizona

1270 Broadway Road

Suite 214A

Tempe, AZ 85282

Texas

US Courier

8711 Burnett, Suite H95

Austin, TX 78757

FOREIGN - EUROPE FOREIGN - ASIA

Austria Japan

Herrgott Wiesgasse 99 Kanagawa Science Park

8020 Graz, Austria Building B, 1013 3-2-1, Sakado, Takatsu-ku

Kawasaki-shi

France Kanagawa Prefecture

Japan 251

ZA de L'Observatoire

4 Avenue des Trois Peuples Taiwan

78180 Montigny le Bretonneux 13F-1, No. 295, Sec. 2

Paris France Kuang Fu Road, Hsin-Chu

Taiwan, ROC 300

Page Two

FOREIGN -- EUROPE (CONTINUED) FOREIGN -- ASIA (CONTINUED)

Germany Korea

Lise-Meitner - Str. 3 6F, Heung-Kuk B/O,6-7 85716 Unterschleissheim Sunae-Dong, Bundang-Ku

Germany Sungnam-City, Kyungki-Do

Korea

Italy

Contrada Vazzano SS 121 Km 9,200 95040 Piano Tavola(CT)

Italy

Netherlands

Air Express Internatinal Celsiusweg 66 5928 PR Venlo 5928 PR Venlo The Netherlands

### EMPLOYMENT AGREEMENT

THIS AGREEMENT between Tegal Corporation ("Tegal") and Michael L. Parodi ("Parodi") is dated and entered into as of December 17, 1997. Tegal and Parodi hereby agree as follows:

### **RECITALS**

Parodi 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 Parodi, and Parodi will accept employment by Tegal, as its President and Chief Executive Officer, with such duties and responsibilities consistent with such offices. The Board of Directors of Tegal (the "Board") shall use its best efforts to have Parodi as a director during the entire term of this Agreement.
- 2. Other Business. Parodi will devote his time, attention and effort to Tegal's business on a substantially full-time basis. Notwithstanding the foregoing, Parodi shall be entitled to serve on the Board of Directors of other corporations, as Parodi may elect from time to time, so long as such service is approved by the Board.
- 3. Term. This Agreement shall continue until the third anniversary of the date hereof.
- 4. Salary. Parodi's base salary (the "Base Salary") shall be at an annual rate of not less than \$250,000.00 subject to discretionary increases in accordance with Tegal's normal review procedures and policies. The Base Salary shall be paid in substantially equal installments at the same intervals as other officers of Tegal are paid.
  - 5. Annual Bonus and Vacation.
- 5.1 Bonus. In addition to his Base Salary, and subject to the achievement of certain goals established in accordance with this Section 5, Parodi shall be paid an annual bonus (the "Bonus") during the term of this Agreement in an amount not less than 50% of the Base Salary. Each year the Board shall approve objective, quantifiable and reasonably attainable annual goals, which shall be reduced to writing and presented by Parodi 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. Parodi shall be entitled to a pro rata portion of the bonus at the end of the fiscal year ending in 1997.
- 5.2 Vacation. Parodi shall be entitled to one and one-quarter (1 1/4) days of paid vacation for each month during the term of this Agreement.
- 6. Stock Purchase. Upon signing of this Agreement by Parodi, the Board will grant to Parodi, as soon as practical, non-qualified stock options as follows:
- (a) 260,000 shares with a four-year expiration of repurchase rights; and
- (b) 240,000 shares with rights of repurchase expiring immediately upon Tegal's stock price reaching the following targets for 10 or more consecutive trading days;
  - (a) 60,000 shares at \$12 per share;
  - (b) 60,000 shares at \$17 per share;
  - (c) 60,000 shares at \$21 per share; or
  - (d) 60,000 shares at \$25 per share.

The stock price used will be the closing price at the end of the New York Trading Day on NASDAQ.

Any stock purchased or stock options issued to Parodi shall be substantially in the form, respectively, of the Amended and Restated Equity Incentive Plan Nonqualified Stock Purchase Agreement and the Amended and Restated Equity Incentive Plan Stock Option Agreement.

7. Living Accommodations, Commuting and Relocation Costs. In view of the fact that Parodi's primary residence is not within the vicinity of the headquarters of Tegal and in view of the uncertainty of his tenure, Tegal shall, so long as its headquarters is more than 40 miles from Parodi's primary residence, reimburse Parodi for (i) the costs of commuting from his current residence to Tegal's headquarters, and (ii) the reasonable costs of securing and maintaining living accommodations for the term of the Agreement. For the purposes of Sections 7 and 8 hereof, Tegal's obligation to reimburse Parodi shall include reimbursement for any tax liability Parodi may incur by reason of such reimbursement. Accordingly, to the extent Parodi will incur tax liability for all or any portion for any reimbursement, Tegal's obligation to reimburse such expenses giving rise to a tax liability shall be "grossed-up" to cover the tax liability according to the following formula:

X=Y/(1-Z)

X=Grossed-Up Reimbursement

Y=Reimbursable Expenses Giving Rise to Tax Liability

Z=Parodi's aggregate federal, state and local tax rate

8. Reimbursement of Expenses. Tegal shall reimburse Parodi for all reasonable out-of-pocket expenditures incurred in establishing an office and communications capabilities in Parodi's home and car, which expenditures shall include but not be limited to routine office supplies, a facsimile machine and a telephone and all expenses associated with

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a car telephone. Tegal shall further reimburse Parodi for all out-of-pocket expenses incurred by Parodi in performing his obligations hereunder, including, without limitation, telephone, fax, air freight 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 Parodi of an itemized statement, accompanied by appropriate receipts, describing the reimbursable expenses incurred.

- 9. Benefits. During the term of this Agreement, Parodi will be entitled to participate in all fringe benefit programs as shall be provided from time to time to Tegal's employees or specifically to Parodi by action of the Board (or any person or committee appointed by the Board to determine fringe benefit programs and other emoluments).
- 10. Termination. Employment of Parodi pursuant to this Agreement may be terminated as follows, in which event the compensation and all associated benefits as set forth in this Agreement shall terminate except as provided in Section 11 below:
- 10.1 With or without cause, Tegal may terminate the employment of Parodi at any time during the term of employment upon 45 days' prior written notice to Parodi.
- 10.2 Parodi may terminate his employment at any time upon 45 days' prior written notice to Tegal.
- 10.3 Employment shall terminate automatically upon death or disability. For purposes of this Agreement, "disability" shall mean Parodi's inability to perform in accordance herewith by reason of mental or physical disorder or injury constituting "long-term disability" as defined under Tegal's medical or disability insurance policy, as in effect from time to time.

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### 11. Termination Payments.

- 11.1 Termination by Employer. If Tegal terminates Parodi's employment prior to the end of the term of this Agreement without cause, Parodi 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").
- 11.2 Termination by Employee. In the case of a termination of Parodi's employment by Parodi, except when he terminates his employment because of good reason or a breach of this Agreement by Tegal, Parodi shall not be entitled to a Salary and Benefits Continuance. If Parodi terminates his employment because of good reason, as hereinafter defined, Parodi shall be entitled to the Salary and Benefits Continuance. For purposes of this Agreement, "good reason" shall mean (i) any material breach of this Agreement by Tegal; (ii) the assignment to Parodi of any duties, or the substantial reduction of Parodi's duties, either of which is inconsistent with Parodi's position as President and Chief Executive Officer; or (iii) any change in Parodi's reporting relationship which results in his not reporting directly to the Board.
- 11.3 Continuance of Competition Restrictions. In the event that Parodi's employment is terminated, but pursuant to Sections 11.1 or 11.2 he remains entitled to Salary and Benefits Continuance, then during the period of the Salary and Benefits Continuance his obligations under Section 14 hereof shall continue to apply.

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- 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 Parodi to Tegal and is limited to the following:
- (a) Repeated failure or refusal to carry out the reasonable directions of the Board, which directions are consistent with Parodi'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 this 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.
- 12.3 Payment Schedule. In the event Parodi is entitled to Salary and Benefits Continuance, the payments of Base Salary shall be made to Parodi in equal installments at the same intervals as other officers of Tegal are being paid at the time that the employment was terminated.
- 12.4 Mitigation. Parodi shall not be required to mitigate the amount of any payments provide for in Section 11 hereof by seeking other employment or a consultancy with any other entity or otherwise, but Parodi shall notify Tegal of any

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subsequent employment or consultancy engaged in by Parodi during the period covered by any payments provided in Section 11 hereof and the amounts payable pursuant thereto shall be reduced by the amount of any salary or fees so paid or payable with respect to such period. Parodi's entitlement to any Salary and Benefits Continuance shall cease upon any violation by Parodi of either Section

12.5 Obligation to Successor Entity. In the event that Tegal merges into another entity and is the disappearing corporation, or Tegal sells all or substantially all of its assets, Tegal may assign its rights and obligations under this Agreement to its successor or successors (the "Successor"). In the event of any such assignment, Tegal shall cause the Successor to assume the obligations of Tegal hereunder, by a written agreement addressed to Parodi, concurrently with any assignment with the same effect as if the Successor were "Tegal" hereunder. Upon the occurrence of any such assignment, Parodi agrees that, if the Successor requests him to remain as President and Chief Executive Officer with similar responsibilities and compensation as provided by Tegal at the time of such assignment, he will continue such responsibilities for a period of 12 months following the assignment of this Agreement. For purposes of this Section, compensation shall include the Base Salary, the Bonus, all benefits pursuant to Section 9 hereto, and all expense reimbursements. Notwithstanding the foregoing, in the event Successor significantly decreases Parodi's compensation or significantly alters responsibilities as in effect during the immediately preceding 12 months, Parodi may resign his employment and, for purposes of the Salary and Benefits Continuance, Parodi shall be deemed to have terminated his employment because of good reason. However, in the event that the Successor terminates

-7.

Parodi's employment within six months of the change in control of Tegal, Parodi shall be entitled to the Salary and Benefits Continuances as set forth in Section 11.

13. Proprietary Information. All Proprietary Information, as hereinafter defined, shall be the sole property of Tegal and its assigns, and Tegal and its assigns shall be the sole owner of all patents, copyrights and other rights (collectively referred to herein as "Rights") pertaining to the Proprietary Information. Parodi hereby assigns to Tegal any Rights he may have or acquire in the Proprietary Information or any Rights pertaining to the Proprietary Information. Parodi further agrees, as to all Proprietary Information, to reasonably assist Tegal or any person designated by it (at Tegal's expense) to obtain and, from time to time, to enforce Rights relating to said Proprietary Information in any and all countries. Parodi will execute documents for use in applying for, obtaining and enforcing such Rights on such Proprietary Information as reasonably required, together with any assignments thereof to Tegal or persons designated by it. Parodi's obligation to reasonably assist Tegal or any person designated by Tegal in obtaining and enforcing Rights relating to the Proprietary Information shall continue beyond the cessation of his employment, but Tegal shall compensate Parodi at a reasonable rate after the cessation of Parodi's employment for time actually spent by him upon Tegal's request for such assistance. At all times, both during Parodi's employment by Tegal and after its cessation, whether the cessation is voluntary or involuntary, for any reason or no reason, or by death or disability (the "Cessation of Employment"), Parodi will keep in strictest confidence and trust all Proprietary Information and will not disclose, use or induce or assist in the use or disclosure of any Proprietary Information or Rights pertaining to Proprietary Information, or anything related thereto, without the prior express written consent of Tegal, except any may be necessary in

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the ordinary course of performing his duties as an employee of Tegal. For purposes of this Agreement, "Proprietary Information" shall mean any and all proprietary or confidential information or trade secrets in which Tegal has a proprietary interest, including Tegal's anticipated research and development accomplishments resulting from tasks assigned to Parodi by Tegal or resulting from the use by Parodi of equipment, supplies or facilities owned, leased or contracted for by Tegal, including, without limitation, trade secrets, processes, formulas, data, patents, know-how, discoveries, developments, designs, inventions, techniques, plans, strategies, customer and supplier lists and information which may be useful or have actual or potential economic value to Tegal. Notwithstanding the foregoing, Proprietary Information shall not include (i) any information known to Parodi prior to the commencement of employment with Tegal and not obtained or derived directly or indirectly from Tegal or, if so obtained, not subject to confidential obligations; (ii) any information which is or becomes public or available to the general public or generally known in the industry otherwise than through any breach of confidentiality by Parodi, or (iii) any information obtained subsequent to the commencement of employment with Tegal from a third party who is lawfully in

possession of such information and which is not subject to any confidential or non-use obligations of such third party owed to Tegal or any other third party.

PARODI UNDERSTANDS THAT TEGAL IS HEREBY ADVISING HIM THAT ANY PROVISION IN THIS AGREEMENT REQUIRING HIM TO ASSIGN HIS RIGHTS IN ANY INVENTION DOES NOT APPLY TO AN INVENTION WHICH QUALIFIES FULLY UNDER THE PROVISIONS OF SECTION 2870 OF THE CALIFORNIA LABOR CODE. THAT SECTION PROVIDES THAT THE

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REQUIREMENT TO ASSIGN INVENTIONS "SHALL NOT APPLY TO ANY INVENTION FOR WHICH NO EQUIPMENT, SUPPLIES, FACILITY, OR TRADE SECRET INFORMATION OF THE EMPLOYER WAS USED AND WHICH WAS DEVELOPED ENTIRELY ON THE EMPLOYEE'S OWN TIME AND (A) WHICH DOES NOT RELATE (1) TO THE BUSINESS OF THE EMPLOYER OR (2) TO THE EMPLOYER'S ACTUAL OR DEMONSTRABLY ANTICIPATED RESEARCH OF DEVELOPMENT, OR (B) WHICH DOES NOT RESULT FROM ANY WORK PERFORMED BY THE EMPLOYEE FOR THE EMPLOYER." BY SIGNING THIS AGREEMENT, Parodi ACKNOWLEDGES THAT THIS PARAGRAPH SHALL CONSTITUTE WRITTEN NOTICE OF THOSE PROVISIONS OF SECTION 2870.

14. Competition. During the term of this Agreement and except as otherwise set forth herein, Parodi will not directly, as an officer, director, stockholder, partner, associate, owner, employee or consultant engage in any activity in direct competition with Tegal in any geographical areas in which Tegal or any of its affiliates are now so engaged. Parodi shall report to the Board any purchase of stock of a Tegal competitor at such time as Parodi becomes aware of such purchase. During his employment by Tegal and for a period of two years after or cessation of employment, Parodi will not, either directly or indirectly, either alone or in concert with others, solicit or entice any employee of or consultant of Tegal to leave Tegal or to entice such employee to work for anyone in direct competition with Tegal. Parodi will not solicit, entice or in any way divert any customer or supplier to do business with any business entity in competition with Tegal. During his employment by Tegal, Parodi agrees not to plan or otherwise take any preliminary steps,

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either alone or in concert with others, to set up or engage in any business enterprises that would be in direct competition with Tegal.

- 15. Return of Work-Related Materials. In the event of a Cessation of Employment, Parodi will deliver to Tegal all documents, data and other materials of any nature pertaining to his work with Tegal, and will not take with him any of the foregoing or any reproduction of any of the foregoing.
- 16. Disclosure. Except when not required by California Labor Code Section 2870, Parodi will promptly disclose to Tegal all discoveries, developments, designs, improvements, inventions, formulas, software programs, processes, techniques, know-how, negative know-how and data, whether or not patentable or registrable under patent, copyright or similar statutes or reduced to practice, made or conceived or reduced to practice or learned by him, either alone or jointly with others, during his period of employment by Tegal, that are related to or useful in the business or future business of Tegal, or result from tasks assigned him by Tegal or result from the use of property used by Tegal.

### 17. General Provisions.

- 17.1 Governing Law. This Agreement shall be construed under and according to the internal laws, and not the laws of conflict, of the State of California.
- 17.2 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.

continue to retain Parodi as an employee. Parodi understands that this means that Tegal has and will continue to have the absolute and unconditional right to terminate his employment for any reason or no reason, with or without cause or prior notice.

- 17.4 Entire Agreement. This Agreement contains the sole and entire agreement and understanding between Tegal and Parodi 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 Parodi.
- 17.5 Arbitration. Any controversy or claim arising out of or relating to this Agreement, or the breach hereof, shall be settled by final and binding arbitration. Except as hereinafter set forth, any such arbitration shall be conducted in accordance with the then existing rules (the "Rules") of the American Arbitration Association ("AAA") and judgment upon the award rendered by the arbitrators may be entered in any court having jurisdiction thereof; provided, however, that the law applicable to any controversy shall be the law of California, regardless of its or any jurisdiction's choice of law principle. In any such arbitration, the award or decision shall be rendered by a majority of the members of a Board of Arbitration consisting of three (3) members, one of whom shall be appointed by each party and the third of whom shall be the chairman of the panel and be appointed by mutual agreement of said two party-appointed arbitrators. In the event of failure of said two arbitrators to agree, within sixty (60) days after the commencement of the arbitration proceeding, upon the appointment of the third arbitrator, the third arbitrator shall be appointed by the AAA in accordance with the Rules. In the event that either party shall fail

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to appoint an arbitrator within thirty (30) days after the commencement of the arbitration proceeding, the arbitration shall be conducted by the single arbitrator selected.

17.6 Notice. All notices and other communications required or permitted under this Agreement shall be in writing, served personally on or mailed by certified or registered United States mail to, the party to be charged with receipt thereof. Notices and other communications served by mail shall be deemed duly given three days after deposit of such notice in the United States Post Office as certified or registered mail with postage prepaid-and duly addressed to the applicable party at the address set forth below or at such other address as the applicable party may designate by written notice from time to time:

PARODI: Michael L. Parodi 91 Grand Via Alamo, CA 94507

TEGAL: TEGAL CORPORATION 2201 S. McDowell Boulevard Petaluma, CA 94953 ATTENTION: Robert V. Hery Chairman of the Board

- 17.7 Waiver. No waiver of any of the provisions hereof shall be valid unless in writing, signed by the party against whom such claim or waiver is sought to be enforced, nor shall failure to enforce any right hereunder constitute a continuing waiver of the same or a waiver of any other right hereunder.
- 17.8 Amendment. No modification of any of the provisions hereof shall be binding upon either Parodi or Tegal unless in writing, signed by the party against whom such modification is sought to be enforced.

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17.9 Non-Disclosure. Parodi agrees that, during the term of his employment by Tegal and following termination of such employment, he will not disclose (except as required by Parodi's duties to Tegal) any of Tegal's secret

or confidential information, whether patentable or not, of which he becomes informed during his employment.

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

# TEGAL CORPORATION

BY: /s/ ROBERT V. HERY

Robert V. Hery, Chairman of the Board of Directors

/s/ MICHAEL L. PARODI -----MICHAEL L. PARODI

### EXHIBIT 23.1

# CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-462 and 333-12473) of Tegal Corporation of our report dated April 24, 1998 appearing on page 40 of Tegal Corporation's Annual Report on Form 10-K. We also consent to the incorporation by reference of our report on the Financial Statement Schedule, which appears on page S-2 of this Annual Report on Form 10K.

/s/ Price Waterhouse LLP

San Jose, California May 18, 1998

### EXHIBIT 23.2

# CONSENT OF INDEPENDENT AUDITORS

The Board of Directors Tegal Corporation

We consent to incorporation by reference in the registration statements (Nos.: 333-462, 333-12473 and 333-52265) on Forms S-3 and S-8 of Tegal Corporation of our reports dated April 23, 1996, relating to the consolidated statements of operations, stockholders' equity (deficit) and cash flows of Tegal Corporation and Subsidiaries for the year ended March 31, 1996, and the related schedule, which reports appear in the March 31, 1998, annual report on Form 10-K of Tegal Corporation.

/s/ KPMG Peat Marwick LLP

Mountain View, California May 18, 1998

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