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

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, 1999

[] 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)

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DELAWARE 68-0370244

(STATE OR OTHER JURISDICTION OF INCORPORATION (I.R.S. EMPLOYER IDENTIFICATION NO.) 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 June 4, 1999, as reported on the Nasdaq National Market was \$24,179,206. As of June 4, 1999, 10,725,650 shares of the Registrant's Common Stock were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement for Registrant's 1999 Annual Meeting of Stockholders to be held on September 21, 1999, 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.

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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 over the last 20 years. This growth has resulted from the increasing demand for ICs from

traditional IC markets, such as personal computers, telecommunications, consumer electronics, automotive electronics and office equipment, as well as the recently developing markets, such as multimedia, wireless communications and portable and network computing. As a result of this increased demand, semiconductor device manufacturers have periodically expended significant amounts of capital to build new semiconductor fabrication facilities ("fabs") and to expand existing fabs. In spite of the continuing growth in demand for semiconductors, the industry periodically experiences 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. The industry has experienced such excess supply and excess capacity since late 1995.

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 oxide, polysilicon, and metal segments of the dry etch market represented approximately 50%, 25% and 25%, respectively, of the total sales of dry etch systems in 1998. 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 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 1999, approximately 72% 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 generate incremental sales from 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. Tegal introduced the 6500 series tool in 1994 and since that time has expanded the product line to address new applications. Etch applications addressed by the 6500 series system include; 1) new high K dielectrics and associated materials used in capacitors at sub-0.5 micron for FRAMs and high-density DRAM devices, 2) shallow trench isolation used to isolate transistors driven by increased packing densities used in memory devices employing design rules at or below 0.25 micron, 3) sub-0.5 micron multi-layer metal films composed of aluminum/copper/silicon/titanium alloys, 4) sub-0.5 micron polysilicon and 5) 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 \$3.0 million.

The Company's 6500 series systems have been engineered to provide process flexibility and competitive throughput for wafers and substrates up to eight inches in diameter, while minimizing cost and space requirements. 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 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.

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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.

CUSTOMERS

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:

ABB Semiconductor AG Matsushita Seiko Epson

Bosch Micrel Semiconductor SGS-Thomson Microelectronics

Fuji Film Motorola Siemens
Hewlett-Packard NEC Sony
Hyundai Northern Telecom Toshiba
International Rectifier -- Oki Winbond

Hex Fet America Read Rite LG Semiconductor Samsung

Of these 21 customers, 10 ordered one or more systems from the Company in fiscal 1999. 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 1999, 1998 and 1997 accounted for 66.4%, 61.2% and 46.7%, respectively, of the Company's total net system sales. Matsushita, Seiko Epson, Fuji Film and Oki represented 17.9%, 14.8%, 14.7% and 11.8%, respectively, of the Company's net system sales in fiscal 1999. 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. Other than the above customers, no single customer represented more than 10% of the Company's net system sales in fiscal 1999, 1998 or 1997. 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 and related device manufacturing industry, may have a material adverse effect on the Company.

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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, 1999 and 1998 the Company's order backlog was approximately \$2.8 million and \$3.4 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 16 direct sales representatives and 12 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 locations 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, Italy and the United Kingdom and service/support operations in Austria and China. In addition to its international direct sales and support organizations, the Company markets its systems through independent sales representatives in China, Israel, Korea and Singapore and selected markets in the United States and Japan.

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 approximately 72%, 61% and 61% of total revenue for fiscal 1999,

1998 and 1997, 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 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

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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, 1999, the Company had 56 full-time employees dedicated to equipment design engineering, process support and research and development. Research and development expenses for fiscal 1999, 1998 and 1997 were \$9.6 million, \$11.0 million and \$10.5 million, respectively, and represented 33.0%, 26.6% and 18.3% 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. Through the use of such techniques, non-critical system manufacturing cycle times take approximately 14 days and cycle times for its critical etch products take two to three months.

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.

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

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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 26 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 13 additional United States patents and 33 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.

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.

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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 17, 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. On January 21, 1999 the Court issued an order interpreting the patents-in-suit in the manner urged by the Company and rejecting the interpretation arguments made by TEL. The Company is seeking, among other things, injunctive relief barring TEL from importing or selling such products. The case was tried to the Court on May 26-29, 1999 and is now under submission. The Court has indicated that it expects to issue a decision by September 1, 1999. 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's results of operation or financial condition.

On June 10, 1996, Lucent Technologies Inc. ("Lucent") filed a claim with 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. In March 1995, the Company executed an agreement with AMS, containing an indemnification provision 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 filed a claim for patent infringement in Germany against AMS for the worldwide sale of integrated circuits manufactured with the Company's dry plasma etch systems. Lucent and AMS have settled that matter with respect to worldwide sales and AMS has also requested indemnification for that matter. The Company believes that the claims made by AMS are without merit and that the ultimate outcome of any defense of such indemnification claims is unlikely to have a material adverse effect on the Company's results of operations or financial condition. With respect to the above matters, proposals have been made by the parties to an ICC arbitration panel. The proposals must now be examined and finalized by the International Court of Arbitration. A resolution is expected in July of this year. 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. The Company believes that GSC's dispute with Applied Materials has subsequently been settled. 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, 1999, the Company had a total of 208 employees consisting of 191 full-time permanent employees and 17 temporary or contract personnel, including 56 in engineering, research and development, 38 in manufacturing, 81 in marketing, sales and customer service and support and 33 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 low volume 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.

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 \$3.0 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.

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

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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. 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 business, financial condition 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 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 believes 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 or existing credit lines are not renewed, 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.

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.

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.

Significant Stockholders; Anti-Takeover Effect

The Company's principal stockholders and the Company's executive officers and directors beneficially owned approximately 41.0% of the Company's outstanding shares of common stock as of March 31, 1999.

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Accordingly, these stockholders can be expected to have substantial influence over the Company. 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.

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. In addition, as of March 31, 1999, the holders of an aggregate of approximately 3.3 million shares of the Company's common stock issued and outstanding are entitled to certain rights with respect to the registration of such shares for offer and sale to the public under the Securities Act of 1933, as amended, pursuant to a registration rights agreement between the Company and the holders. In addition to other rights under the registration rights agreement, the holders may require the Company, at any time and from time to time, to use its best efforts to effect a registration statement on Form S-3, subject to various conditions. There is no limit to the number of times that the holders may demand registration on Form S-3 pursuant to the registration rights agreement. 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.

Year 2000 Compliance

In the past, many information technology products were designed with two digit year codes that did not recognize century and millennium fields. As a result these hardware and software products may not function or may give incorrect results when Year 2000 dates are used. The "Year 2000 Issue" is faced by substantially every company which relies on computer systems. In order to address this issue, such hardware and software products may need to be upgraded or replaced in order to correctly process dates beginning in the Year 2000.

The Company has formed a team and named an executive sponsor to identify remedies and test and develop contingency plans for the Year 2000 Issue. The Company estimates that the tasks identified by this team will be completed by October 1999. To date, the Company has evaluated its internal systems, its products and the readiness of its key suppliers and other third parties to determine their Year 2000 status.

The Company's Enterprise Resource Planning (ERP) system is provided by a software vendor and contains some custom modifications to meet the Company's business requirements. The vendor-provided software is Information Technology Association of America certified Year 2000 compliant. The custom modifications have been evaluated to identify the changes necessary to make them compliant. The Company estimates that the required modifications will be completed by October 1999. The Company's current product offerings have been tested and determined to either be Year 2000 compliant or, where they are not compliant, an upgrade program is available to address the problem.

The Company completed its Year 2000 risk assessment and its corrective action and contingency plans in April 1999. The corrective action plan has identified required modifications and upgrades to its business software and hardware. The risk assessment has evaluated the readiness of its key suppliers and other third parties and the effect their compliance readiness might have on the Company. For key suppliers where

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the risk of non-compliance has been assessed as high, backup or contingency plans have been developed and documented and audits of those vendors for Year 2000 compliance are scheduled to be performed prior to October 1999. The Company is not currently planning on assessing the compliance readiness of its customers. The Company's customers are generally considerably larger than the Company and are unlikely to complete any questionnaire which the Company might furnish to its customers to assess Year 2000 compliance. The Company does not anticipate that its ability to conduct its business operations with its suppliers or customers is likely to be materially adversely impacted by Year 2000 issues since purchase and sales order transactions are generally transmitted by mail, phone or facsimile between parties as opposed to through some form of electronic data interchange.

The total expense of preparing the Company for Year 2000 compliance is estimated at approximately \$0.4 million, which is not material to the Company's business operations or financial condition. Less than \$0.1 million of expense has been incurred through the date of this report. Nevertheless, satisfactorily addressing the Year 2000 Issue is dependent on many factors, some of which are not within the Company's control. Should the Company's internal systems, or the internal systems of one or more of its significant vendors, customers, or other third parties fail to achieve Year 2000 compliance, the Company's business,

financial condition and results of operations could be materially adversely affected.

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 Santa Clara, California; Austin, Texas; Manassas, Virginia; Kent, England; Munich, Germany; Kawasaki, Japan; Catania, Italy; Seoul, Korea and Hsin Chu City, Taiwan.

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.

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, 1999.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following sets forth certain information regarding the executive officers and directors of the Company as of March 31, 1999:

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Consortium Boards of Directors.

<TABLE> <CAPTION> **POSITION NAME AGE** <C> <C> Michael L. Parodi...... 50 Chairman of the Board of Directors, President and Chief Executive Officer David Curtis............ 45 Vice President, Finance and Administration, Chief Financial Officer, Secretary and Treasurer Stephen P. DeOrnellas.... 44 Vice President, Technology and Corporate Development and Chief Technical Officer George B. Landreth...... 44 Vice President, Product Development James D. McKibben....... 48 Vice President, Worldwide Sales and Marketing Colin C. Tierney....... 52 Vice President, Worldwide Operations and Customer Support </TABLE>

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

Michael L. Parodi joined the Company as Director, President and Chief

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

National Semiconductor Corporation. Mr. Parodi currently is a member of the Semiconductor Equipment and Materials International and the U.S. Display

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 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 Instruments Corporation ("KLA"). From 1981 to 1989 he held a variety of product development and marketing management positions, including Vice President Marketing from 1987 to 1989, Vice President of Process Engineering from 1983 to 1987, and Senior Process Engineer from 1981 to 1983, with Lam Research Corporation where he had responsibility for the development and introduction of the Lam Autoetch and Rainbow product lines.

George B. Landreth joined 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. In November 1998, he 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.

Colin C. Tierney joined the Company in September 1998 as Vice President, Worldwide Operations and Customer Support. From 1996 to 1998, he was Vice President Operations with KLA where he led Operations through the merger with Tencor and implemented new product introduction and demand flow technology processes. From 1988 to 1996, Mr. Tierney served as Vice President, Operations with Lam Research Corporation where he led worldwide operations and facilities functions and directed projects to integrate several acquisitions. Prior to 1988, Mr. Tierney held senior operations positions with Scientific Microsystems, Inc., Ultratech Stepper, Inc. and Diablo Systems Inc., a division of Xerox Corporation.

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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 prior two fiscal years.

<TABLE> <CAPTION>

<caption></caption>			
	HIGH	LO)W
<s></s>	<c></c>	<	:C>
FISCAL YEAR 1998			
First Quarter	8	3/4	5
Second Quarter		10 1/4	6
Third Quarter			4
Fourth Quarter	·············	7 1/2	4
FISCAL YEAR 1999			

First Quarter	7	3 11/16
Second Quarter	4 5/8	1 15/16
Third Quarter	3 5/8	1 3/8
Fourth Quarter	5 13/16	2 17/32

 | |The approximate number of record holders of the Company's common stock as of March 31, 1999 was 138. 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.

ITEM 6. SELECTED FINANCIAL DATA

<TABLE> <CAPTION>

<S>

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

CONSOLIDATED STATEMENTS OF OPERATIONS DATA:

 Revenue
 \$ 29,035
 \$41,472
 \$57,423
 \$62,046
 \$ 44,645

 Gross profit
 8,161
 17,095
 25,901
 28,577
 20,583

 Operating income (loss)
 (15,402)
 (6,673)
 3,180
 6,572
 1,376

 Income (loss)
 (14,997)
 (5,545)
 4,180
 6,186
 949

 Net income (loss)
 (15,132)
 (5,545)
 3,140
 5,566
 828

Net income (loss) per share:(1)

Shares used in per share computation:

CONSOLIDATED BALANCE SHEET DATA:

Short-term notes payable to banks and

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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.

RESULTS OF OPERATIONS

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

<TABLE> <CAPTION>

MARCH 31,

1999 1998 1997

⁽¹⁾ See Note 1 of Tegal's Consolidated Financial Statements for an explanation of the computation of earnings per share.

-			-	
<s></s>	<c></c>	<c></c>	<c></c>	
Revenue	100.	0% 10	0.0% 1	00.0%
Cost of sales	71.	9 58.8	54.9	
-			-	
Gross profit	28.	1 41.2	45.1	
Operating expenses:				
Research and development		33.0	26.6	18.3
Sales and marketing		18.0	14.7	10.8
General and administrative		30.1	16.0	10.5
-			-	
Total operating expenses		81.1	57.3	39.6
			-	
Operating income (loss)		(53.0)	(16.1)	5.5
Other income (expense), net		1.4	2.7	1.7
-			-	
Income (loss) before income taxes.		(51	.6) (13	5.4) 7.2
Provision for income taxes				
-		`	-	
Net income (loss)	(5	52.1)%	(13.4)%	5.5%
=			`	=

 | | | |YEARS ENDED MARCH 31, 1999, 1998 AND 1997

Revenue

The Company's revenue is derived from sales of new and refurbished systems, spare parts and non-warranty service. Revenue declined 30 percent in fiscal 1999 from fiscal 1998 (to \$29.0 million from \$41.5 million). Revenue declined 28 percent in fiscal 1998 from fiscal 1997 (to \$41.5 million from \$57.4 million). The revenue decline in fiscal 1999 as compared to fiscal 1998 was 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's sales of spare parts and service also declined in fiscal 1999 over fiscal 1998, which the Company believes was principally due to its customers operating their Tegal equipment at a lower level of utilization during the industry slowdown. The Company believes that sales of its 6500 series systems were adversely affected in fiscal 1999 by the Korean financial crisis which became apparent in the fall of 1997 and began to adversely impact the Company's sales of 6500 series systems in the fourth quarter of fiscal 1998 and continues through the date of this report. The revenue decline in fiscal 1998 as compared to fiscal 1997 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 1998 over fiscal 1997, which the Company believes was primarily caused by customers depleting their supplies of spare parts during the industry slowdown. Revenue 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 1998, partially offsetting the

declines experienced in 900 series etch systems and spare parts sales. International sales accounted for approximately 72, 61 and 69 percent of total revenue in fiscal 1999, 1998 and 1997, respectively. The Company expects that international sales will continue to account for a significant portion of its revenue.

Gross Profit

The Company's gross profit as a percentage of revenue (gross margin) declined to 28 percent in fiscal 1999 from 41 percent in fiscal 1998 and 45 percent in fiscal 1997. The gross margin decline in fiscal 1999 as compared to fiscal 1998 was principally attributable to spreading substantially fixed manufacturing overhead expenses over significantly fewer systems manufactured and spare parts revenue. 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 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 equipment industry slowdown will continue for several more quarters, the Company expects that its gross margin is likely to be below 35 percent for fiscal 2000.

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 decreased to \$9.6 million in fiscal 1999 from \$11.0 million in fiscal 1998 and \$10.5 million in fiscal 1997. Research and development as a percentage of revenue increased to 33 percent in fiscal 1999 from 27 percent in fiscal 1998 and 18 percent in fiscal 1997, 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 decrease in fiscal 1999 expenses over fiscal 1998 expenses was attributable to reduced spending on salaries and related expenses due to a reduction in headcount. The Company anticipates that fiscal 2000 research and development expenses in absolute dollars will continue at or decline slightly from fiscal 1999 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 \$5.2 million in fiscal 1999 from \$6.1 million in fiscal 1998 and \$6.2 million in fiscal 1997. As a percentage of revenue, sales and marketing expenses increased to 18 percent in fiscal 1999 from 15 percent in fiscal 1998 and 11 percent in fiscal 1997. The absolute dollar declines in sales and marketing expenses in fiscal 1999 versus fiscal 1998 and in fiscal 1998 versus fiscal 1997 were principally due to declines in systems sales volumes, resulting in lower commission spending and to reduced spending on advertising. The Company expects to reduce slightly its absolute dollar spending on sales and marketing in fiscal 2000 through improved trade show and staffing efficiencies.

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

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and investor relations activities. General and administrative expenses in absolute dollars increased to \$8.7 million in fiscal 1999 from \$6.6 million in fiscal 1998 and \$6.0 million in fiscal 1997. As a percentage of revenues, general and administrative expenses increased to 30 percent in fiscal 1999 from 16 percent in fiscal 1998 and 11 percent in fiscal 1997. The absolute dollar increases in general and administrative expenses in fiscal 1999 over fiscal 1998 and in fiscal 1998 over fiscal 1997 were primarily attributable to the Company incurring additional legal fees and expenses in connection with its patent disputes with AMS and TEL. The Company anticipates that its general and administrative expenses for fiscal 2000 will be somewhat lower than fiscal 1999 spending due primarily to anticipated reductions in legal costs associated with its intellectual property after the first half of fiscal 2000.

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 \$0.4 million, \$1.1

million and \$1.0 million in fiscal 1999, 1998 and 1997, respectively. In all three years, net non-operating income was primarily attributable to interest income on outstanding cash balances.

Provision for Income Taxes

The Company's effective tax rate was 0 percent, 0 percent and 25 percent in fiscal 1999, 1998 and 1997, respectively. The effective tax rate for fiscal 1997 was materially lower than the statutory tax rate due to extensive operating loss carryforwards generated in prior years. The Company incurred net losses before taxes in fiscal 1999 and 1998 and therefore recorded no tax liability in fiscal 1998 and a \$0.1 million tax liability in fiscal 1999 associated with its operations in Japan.

Liquidity and Capital Resources

For fiscal 1999 and 1998, the Company financed its operations from available cash balances. In fiscal 1997, the Company financed its operations through cash generated from operations.

Net cash used in operations was \$8.8 million in fiscal 1999, due principally to a net loss of \$13.2 million after adjusting for depreciation, a decline in accrued expenses and accounts payable offset, in part, by a decline in accounts receivable, inventories and other current assets. Net cash used in operations was \$2.9 million in fiscal 1998, due principally to a net loss of \$3.1 million after adjusting for depreciation, a decline in accrued expenses 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 of \$5.5 million after adjusting for depreciation and a decrease in accounts receivable and inventories offset, in part, by a decrease in accounts payable. Included in net cash from operations were purchase credits for preferred stock redemptions of \$1.6 million in fiscal 1997. Such credits apply to prior financing from Motorola which was fully repaid in fiscal 1997.

Net capital expenditures totaled \$0.1 million, \$1.3 million and \$1.4 million in fiscal 1999, 1998 and 1997, 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 \$0.2 million for fiscal 1999, 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 equipment leases. Net cash provided by or used in financing activities for fiscal 1998 and 1997 were immaterial.

As of March 31, 1999, the Company had approximately \$17.6 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, 1999, the Company had an aggregate borrowing capacity of \$12.5 million available under a domestic line of credit secured by substantially all of the Company's assets. The facility is available until August 15, 1999. In addition to the foregoing facility, as of March 31, 1999, the Company's Japanese subsidiary had available two lines of credit available for a total of

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390 million Yen (approximately \$3.3 million at exchange rates prevailing on March 31, 1999) unused portion of two Japanese bank lines of credit totaling 450 million Yen (approximately \$3.8 million at exchange rates prevailing on March 31, 1999) 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. See Item 1-- Business -- Additional Risk Factors -- Future Capital Needs.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISK

The Company is exposed to financial market risks, including changes in foreign currency exchange ("FX") rates and interest rates. To mitigate the risks associated with FX rates, the Company utilizes derivative financial instruments. The Company does not use derivative financial instruments for speculative or trading purposes.

The Company manufactures the majority of its products in the US; however, it services customers worldwide and thus has a cost base that is diversified over a number of European and Asian currencies as well as the US dollar (USD). This diverse base of local currency costs serves to mitigate partially the earnings effect of potential changes in value of the Company's local currency denominated revenue. Additionally, the Company denominates its export sales in US dollars, whenever possible.

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

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

A 42 basis-point move in the weighted average interest rates (10% of Tegal's weighted average interest rates in 1999) affecting Tegal's floating rate financial instruments as of March 31, 1999, would have an immaterial effect on Tegal's pretax results of operations over the next fiscal year.

All of the potential changes noted above are based on sensitivity analyses performed on the Company's balances as of March 31, 1999.

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ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

TEGAL CORPORATION

CONSOLIDATED BALANCE SHEETS (IN THOUSANDS, EXCEPT SHARE DATA)

<table></table>		
<caption></caption>		
	MAR	CH 31,
	1999	1998
<\$>	<c></c>	<c></c>
ASSETS		
Current assets:		
Cash and cash equivalents		\$ 17,569 \$25,660
Accounts receivable, less allowand	e for return	s and
doubtful accounts of \$264 and \$5	542	4,831 7,482
Inventory	12,	226 14,424
Prepaid expenses and other current	assets	1,478 2,249
Total current assets		36,104 49,815
Property and equipment, net		3,185 4,982
Other assets, net		363 349

Current liabilities:	OCKHOLDERS' EQUITY
Notes payable	
Accounts payable	
Accrued expenses and other current	liabilities 6,329 7,265
Total current liabilities	
Long term portion of capital lease obl	
Long term portion of capital lease our	
Total liabilities	
10441140111110	
Commitments and contingencies (Not Stockholders' equity: Preferred stock; \$0.01 par value; 5,0	00,000 shares
authorized; none issued and outsta	
Common stock; \$0.01 par value; 35,	
authorized; 10,725,650 and 10,566	
outstanding	
Additional paid-in capital	
Accumulated other comprehensive is	
Accumulated deficit	(23,082) (9,930)
Total stockholders' equity	
	\$ 39,652 \$55,146

	See accompanying notes to con 23	solidated financial statements.
TEGAL CORPOR	RATION	
	TEMENTS OF OPERATIONS	
(IN THOUSANDS, EXC	CEPT PER SHARE DATA)	
•	CEPT PER SHARE DATA)	
	CEPT PER SHARE DATA)	
•		
	YEAR ENDED MARCH 31,	
	YEAR ENDED MARCH 31,	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
	YEAR ENDED MARCH 31, 1999 1998 1997	
</TABLE>

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TEGAL CORPORATION

CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (IN THOUSANDS, EXCEPT SHARE DATA)

<table></table>
<caption></caption>

CAP HON>	COMMON		ADD	ULATED ITIONAI COMPRE	L O	THER VE ACC		OTAL STOCKHOLDERS'
	SHARES		NT CAF	PITAL) DEFICIT	EQUITY
<s> Balances at March</s>	-	(C>		<c></c>	<c></c>	> <c< td=""><td><u>'</u>></td><td></td></c<>	<u>'</u> >	
1996 Common stock iss option and stock	. 10,064,404 ued under	\$101	\$54,455	5 \$6	15	\$ (7,545)	\$ 47,626	
plans Net income (loss).	. 215,317	2	366		3,140	368		
Cumulative transla			(5	92)				
Total comprehensi (loss)					2,5	548		
Balances of March 1997 Common stock iss	31, . 10,279,721 ued under	103	54,821	23	((4,405)	50,542	
option and stock plans	. 286,317		356	((5,545)	359		
Cumulative transla adjustment	ition		(5	52)	, ,			
Total comprehensi (loss)					(6,0	097)		
Balances at March 1998 Common stock iss	. 10,566,038 ued under	106	55,177	(529	9)	(9,950)	44,804	
option and stock plans Net income (loss). Cumulative transla	. 159,612	1	458	(15,132)	459		
adjustment Total comprehensi (loss)	 ve income		6	85	(14,	447)		
Balances at March			\$55,635	5 \$1	56	\$(25,082)	\$ 30,816	

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

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TEGAL CORPORATION

CONSOLIDATED STATEMENTS OF CASH FLOWS (IN THOUSANDS)

<TABLE> <CAPTION>

<S>

YEAR ENDED MARCH 31,

1999 1998 1997 ------ <----- <----- <-----

Cash flows from operating activities:

Net income (loss)...... \$(15,132) \$(5,545) \$ 3,140

Adjustments to reconcile net income (loss) to net cash

provided by (used in) operating activities:

Deferred income taxes
Depreciation and amortization
Purchase credit for preferred stock redemptions (1,587)
Allowance for doubtful accounts and sales return
allowances
Changes in operating assets and liabilities:
Accounts receivable
Inventory
Prepaid expenses and other assets
Accounts payable and other current liabilities (1,459) (2,343) (2,467)
Net cash provided by (used in) operating activities (8,842) (2,872) 9,069
Cash flows used in investing activities for the purchases of
property and equipment
(100) (1,203) (1,427)
Cash flows from financing activities:
Proceeds from issuance of common stock
Borrowings under (repayments of) notes payable
Repayment of capital lease financing (224) (348) (386)
Net cash provided by (used in) financing activities
activities 173 44 (9)
activities

See accompanying notes to consolidated financial statements. 26

TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (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 transactions are included as a separate component of other income (expense).

The preparation of financial statements in conformity with generally accepted accounting principles 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, although such differences are not expected to be material to the financial statements.

CASH AND CASH EQUIVALENTS

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

At March 31, 1999 and 1998, all of the Company's investments are classified as cash equivalents on the balance sheet. The investment portfolio at March 31, 1999 and 1998 is comprised of money market funds. At March 31, 1999 and 1998, 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, due to their relatively short maturity. The Company has foreign subsidiaries which operate and sell the Company's products in various global markets. As a result, the Company is exposed to changes in foreign currency exchange rates. The Company utilizes hedge instruments, primarily forward contracts to manage its exposure associated with firm third-party transactions denominated in non-functional currencies. The Company does not hold derivative financial instruments for speculative purposes. Forward contracts are considered identifiable hedges and realized and unrealized gains and losses are deferred until settlement of the underlying commitments. They are recognized as other gains or losses when a hedged transaction is no longer expected to occur. Deferred gains and losses were not significant at March 31, 1999 or 1998. Foreign currency gains and losses included in other income (expenses) were not significant for the years ended March 31, 1999, 1998 and 1997.

At March 31, 1999, the Company had forward exchange contracts maturing at various dates throughout fiscal 2000 to exchange 178,338 Yen into \$1,427 which also represented the fair value of these instruments at March 31, 1999. The counterparties to these contracts consist of U.S. financial institutions.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) (ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

The Company enters into foreign exchange options to partially hedge 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, 1999, the Company had no foreign exchange options outstanding.

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, 1999, one customer accounted for approximately 35% of the

accounts receivable balance. As of March 31, 1998, two customers accounted for approximately 24% and 16% of the accounts receivable balance.

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.

REVENUE RECOGNITION

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

In accordance with Statement of Financial Accounting Standard No. 128 ("SFAS 128"), Earnings Per Share ("EPS"), the Company reports both basic and diluted EPS on the income statement. 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 shares outstanding plus any potentially dilutive securities, 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 repurchased from proceeds received upon the exercise of stock options.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(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).

COMPREHENSIVE INCOME

In fiscal 1999, the Company adopted SFAS No. 130, "Reporting Comprehensive Income". Comprehensive income is defined as the change in equity of a company during a period from transactions and other events and circumstances excluding transactions resulting from investments by owners and distributions to owners. The primary difference between net income and comprehensive income for Tegal, is due to foreign currency translation adjustments. Comprehensive income is shown in the statement of stockholders' equity.

SEGMENT REPORTING

In fiscal 1999, the Company adopted Statement of Financial Accounting Standards No. 131, "Disclosures about Segments of an Enterprise and Related Information" ("SFAS 131"). SFAS 131 supersedes Statement of Financial Accounting Standards No. 14, "Financial Reporting Segments of a Business Enterprise." SFAS 131 establishes standards for disclosures about products and services,

RECENT ACCOUNTING PRONOUNCEMENTS

In June 1998, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"). SFAS 133 establishes a new model for accounting for derivatives and hedging activities and supersedes and amends a number of existing accounting standards. SFAS 133 requires that all derivatives be recognized in the balance sheet at their fair market value. In addition, corresponding derivative gains and losses should be either reported in the statement of operations or stockholders equity, depending on the type of hedging relationship that exists with respect to such derivatives. Adopting the provisions of SFAS 133, which will be effective in fiscal 2001, is not expected to have a material effect on the Company's consolidated financial statements.

NOTE 2. BALANCE SHEET AND INCOME STATEMENT DETAIL

Inventory consisted of:

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

Property and equipment consisted of:

<TABLE> <CAPTION>

</TABLE>

Machinery and equipment at March 31, 1999 and 1998 includes approximately \$607 and \$1,388, respectively, of assets under leases that have been capitalized. Accumulated amortization for such equipment approximated \$523 and \$1,045, respectively.

A summary of accrued expenses and other current liabilities follows:

<TABLE> <CAPTION>

MARCH 31, ------1999 1998

<S><C> <C> <C> Accrued compensation costs..... \$ 1,340 \$1,591 615 996 2,449 2,422 Other..... \$ 6,259 \$7,265 </TABLE> Other income (expenses), net, consisted of the following: <CAPTION> YEAR ENDED MARCH 31, 1999 1998 1997 <S> <C> <C> <C> Foreign currency exchange gain (loss), net...... (549) (138) (186) \$ 405 \$1,128 \$1,000 </TABLE> NOTE 3. EARNINGS PER SHARE A reconciliation of the numerators and the denominators of the basic and diluted per share computation is as follows: <TABLE> <CAPTION> 1998 1997 PER SHARE PER SHARE PER SHARE INCOME SHARES AMOUNT INCOME SHARES AMOUNT INCOME SHARES AMOUNT <S> Basic EPS: Net income available to common Effects of dilutive securities: Stock Options..... 640 Diluted EPS: ----- ---- -----

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</TABLE>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) (ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

Options to purchase 2,441,000 and 2,036,000 shares of common stock were outstanding at March 31, 1999 and 1998, respectively, 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 shares of common stock were outstanding at March 31, 1997, 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 \$12,500 with one U.S. bank. The line bears interest at prime (8.25 percent as of March 31, 1999), is secured by

a blanket security in all of the Company's assets, and is available until August 15, 1999. No amount was outstanding on this line of credit at March 31, 1999 and 1998. 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, 1999 and 1998.

The Company's Japanese subsidiary has two lines of credit available for 300,000 Yen and 150,000 Yen (approximately \$2,524 and \$1,262, respectively, at exchange rates prevailing as of March 31, 1999), bearing interest at 0.25 percent and 0.5 percent, in excess of Japanese prime (1.375 percent as of March 31, 1999). The lines of credit are available until June 30, 2000 and November 30, 1999, 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, 1999 and 1998, were \$223 and \$285, respectively.

NOTE 5. INCOME TAXES

The components of income (loss) before income taxes are as follows:

<TABLE> <CAPTION>

	YEA	R ENDED	MARC	Н 31,
	1999	1998	1997	
<\$>	<c></c>	<c></c>	 <c></c>	•
Domestic				
Foreign	(4	134) 1,21 		50
	\$(14,99 =====	(7) \$(5,54 === ===	5) \$4,1 ====	80 =====

</TABLE>

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

<TABLE> <CAPTION>

	YEAR ENDED MARCH 31,
	1999 1998 1997
<s></s>	<c> <c> <c></c></c></c>
Current:	
U.S. federal	\$ (257) \$ (939) \$1,143
State and local	
Foreign	
	(104) (939) 1,678
Deferred:	
U.S. federal	239 939 (589)
State and local	()
State and local	(4)
	239 939 (638)
Total	\$ 135 \$ \$1,040
10441	=======================================

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

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

<TABLE> <CAPTION>

</TABLE>

YEAR ENDED MARCH 31,

13	1990 1997
<\$>	 <c> <c> <c></c></c></c>
Income tax provision at U.S. stati	utory rate \$(5,099) \$(1,885) \$1,424
State taxes net of federal benefit.	
Utilization of foreign losses	(633)
Reversal of deferred tax assets pr	
Utilization of net operating losses	` /
	allowance 5,419 1,161 (460)
Other	
Income tax expense	\$ 135 \$ \$1,040

	The components of deferred to	axes are as follows:
C. II 11011	MARCH 31,	
	1999 1998	
	leferred for book \$ 344 \$ 378	
Non-deductible accruals and rese	rves	
Foreign net operating loss carryfor Domestic net operating loss carry	orward	
Credits	7lorward 5,212	
Uniform cap adjustment	130 130	
Other		
Other		
Total		
Valuation allowance		
	====== ======	
Net deferred tax asset	\$ \$ 239	
1999

1998

1997

The Company has recorded net deferred tax assets of approximately \$0 and \$239 at March 31, 1999 and 1998, respectively. Management's evaluation of the recoverability of the March 31, 1998 deferred tax was based upon the Company's ability to carry back temporary differences for future tax deductions against previously taxed income.

At March 31, 1999, the Company had federal operating loss carryforwards of approximately \$13,150, which begin to expire in the year ending March 31, 2020.

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NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

NOTE 6. COMMITMENTS AND CONTINGENCIES

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

<TABLE> <CAPTION>

YEAR ENDING MARCH 31,

CAPITAL OPERATING LEASES LEASES

2002	. 2	38	
2003		13	
2004			
Total minimum lease payments		107	\$3,705
	=		
Less amount representing interest		(7)	
	\$100		

</TABLE>

The above schedule of minimum payments excludes minimum annual sublease rentals payable to the Company totaling \$300 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 \$2,069, \$1,949, and \$2,406 during the years ended March 31, 1999, 1998, and 1997, respectively.

NOTE 7. EMPLOYEE BENEFIT PLANS

EOUITY 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, 1999, 120,280 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, 1999, 70,281 shares were available for issuance under the Option Plan.

TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

1998 EQUITY PARTICIPATION PLAN

Pursuant to the terms of the Company's 1998 Equity Participation Plan ("Equity Plan"), which was authorized as a successor plan to the Company's Equity Incentive Plan and Option Plan, 600,000 shares of common stock may be granted upon the exercise of options and stock appreciation rights or upon the vesting of restricted stock awards. The exercise price of options generally will be the fair value of the Company's common stock on the date of grant. Options are generally subject to vesting at the discretion of the Compensation Committee of the Board of Directors (the "Committee"). At the discretion of the Committee, vesting may be accelerated when the fair market value of the Company's stock equals a certain price established by the Committee on the date of grant. Incentive stock options will be exercisable for up to 10 years from the grant date of the option. Non-qualified stock options will be exercisable for a

maximum term to be set by the Committee upon grant. As of March 31, 1999, all 600,000 shares were available for issuance under the Equity Plan.

DIRECTORS STOCK OPTION PLAN

Pursuant to the terms of the Amended 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 elected or appointed to the Board on or after September 15, 1998, shall be granted an option to purchase 20,000 shares of common stock and on each secondary anniversary after the applicable election or appointment shall receive an additional option to purchase 20,000 shares, provided that such outside director continues to serve as an outside director on that date. 10,000 shares each will vest on the first and second anniversaries of the option grant date, contingent upon continued service as a director. Vesting may be accelerated, at the discretion of the Board, when the fair market value of the Company's stock equals a certain price set by the Board on the date of grant of the option. As of March 31, 1999, 100,000 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, 1999, 1998, and 1997 (number of shares in thousands):

<TABLE>

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<caption></caption>					
	1999	1998	1997		
	SHARES PR			CHADEC	DDICE
	SHAKES FR	ICE SHAKI	25 FRICE S	DITAKES	FRICE
_					
<s></s>	<c> <c;< td=""><td>> <c> <</c></td><td><c> <c></c></c></td><td><c></c></td><td></td></c;<></c>	> <c> <</c>	<c> <c></c></c>	<c></c>	
Options outstanding	at beginning				
of year	2,036 \$5.	46 1,413 \$	34.36 1,163	\$4.90	
Options canceled	(184)	6.23 (101)	6.07 (183	9.52	
Options granted	742	2.15 942	6.01 595	5.50	
Options exercised	(62)	1.31 (219)	0.47 (162	0.33	
Options outstanding	March 31 2,	532 \$4.53	2,036 \$5.46	1,413	\$4.36
		======			==

 | | | | |At March 31, 1999, the repurchase right associated with 790,470 of the options outstanding had elapsed.

TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) (ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

Significant option groups outstanding at March 31, 1999, 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 (number of shares in thousands):

<TABLE> <CAPTION>

> OPTIONS IN WHICH UNDERLYING SHARES NO LONGER SUBJECT OUTSTANDING TO REPURCHASE RIGHTS

----- REMAINING EXERCISE PRICE RANGE SHARES PRICE SHARES PRICE LIFE (YEARS)

<s></s>	<c></c>	<c></c>	<c></c>	<c></c>	<c></c>
\$.24 - \$.53	216	\$.48	115	\$.50	4.51
\$1.50 - \$3.38	692	2.19	4	1.50	13.91
\$4.25 - \$5.50	993	4.73	381	5.07	8.64
\$6.13 - \$6.25	119	6.20	52	6.20	10.35
\$6.88 - \$8.75	453	8.19	180	7.64	10.25
\$12.00	59	12.00	59	12.00	7.05

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

The weighted average estimated grant date fair value, as defined by SFAS 123, for options granted during 1999, 1998 and 1997 was \$1.27, \$2.66 and \$3.67 per option, respectively. The estimated fair value, as defined by SFAS 123, attributable to options canceled and reissued during 1999, 1998 and 1997 were \$0, \$0 and \$1.53 per option, respectively.

STOCK PURCHASE PLAN

The Company has offered an Employee Plan under which rights are granted to purchase shares of common stock at 85% of the lesser of the market value of such shares at the beginning of a six month offering period or at the end of that six month period. Under the Employee Plan, the Company is authorized to grant options to purchase up to 250,000 shares of common stock. 97,541 common stock shares were purchased in fiscal 1999 and 61,371 common shares were purchased in 1998. Shares available for future purchase under the Employee Plan were 37,455 at March 31, 1999.

35 TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED) (ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

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. The weighted average estimated grant date fair value per share, as defined by SFAS 123, for rights granted under the Employee Plan for stock purchased under the Employee Plan during 1999, 1998 and 1997 were \$1.48, \$1.47 and \$3.69, respectively.

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, 1999, 1998 and 1997:

	1999	1998	1997	
<s></s>	<c></c>	<c></c>	<c></c>	
Pro forma net income (loss)		\$(16,895	5) \$(6,674)	\$1,865
Pro forma net income (loss) po				
Basic	\$ (1.59	9) \$ (0.64	\$ 0.18	
Diluted	\$ (1.5	9) \$ (0.6	4) \$ 0.17	

 , | , | | |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 1999, 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 percent of their compensation, not to exceed a prescribed maximum amount. The Company made contributions to the plan of \$27, \$31 and \$28 in the years ended March 31, 1999, 1998, and 1997, 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 acquirer to take over the Company, in a manner or under terms not approved by the Board. Each Right becomes exercisable to purchase one one-hundredth of a share of Series A Junior Participating Preferred Stock at an exercise price of \$45.00 upon certain circumstances associated with an unsolicited takeover attempt and expires on June 11, 2006. The Company may redeem the Rights at a price of \$0.01 per Right.

36 TEGAL CORPORATION

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(ALL AMOUNTS IN THOUSANDS, EXCEPT SHARE DATA, UNLESS OTHERWISE NOTED)

NOTE 9. SEGMENT REPORTING

The Company operates in one segment comprising the design, manufacturing and servicing of plasma etch systems used in the manufacturing of integrated circuits and related devices.

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

<TABLE> <CAPTION>

YEARS ENDED MARCH 31,

1999	1998	1997
<c></c>	<c></c>	· <c< th=""></c<>

Revenues:

<S>

Sales to customers located in:

United States	\$ 8,11	1 \$16,0	45 \$17,795
Asia	2,669	11,110	18,640
Europe	6,657	8,667	10,061
Japan	11,598	5,650	10,927

Total external sales...... \$29,035 \$41,472 \$57,423

CARTICAL	
<caption></caption>	MARCH 31,
	1999 1998
<s> <c></c></s>	> <c> <c></c></c>
Identifiable assets at year-end:	
United States	\$38,986 \$55,326
Europe	8,405 8,819
Japan	7,623 4,424
Consolidation eliminations	(15,362) (13,423)
Total identifiable assets	. \$39,652 \$55,146

<TARLE>

</TABLE>

The Company's sales are primarily to domestic and international semiconductor manufacturers. The top five customers accounted for approximately 41%, 41%, and 46% of the Company's total net sales for the years ended March 31, 1999, 1998, and 1997, respectively. No customer accounted for 10% or more of net sales for the year ended March 31, 1999, one customer accounted for approximately 16% of net sales for the year ended March 31, 1998, and two customers accounted for 17% and 10%, respectively, of the Company's net sales for the year ended March 31, 1997.

NOTE 10. RELATED PARTY TRANSACTIONS

Included in prepaids at March 31, 1999, was a note receivable for \$230 from an employee for an advance made by Tegal to the employee. This amount was repaid in full on April 5, 1999. There were no such transactions in fiscal 1998.

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REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders of Tegal Corporation

In our opinion, the consolidated financial statements listed in the index appearing under item 14(a)(1) and (2) on page 40 present fairly, in all material respects, the financial position of Tegal Corporation and its subsidiaries at March 31, 1999 and 1998 and the results of its operations and cash flows for each of the three years in the period ended March 31, 1999 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.

PricewaterhouseCoopers LLP San Jose, California April 28, 1999

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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") no later than 120 days after the end of

the fiscal year covered by this Report, and certain information included therein is incorporated herein by reference. Only those sections of the Proxy Statement that specifically address the items set forth herein are incorporated by reference. Such incorporation does not include the Compensation Committee Report or the Performance Graph included in the Proxy Statement.

ITEM 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

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

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."

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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

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

<TABLE> <CAPTION> **PAGE** $\langle S \rangle$ $\langle C \rangle$ Consolidated Balance Sheets as of March 31, 1999 and 1998... 23 Consolidated Statements of Operations for the years ended March 31, 1999, 1998 and 1997...... 24 Consolidated Statements of Stockholders' Equity for the years ended March 31, 1999, 1998 and 1997...... 25 Consolidated Statements of Cash Flows for the years ended March 31, 1999, 1998 and 1997...... 26 </TABLE> (2) Financial Statement Schedule

<TABLE>

<CAPTION>

<S> <C> Schedule II -- Valuation and Qualifying Accounts...... S-1 </TABLE>

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

(3) Exhibits

The following exhibits are referenced or included in this report:

<TABLE> <CAPTION> EXHIBIT

DESCRIPTION

<C> <S>

- 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
- *10.2 1990 Stock Option Plan
- *10.4 Employee Qualified Stock Purchase Plan
- 10.5 Amended and Restated Stock Option Plan for Outside Directors (incorporated by reference to Appendix B to the Proxy Statement for the Registrant's 1998 Annual Meeting of Stockholders filed with the SEC on July 29, 1998 (Commission File No. 0-26824))

</TABLE>

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<TABLE> <CAPTION> EXHIBIT

DESCRIPTION

<C> <S>

- 10.10 Employment Agreement between the Registrant and Stephen P. DeOrnellas dated December 16, 1997 (incorporated by reference to Exhibit 10.10 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998 (Commission File No. 0-26824))
- *10.11 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 and Imperial Bank dated as of August 15, 1998
- *10.15 Supplemental Source Code License Agreement with the Registrant and Realtime Performance, Inc. dated as of November 1, 1991
- 10.18 Employment Agreement between Registrant and Michael L. Parodi dated as of December 17, 1997 (incorporated by reference to Exhibit 10.18 to the Registrant's Annual Report on Form 10-K for the fiscal year ended March 31, 1998 filed with the SEC on May 20, 1998 (Commission File No. 0-26824))
- 10.19 1998 Equity Participation Plan (incorporated by reference to Appendix A to the Proxy Statement for the Registrant's 1998 Annual Meeting of Stockholders filed with the SEC on July 29, 1998 (Commission File No. 0-26824))
- *21 List of Subsidiaries of the Registrant
- 23.1 Consent of Independent Accountants
- 24.1 Power of Attorney (included on page 42 of this Report)

27.1 Financial Data Schedule </TABLE>

- -----

* 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.

(b) Reports on Form 8-K.

A current report on Form 8-K regarding an amendment to the Company's stockholders' rights plan was filed with the SEC on January 15, 1999.

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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 Chairman, President & Chief

Executive Officer

Dated: June 25, 1999

<TABLE>

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.

\1/\DLL		
<caption></caption>		
SIGNATURE	TITLE	DATE
		-
<c> <c></c></c>	< <u>S</u>	
/s/ MICHAEL L. PARODI		resident, June 25, 1999 er and Director
Michael L. Parodi	(Principal Executive O	fficer)
/s/ DAVID CURTIS	Chief Financial O (Principal Financial O	
David Curtis	1	,
/s/ KATHY PETRINI	Corporate Cont (Principal Accountin	roller June 25, 1999 g Officer)
Kathy Petrini		
/s/ FRED NAZEM	Director	June 25, 1999
Fred Nazem		
/s/ JEFFREY KRAUSS	Director	June 25, 1999
Jeffrey Krauss		
/s/ THOMAS R. MIKA	Director	June 25, 1999

/s/ EDWARD A. DOHRING

Director

June 25, 1999

Edward A. Dohring

</TABLE>

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SCHEDULE II

TEGAL CORPORATION

VALUATION AND QUALIFYING ACCOUNTS YEARS ENDED MARCH 31, 1997, 1998, 1999 (IN THOUSANDS)

<TABLE> <CAPTION>

<S> Year ended March 31, 1997: \$4,406 \$(118) \$(4,623) \$2,251 Product warranty..... \$2,586 -- (54) 320 13 Sales returns and allowances........ 83 532 (1) (211) (19)Year ended March 31, 1998: Product warranty...... 2,251 2,706 (31)(2,670)2,256 154 (177) 297 Sales returns and allowances....... 444 214 (420)31 (65)Year ended March 31, 1999: Product warranty...... 2,256 1,375 (57) (2,219) 1,355 35 (130)(25) (170) 49 (37) 19 </TABLE>

S-1

INDEX TO EXHIBITS

<TABLE> <CAPTION> EXHIBIT

NUMBER DESCRIPTION OF EXHIBIT

<C> <S>

10.14 Security and Loan Agreement between Registrant and Imperial Bank dated as of August 15, 1998

- 23.1 Consent of Independent Accountants
- 24.1 Power of Attorney (included on page 42)
- 27.1 Financial Data Schedule

</TABLE>

Exhibit 10.14

AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT

THIS AMENDED AND RESTATED LOAN AND SECURITY AGREEMENT is made and entered into as of August 15, 1998 ("AGREEMENT"), by and among IMPERIAL BANK ("IMPERIAL"), as Collateral Agent and a Bank, the BANKS, and TEGAL CORPORATION, a Delaware corporation ("BORROWER"). This Agreement amends, restates and supersedes in its entirety the Prior Loan Agreement (as hereinafter defined).

RECITALS

- A. Borrower, Imperial and Sanwa Bank California ("SANWA") entered into a certain Loan and Security Agreement dated as of August 15, 1997 (the "PRIOR LOAN AGREEMENT"), pursuant to which Imperial and Sanwa agreed to extend and make revolving loans available to Borrower thereunder.
- B. Borrower and Imperial desire to amend and restate the Prior Loan Agreement in its entirety to, among other things, remove Sanwa as a Bank thereunder, reduce the amount of the Committed Revolving Line and to modify certain covenants and reporting requirements of the Borrower, all as more fully set forth herein. There are currently no Advances outstanding under the Committed Revolving Line.
- C. Imperial has agreed to continue to make and maintain the Committed Revolving Line as described in this Agreement, but only upon the terms and subject to the conditions hereinafter set forth and in reliance on the representations and warranties set forth herein.

AGREEMENT

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual covenants hereinafter set forth, and intending to be legally bound, the parties hereby 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.

1.

"AFFILIATE" means, with respect to any Person, any Person that owns or controls directly or indirectly such Person, any Person that controls or is controlled by 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.

"BANK" or "BANKS" means Imperial and/or the banks, financial institutions and other institutional lenders which have executed signature pages to this Agreement and such other assignee as shall hereafter execute and deliver an Assignment and Acceptance with respect to all or any portion of the Committed Revolving Line and the Advances made and maintained pursuant to the Committed Revolving Line, in each case pursuant to and in accordance with SECTION 13.4(B), or otherwise become a party to this Agreement.

"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 close.

"CLOSING DATE" means the date of this Agreement.

"CODE" means the California Uniform Commercial Code.

"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 Twelve Million Five Hundred Thousand Dollars (\$12,500,000.00).

"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 credit or 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.

2.

"CURRENT LIABILITIES" means, as of any applicable date, all amounts that should, in accordance with GAAP, be included as current liabilities on the consolidated balance sheet of 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 Obligations 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 regulations 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.

"IP SECURITY AGREEMENT" means that certain Collateral Assignment, Patent Mortgage and Security Agreement dated of even date herewith, entered into by and between Borrower and Imperial.

"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,

3.

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 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, and Borrower's Books relating to any of the foregoing.

"INVESTMENT" 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, the Note or any other note or notes executed by Borrower in favor of any Bank in connection with this Agreement, the IP Security Agreement and any other agreement or document delivered by Borrower or entered into between Borrower and Imperial or any other Bank in connection with this Agreement, in each case as originally executed or as the same may from time to time be modified, amended, supplemented or restated.

"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.

"NOTE" means that certain Note dated of even date herewith in the principal amount of Twelve Million Five Hundred Thousand Dollars (\$12,500,000.00), made by Borrower and payable to the order of Imperial.

"OBLIGATIONS" means all debt, principal, interest, Bank Expenses and other amounts or obligations owed to any Bank 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 any 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 13.6 hereof.

"PERIODIC PAYMENTS" means all installments or similar recurring payments that Borrower may now or hereafter become obligated to pay to the Banks pursuant to the terms and provisions of any instrument, or agreement now or hereafter in existence between Borrower and the Banks.

"PERMITTED INDEBTEDNESS" means:

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- (a) Indebtedness of Borrower in favor of the 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 Borrower's Board of Directors;
- (i) Extensions, renewals or refinancings of Indebtedness permitted under this Agreement, other than clause (d) above; and
- (j) Other Indebtedness in the aggregate amount not exceeding One Million Five Hundred Thousand Dollars (\$1,500,000.00).

"PERMITTED INVESTMENTS" 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 the 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 any 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 any 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 the variable rate of interest, per annum, most recently announced by Imperial, as its "prime rate," as applicable to the Advances made hereunder by Imperial whether or not such announced rate is the lowest rate available from Imperial.

"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.

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

"REVOLVING MATURITY DATE" means August 15, 1999.

"SCHEDULE" means the Schedule of Exceptions attached hereto as SCHEDULE 1.

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

"TANGIBLE NET WORTH" means at any date as of which the amount thereof shall be determined, (1) the consolidated total assets of Borrower and its Subsidiaries minus, without duplication, the sum of any amounts attributable to (i) goodwill, (ii) intangible items such as unamortized debt discount and expense, patents, trade and service marks and names, copyrights and research and development expenses except prepaid expenses, and (iii) all reserves not already deducted from assets, minus (2) 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.

"YEAR 2000 COMPLIANT" means, in regard to Borrower or any Person, that all software, hardware, firmware, equipment, goods or systems utilized by or material to the business operations or financial condition of Borrower or such Person, will properly perform date sensitive functions before, during and after the year 2000.

"YEAR 2000 PROBLEM" means the risk that any computer applications used by Borrower and its Subsidiaries may be unable to recognize and properly perform date-sensitive functions involving certain dates prior to and any date on or after December 31, 1999.

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 Loan Payment/Advance Telephone Request Form in substantially the form of EXHIBIT B attached hereto ("ADVANCE FORM"). 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 the Note, in the form attached hereto as EXHIBIT C.

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.

(a) FOREIGN EXCHANGE USAGE AND SUBLIMIT. Subject to the availability of the Committed Revolving Line and in reliance on the representations and warranties of Borrower set forth herein, at any time and from time to time from the date hereof through the Banking Day immediately prior to the Revolving Maturity Date, Imperial shall arrange the purchase by Borrower of foreign exchange futures contracts ("EXCHANGE CONTRACTS") as Borrower may request, which request shall be made by delivering to Imperial a duly executed exchange contract application on Imperial's standard form; provided, however, that the maximum aggregate notional contract amount under all such Exchange Contracts shall not at any time exceed \$15,000,000.00 and provided, further, that Imperial shall only advance up to ten percent (10.0%) of said maximum aggregate notional contract amount under all such Exchange Contracts, the amounts so advanced of which shall be deemed to constitute outstanding Advances for the purpose of calculating availability under the Committed Revolving Line. Unless Borrower shall have deposited with Imperial cash collateral in an amount sufficient to cover all undrawn amounts under each such Exchange Contract and Imperial shall have agreed in writing, no Exchange Contract shall have a due date that is later than the Revolving Maturity Date. All Exchange Contracts shall be in form and substance acceptable to Bank Imperial in its sole discretion and shall be subject to the terms and conditions of Imperial's form exchange contract application. Borrower will pay any standard issuance and other fees that Imperial notifies Borrower will be charged for issuing and processing Exchange Contracts for Borrower. After and during the continuance of an Event of Default, Imperial may, in its sole and absolute discretion, terminate any or all of the Exchange Contracts. Borrower agrees to indemnify and hold harmless Imperial from and against all loss, costs and expense associated with any such termination of any Exchange Contract.

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.
- (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) (1) 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

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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 the 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 the Banks as necessary to ensure a sharing of all amounts received by Imperial or Collateral Agent as set forth in SECTION 13.6. 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 Collateral 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 Bank 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 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 such Bank after 2:00 p.m. Pacific time shall be deemed to have been received by a 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 extension.
 - 2.4 FEES. Borrower shall pay to the Banks the following:
- (a) CLOSING FEE. A Closing Fee equal to Twenty-Five Thousand Dollars (\$25,000.00), which fee shall be payable to Imperial on the Closing Date and shall be fully earned and non-refundable;
- (b) FACILITY FEE. A Facility Fee equal to one-half of one percent (0.50%) per annum of the average unused amount of the Committed Revolving Line, which fee shall be due quarterly, beginning with the quarter ending December 31, 1998, and payable in arrears to each Bank based upon such Bank's Percentage Share of the Committed Revolving Line. Notwithstanding the foregoing,

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Borrower shall also pay to Imperial on September 30, 1998, a pro-rated Facility Fee covering the period from August 15, 1998 through September 30, 1998;

- (c) FINANCIAL EXAMINATION AND APPRAISAL FEES. Each 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 the Collateral and financial analysis and examination of Borrower performed from time to time and, if an Event of Default does not exist, 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 any 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) imposes 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, the 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 the Banks shall retain their Lien on the Collateral which shall remain in effect for so long as any Obligations are outstanding.

SECTION 3. CONDITIONS OF LOANS.

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- 3.1 CONDITIONS PRECEDENT TO INITIAL ADVANCE. The obligation of any 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;
- (c) a certificate of the Secretary of State of Delaware and California with respect to Borrower's standing (and foreign qualification) in said states;
 - (d) financing statement amendments (Form 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 the Banks may reasonably request prior to the Closing Date.

- 3.2 CONDITIONS PRECEDENT TO ALL ADVANCES. The obligation of any Bank to make each Advance, including the initial Advance, is further subject to the following conditions:
- (a) receipt by each Bank of the 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 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 the 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 any Collateral acquired after the date hereof. From and after an Event of Default, Borrower acknowledges that the Banks may place 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 any Bank, all Negotiable Collateral, all

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financing statements and other documents that any Bank may reasonably request, in form satisfactory to such Bank, to perfect and continue perfected such Bank's security interests in the Collateral.

4.3 RIGHT TO INSPECT. Any 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.

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 requires 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 conducted 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 or 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 any 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 the 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 the Banks, which in the reasonable determination of the Banks has a Material Adverse Effect. Notwithstanding the foregoing, if Borrower suffers any losses as described in SECTIONS 6.11 and/or 6.12 hereof, but remains in compliance with said financial covenants, the Banks

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agree that such losses will not, in and of themselves, be considered to constitute as having a Material Adverse Effect on Borrower's financial condition.

- 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 have met the minimum funding requirements of ERISA with respect to any applicable employee benefit plans subject to ERISA. No event 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 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 each 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 the Banks contains any untrue statement of a material

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fact or omits to state a material fact necessary in order to make the statements contained in such certificates or statements not misleading.

5.15 YEAR 2000 PROBLEM. Borrower and its Subsidiaries have reviewed the areas within their operations and business which could be adversely affected by, and have developed or are developing a program to address on a timely basis, the Year 2000 Problem and have made related appropriate inquiry of material suppliers and vendors, and based on such review and program, the Year 2000 Problem will not have a Material Adverse Effect upon its financial condition, operations or business as now conducted.

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 any Bank's Lien on the Collateral.
- deliver to the Banks: (a) as soon as available, but in any event within forty-five (45) days after the end of each fiscal quarter, a company prepared consolidated and consolidating balance sheet 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 in any event within one hundred twenty (120) days after the end of Borrower's fiscal year, audited consolidated and unaudited 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 of Subordinated

Debt 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 Fifty Thousand Dollars (\$250,000.00) or more; and (e) upon the reasonable request of any Bank, such budgets, sales projections, operating plans, consolidating financial statements or other financial information as such Bank may reasonably request from time to time.

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

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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 the Banks of all returns and recoveries and of all disputes and claims, where the return, recovery, dispute or claim involves more than Two Hundred Fifty Thousand Dollars (\$250,000.00).
- 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 each Bank, 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 income 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 amounts as reasonably satisfactory to the Banks. All such policies of property insurance shall contain a lender's loss payable endorsement, in a form satisfactory to the Banks, showing the Banks as additional loss payees thereof and all liability insurance policies shall show the Banks as additional insureds, and shall specify that the insurer must give at least twenty (20) days notice to the Banks before canceling its policy for any reason. Borrower shall deliver to the Banks certified copies of such policies of insurance and evidence of the payments of all premiums therefor. All proceeds payable under any such policy shall, at the option of the Banks, be payable to the Banks to be applied on account of the Obligations.
- 6.7 PRINCIPAL DEPOSITORY. Borrower shall maintain its principal depository and operating accounts, other than cash management accounts, with Imperial or Collateral Agent.
- 6.8 QUICK RATIO. Borrower shall maintain on a consolidated basis, as of the last day of each fiscal quarter, a ratio of Quick Assets to Current Liabilities of at least 1.75 to 1.00.

- 6.9 DEBT-NET WORTH RATIO. Borrower shall maintain on a consolidated basis, as of the last day of each fiscal quarter, 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 on a consolidated basis, as of the last day of each fiscal quarter, a Tangible Net Worth of not less than Twenty-Eight Million Dollars (\$28,000,000.00).
- 6.11 MAXIMUM QUARTERLY LOSSES. Borrower shall not suffer a pre-tax loss in excess of: (a) Six Million Five Hundred Thousand Dollars (\$6,500,000.00), measured as of the end of each fiscal quarter for the two quarter period ending September 30, 1998, (b) Seven Million One Hundred Thousand Dollars (\$7,100,000.00), measured as of the end of each fiscal quarter for the two quarter period ending December 31, 1998, (c) Eight Million Two Hundred Thousand Dollars (\$8,200,000.00), measured as of the end of each fiscal quarter for the two quarter period ending March 31, 1999 and (d) Six Million Eight Hundred Thousand Dollars (\$6,800,000.00), measured as of the end of each fiscal quarter for the two quarter period ending June 30, 1999. For purposes of these calculations, the pre-tax loss shall exclude (1) non-recurring income and expenses as determined by the Banks and (2) research and development costs in excess of Five Million Dollars (\$5,000,000) for the two quarter period then ended.
- 6.12 MAXIMUM ANNUAL LOSSES. Beginning with the fiscal year ending March 31, 1999, Borrower shall not suffer a pre-tax loss in excess of Fifteen Million Dollars (\$15,000,000.00), measured as of the end of the fiscal year then ended. For purposes of this calculation, the pre-tax loss shall exclude (a) non-recurring income and expenses as determined by the Banks and (b) research and development costs in excess of Ten Million Dollars (\$10,000,000.00) for the two quarter period then ended.
- 6.13 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 the 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 each Bank:

- 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) Transfers 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 (\$1,500,000.00) 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 each Bank, relocate its chief executive office.

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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 Ten Million Dollars (\$10,000,000.00) 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 Ten Million Dollar (\$10,000,000.00) 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 the Banks such documentation, in form and substance satisfactory to the Banks, as the Banks may request to perfect their security interest in such assets.

- 7.4 INDEBTEDNESS. Create, incur, assume or be or remain liable with respect to any Indebtedness or any Contingent Obligations, or permit any Subsidiary to do so, other than Permitted Indebtedness.
- 7.5 ENCUMBRANCES. Create, incur, assume or suffer to exist any Lien with respect to any of its property, or assign 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 (\$5,000,000.00) 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 (\$11,000,000.00) net of any loans or advances made by such Subsidiaries to Borrower.
- 7.9 TRANSACTIONS WITH AFFILIATES. Directly or indirectly enter into or permit to exist any material transaction with any Affiliate of 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 the Banks' prior written consent.
- 7.11 INVENTORY. Store the Inventory with a bailee, warehouseman, or similar party unless the Banks have 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 the Banks may approve in writing, Borrower shall keep the Inventory only at the locations set forth on SCHEDULE 2 attached hereto and such other locations of which Borrower gives the 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 the Banks.

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- 7.12 CAPITAL EXPENDITURES. Except as permitted under SECTION 7.3, make capital expenditures in excess of Two Million Five Hundred Thousand Dollars (\$2,500,000.00) 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.
 - 7.14 YEAR 2000 COMPLIANCE. Borrower shall perform all acts reasonably

necessary (a) to ensure that Borrower, its Subsidiaries and any business in which Borrower holds a substantial interest, become Year 2000 Compliant in a timely manner and (b) to the extent that a failure of any of Borrower's customers, suppliers and vendors to become Year 2000 Compliant would have a Material Adverse Effect on Borrower's business, to ensure that such customers, suppliers and vendors become Year 2000 Compliant in a timely manner. Such acts shall include, without limitation, performing a comprehensive review and assessment of all of Borrower's systems and adopting a detailed plan, with an itemized budget, for the remediation, monitoring and testing of such systems. If requested by any Bank, Borrower shall within ten (10) business days deliver a statement to such Bank summarizing the Year 2000 exposure, program or progress of Borrower and its Subsidiaries or other evidence of Borrower's compliance with the terms of this Section, certified by an officer of Borrower.

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 SECTION 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 within thirty (30) days after Borrower receives notice thereof or any officer of Borrower becomes aware thereof.

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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 the Banks' security interests in the Collateral, which in the

reasonable determination of the 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). As used herein, "Solvent" shall mean that (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 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 the Banks pursuant to this 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 Fifty Thousand Dollars (\$250,000.00) 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 Twenty-Five Thousand Dollars (\$125,000.00) 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).
- 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 any Bank to enter into this Agreement or any other Loan Document.

19. 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 Banks (the "ENFORCING BANK"). Appointment of the Enforcing Bank shall be subject to the approval of either (i) if 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 Committed Revolving Line, as the case may be, then both such Banks 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, total more than sixty-six and two-thirds percent (66.6%) of all such amounts outstanding or 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 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 SECTION 13 hereof, 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 possession 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 and such Bank's determination appears to be prior or superior to its security interest and 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;

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- (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 the 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 the Banks; (b) endorse Borrower's name on any checks or other forms of payment or security that may come into Collateral Agent's or any 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, verifications 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 the Banks as Borrower's attorney in fact, and each and every one of Enforcing Bank's or the Banks' 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 the 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 the Banks, and verify the amount of such Account. Borrower shall collect all amounts owing to Borrower for the Banks, receive in trust all payments as Enforcing Bank's or the Banks' trustee, and immediately deliver such payments to Enforcing Bank or the 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 the 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 Revolving Line as the Banks reasonably deem necessary to protect the

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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 the Banks deem prudent. Any amounts so paid or deposited by the 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 the Banks shall not constitute an agreement by any 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 SECTION 13, the Banks' rights and remedies under this Agreement, the Loan Documents, and all other agreements shall be cumulative. Subject to SECTION 13, the 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 Bank: Imperial Bank

2460 Sand Hill Road, Suite 102 Menlo Park, CA 94025 Attn: Steven D. Kattner Fax: 650/233-3020

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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 the 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 THE 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 RECOGNIZES 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 WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

SECTION 12. JUDICIAL REFERENCE.

12.1 Other than (a) nonjudicial foreclosure and all matters in connection therewith regarding security interests in real or personal property; or (b) the appointment of a receiver, or the exercise of other provisional remedies (any and all of which may be initiated pursuant to applicable law), each controversy, dispute or claim between the parties arising out of or relating to this Agreement or the other Loan Documents, which controversy, dispute or claim is not settled in writing within thirty (30) days after the "CLAIM DATE" (defined as the date on which a party subject to this Agreement gives written notice to all other parties that a controversy, dispute or claim exists), will be settled by a reference proceeding in California in accordance with the provisions of Section 638 et seq. of the California Code of Civil Procedure, or their successor section ("CCP"), which shall constitute the exclusive remedy for the settlement of any controversy, dispute or claim concerning this Agreement, including whether such controversy, dispute or claim is subject to the reference proceeding and except as set forth above, the parties waive their rights to initiate any legal proceedings against each other in any court or jurisdiction other than the Superior Court in the County where the real property, if any, is located or Santa Clara County, if none (the "COURT"). The referee shall be a retired Judge of the Court selected by mutual agreement of the parties, and if they cannot so agree within forty-five (45) days after the Claim Date, the referee shall be promptly selected by the Presiding Judge of the Court (or his/her representative). The referee shall be appointed to sit as a temporary judge, with all of the powers for a temporary judge, as authorized by law, and upon selection should take and subscribe to the oath of office as provided for in Rule 244 of the California Rules of Court (or any subsequently enacted Rule). Each party shall have one peremptory challenge pursuant to CCP Section 170.6. The referee shall (x) be requested to set the matter for hearing within sixty (60) days after the date of selection of the referee and (y) try any and all issues of law or fact and report a statement of decision upon them, if possible, within ninety (90) days of the Claim Date. Any decision rendered by the referee will be final, binding and conclusive and judgement shall be entered pursuant to CCP Section 644 in any court in the State of California having jurisdiction. Any party may apply for a reference proceeding at any time after thirty (30) days following notice to any other party of the nature of the controversy, dispute or claim, by filing a petition for a hearing and/or trial. All discovery permitted by this Agreement shall be completed no later than fifteen (15) days before

period in the event of a party's refusal to provide requested discovery for any reason whatsoever, including, without limitation, legal objections raised to such discovery or unavailability of a witness due to absence or illness. No party shall be entitled to "priority" in conducting discovery. Depositions may be taken by either party upon seven (7) days written notice, and request for production or inspection of documents shall be responded to within ten (10) days after service. All disputes relating to discovery which cannot be resolved by the parties shall be submitted to the referee whose decision shall be final and binding upon the parties. Pending appointment of the referee as provided herein, the Superior Court is empowered to issue temporary and/or provisional remedies, as appropriate.

- 12.2 Except as expressly set forth in this Agreement, the referee shall determine the manner in which the reference proceeding is conducted including the time and place of all hearings, the order of presentation of evidence, and all other questions that arise with respect to the course of the reference proceeding. All proceedings and hearings conducted before the referee, except for trial, shall be conducted without a court reporter except that when any party so requests, a court reporter will be used at any hearing conducted before the referee. The party making such a request shall have the obligation to arrange for and pay for the court reporter. The costs of the court reporter at the trial shall be borne equally by the parties.
- 12.3 The referee shall be required to determine all issues in accordance with existing case law and the statutory laws of the State of California. The rules of evidence applicable to proceedings at law in the State of California will be applicable to the reference proceeding. The referee shall be empowered to enter equitable as well as legal relief, to provide all temporary and/or provisional remedies and to enter equitable orders that will be binding upon the parties. The referee shall issue a single judgment at the close of the reference proceeding that shall dispose of all of the claims of the parties that are the subject of the reference. The parties hereto expressly reserve the right to contest or appeal from the final judgment or any appealable order or appealable judgment entered by the referee. The parties hereto expressly reserve the right to findings of fact, conclusions of laws, a written statement of decision, and the right to move for a new trial or a different judgment, which new trial, if granted, is also to be a reference proceeding under this provision.
- 12.4 In the event that the enabling legislation which provides for appointment of a referee is repealed (and no successor statute is enacted), any dispute between the parties that would otherwise be determined by the reference procedure herein described will be resolved and determined by arbitration. The arbitration will be conducted by a retired judge of the Court, in accordance with the California Arbitration Act, Section 1280 through Section 1294.2 of the CCP as amended from time to time. The limitations with respect to discovery as set forth hereinabove shall apply to any such arbitration proceeding.

SECTION 13. INTERCREDITOR PROVISIONS

- 13.1 OWNERSHIP OF ADVANCES. Notwithstanding any other terms of this Agreement, each Bank shall be the holder and sole owner of the respective Advances made by such Bank, and no Bank shall have any interest in the Advances of any other Bank.
- 13.2 LIMITATION ON FURTHER LOANS. Except for daily cash transfers that arise out of the ordinary course of Borrower's cash management operations, no Bank may make loans to or otherwise extend credit to Borrower without the consent of the other Banks, 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.

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13.3 DISBURSEMENTS. All Advances shall be made pro rata by the 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 specifies. 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 Banks and Borrower, which consent shall not be unreasonably withheld, provided that any 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 consent of the other Banks. 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, provided that the aggregate amount that 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 this 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, (iv) reduce the principal amount payable to such participant under this Agreement, or (v) extend the date fixed for the payment of principal or interest 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 13.4 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 an Assignment and Acceptance substantially in the form of EXHIBIT E hereto ("ASSIGNMENT AND ACCEPTANCE"). 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 Banks and Borrower evidence satisfactory to the remaining Banks and 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 Banks and Borrower) to receive and hold the transferred interest subject to all of the provisions of this Agreement.
- (e) CONFIDENTIALITY. Subject to SECTION 14.8 hereof, Borrower authorizes each Bank to disclose to any prospective transferee and any actual transferee any and all information designated by

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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 14.8 hereof. Provided that such prospective transferee or actual transferee has executed a confidentiality agreement in favor of Borrower agreeing to the provisions of SECTION 14.8 hereof, no 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 Banks or Borrower unless the provisions of this SECTION 13.4 are satisfied.
- 13.5 INFORMATION. Each Bank shall use efforts that are reasonable under the circumstances to deliver to the other Banks 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. No Bank shall be responsible for the accuracy, of any information shared pursuant to this SECTION 13.5, nor shall any Bank be liable to any other Bank for any damages incurred as a result of any reliance on such shared information.

- 13.6 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 such Bank has committed to advance as set forth on the signature page to this Agreement (or any amendment thereto) signed by such 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
- 13.7 ALLOCATION OF PAYMENTS. All amounts received by The Banks for the account of Borrower, whether by payment, set-off, counterclaim, or otherwise, shall be allocated and paid to The Banks as necessary to ensure a sharing of all amounts received on account of the Advances as contemplated in SECTION 13.6. Each Bank shall promptly remit to Collateral Agent or Enforcing Bank for disbursement to the other Banks such sums (whether received by such 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 13.6. The Banks likewise shall contribute in such proportions as are necessary to ensure a sharing as contemplated in SECTION 13.6 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.
- promptly advise the other Banks 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. The Banks shall use efforts that are reasonable under the circumstances to consult with the other Banks 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 Banks for any act or omission in the absence of the Enforcing Bank's gross negligence or willful misconduct.

26. 13.9 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 Banks. 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 Committed Revolving Line 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. Any Bank shall have the right to enter a cash bid for such Bank's own account at any sale. If such a 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 Banks shall have no further interest in that Collateral upon payment to such other Banks of their 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 SECTION 13.7.
- 13.10 OTHER OBLIGATIONS. A Bank shall not obtain any interest in any property of 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 the Banks shall share proportionately in such property or proceeds.
- 13.11 INDEPENDENT REVIEW. Each Bank has reviewed this Agreement and the Loan Documents, the financial statements of Borrower, and such other materials as such 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 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 13.5, each Bank shall make its own decision as to 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 Borrower and its officers, employees, accountants, and representatives concerning Borrower's business operations, financial condition, assets, liabilities, and all other matters such 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.
- 13.12 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.

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- 13.13 DESIGNATION OF COLLATERAL AGENT. To facilitate the administration of this Agreement, Imperial shall act as Collateral Agent for itself and the other Banks. 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 all Banks whenever Collateral Agent or Enforcing Bank acts under this Agreement.
- 13.14 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.
- 13.15 NO REAL ESTATE COLLATERAL. Each Bank agrees with, and for the benefit of, the other Banks (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.
- 13.16 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.
- 13.17 REPORTS. Collateral Agent or Enforcing Bank shall use reasonable efforts to deliver to the 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

13.18 COLLATERAL AGENT'S AND ENFORCING BANK'S DUTY OF CARE. Collateral

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 the Banks appraised of all material actions taken. Action taken by Collateral Agent or Enforcing Bank pursuant to the instruction of the 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, the Banks shall not later bring a claim against Collateral Agent or 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 the Banks for any act or omission in the absence of Collateral Agent's or Enforcing Bank's, respectively, own gross negligence or willful misconduct.

13.19 EXPENSES. Upon request, the 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 and Enforcing Bank shall provide to the 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 Bank. If the funds due a non-reimbursing

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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 Banks' proportionate interests as set forth in SECTION 13.6.

- 13.20 COMMUNICATION. Collateral Agent and Enforcing Bank shall promptly inform the Banks if Collateral Agent or Enforcing Bank receives any communication from Borrower calling for action on the part of the Banks, or if Collateral Agent or Enforcing Bank concludes that an Event of Default has occurred under this Agreement.
- as provided in SECTION 13.18 in this Agreement, Collateral Agent and Enforcing
 Bank shall not be liable or answerable to the 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 the 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 relation 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.
- 13.22 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.
- 13.23 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 13.2, 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.

- 13.24 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 under this Agreement. Except as set forth in this Agreement, Collateral Agent has no duty to provide any Bank with any information (other than information provided pursuit to this Agreement), whether coming into Collateral Agent's possession before the Closing Date or at any time thereafter.
- 13.25 NO AGENCY. EXCEPT AS SPECIFIED HEREIN, NO BANK IS AN AGENT OF ANY OTHER BANK. NO BANK HAS ANY AUTHORITY TO ACT OR FAIL TO ACT FOR ANY OTHER BANK. THE OBLIGATIONS OF EACH BANK HEREUNDER ARE SEVERAL. NO BANK SHALL

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BE LIABLE FOR THE FAILURE OF ANY OTHER BANK TO PERFORM ITS OBLIGATIONS HEREUNDER.

13.26 NO RELIANCE. The provisions of this SECTION 13 (except for SECTIONS 13.3, 13.4, and 13.14) are solely for the benefit of the 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 14. GENERAL PROVISIONS.

- 14.1 SUCCESSORS AND ASSIGNS. This Agreement shall bind and inure to the benefit of the respective successors 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 13.4 hereof.
- 14.2 INDEMNIFICATION. Borrower shall defend, indemnify and hold harmless Collateral Agent, Enforcing Bank and each Bank and their respective 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.
- 14.3 TIME OF ESSENCE. Time is of the essence for the performance of all obligations set forth in this Agreement.
- 14.4 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.
- 14.5 AMENDMENTS IN WRITING, INTEGRATION. This Agreement cannot be amended or terminated orally. All prior agreements, understandings, 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.
- 14.6 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.
- 14.7 NOVATION. This Agreement is not intended to be, and shall not be construed to create, a novation or accord and satisfaction, and, except as otherwise provided herein, the Prior Loan Agreement is amended and restated in full by the terms of this Agreement and all obligations outstanding under the Prior Loan Agreement are governed by the terms of this Agreement.

14.8 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 the Banks with respect to the expenses, damages, losses, costs and liabilities described in SECTION 14.2 shall survive until all applicable statute of limitations periods with respect to

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actions that may be brought against the Banks have run, provided that so long as the obligations set forth in the first sentence of this SECTION 14.8 have been satisfied, and no Bank has a commitment to make any Advances or to make any other loans to Borrower hereunder, Collateral Agent, Enforcing Bank and the Banks shall release all security interests granted hereunder and redeliver all Collateral held by it in accordance with applicable law.

14.9 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 or prospective business relations with Borrower, (ii) to prospective transferees or purchasers of any interest in the Advances, 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.

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

TEGAL CORPORATION, a Delaware corporation

a Delaware corporation
By: Michael Parodi President and Chief Executive Officer
By:
David Curtis
Vice President, Secretary, Treasurer and
Chief Financial Officer
IMPERIAL BANK By:
Steven D. Kattner
Vice President and Team Leader
Maximum Commitment Amount: \$12,500,000 (100%)
31.
SCHEDULE 1

SCHEDULE OF EXCEPTIONS

ADDITIONAL PERMITTED INVESTMENTS: None.

ADDITIONAL PERMITTED LIENS: None.

SECTION 5.5 OTHER NAMES: None.

SECTION 5.7 LITIGATION: There are no material legal proceedings pending against Borrower, However, on June 10, 1996, Lucent Technologies, Inc. ("LUCENT"), filed a claim with 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 Borrower's dry plasma etch systems. On March 7, 1995, Borrower 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 Borrower through an arbitration proceeding with respect to the U.S. claim. Borrower has been informed that Lucent recently filed a claim for patent infringement in Germany against AMS for the sale of integrated circuits manufactured with Borrower's dry plasma etch systems. AMS has requested indemnification for the German matter. Borrower believes that the claims made by AMS are without merit and that the ultimate outcome of any defense of any required indemnification obligation to AMS is unlikely to have a Material Adverse Effect on Borrower's results of operations or financial condition. No assurance can be given, however, as to the outcome of such legal proceedings or as to the effect of any such outcome on Borrower's results of operations or financial condition.

On March 17, 1998, Borrower 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 Borrower's patents. Borrower 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 Borrower.

32. SCHEDULE 2

LOCATION OF INVENTORY

See Attached.

SCHEDULE 2

EXHIBIT A

DESCRIPTION OF COLLATERAL

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 finished 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.

EXHIBIT A EXHIBIT B

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

TO:	DATE:
EXHIBIT B	
FAX#:	TIME:
FROM:	
CLIENT NAME (BORRO	JWER)
REQUESTED BY:AUTHORIZED SIGNER'S	S NAME
AUTHORIZED SIGNATURE:	
PHONE NUMBER:	
FROM ACCOUNT # TO ACC	COUNT #

REQUESTED TRANSACTION TYPE	REQUEST DOLLAR AMOUNT
INTEREST PAYMENT (ONLY)	\$ \$ \$) \$
OTHER INSTRUCTIONS:	
All representations and warranties of Borrow Restated Loan and Security Agreement dated as o correct and complete in all material respects as of request for and Advance confirmed by this Borrow however, that those representations and warranties another date shall be true, correct and complete in such date.	f August 15, 1998 are true, the date of the telephone ving Certificate; provided, s expressly referring to
BANK USE ONLY	
TELEPHONE REQUEST:	
The following person is authorized to request the advance on the advance designated account and is	
	Phone #
Authorized Requester	
	Phone #
Received by (Bank)	
Authorized Signature (Bank)	
EXHIBIT B	
EXHIBIT C	
FORM OF NOTE	

\$12,500,000.00

August 15, 1998 Petaluma, California

On the Revolving Maturity Date, and as hereinafter provided, for value received, the undersigned promises to pay to IMPERIAL BANK, a California banking corporation ("BANK"), or order, at its Santa Clara Valley Regional office in San Jose, California, the lesser of (i) the principal sum of \$12,500,000.00 or (ii) such 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 Amended and Restated Loan and Security Agreement dated of even date herewith, by and among the undersigned and Bank, as the same may be amended from time to time (the "LOAN AGREEMENT"), together with interest from the date of disbursement on the unpaid principal balance at a rate of interest equal to the Prime Rate (as defined in the Loan Agreement), which shall vary concurrently with any change in the Prime Rate. Interest shall be computed at the above rate on the basis of the actual number of days during which the principal balance of this Note ("NOTE") is outstanding, divided by 360, which shall, for interest computation purposes, be considered one (1) 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 on September 15, 1998, and continuing on the fifteenth (15th) day of each month thereafter, 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 an 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 two percent (2.0%) per year in excess of the Prime Rate, 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 attorneys' 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 United 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.

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

EXHIBIT C

Page 1 of 2

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 waiver 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, a Delaware corporation

Printed Name:	
Title:	
D.,,	
By:Printed Name:	
Title:	
EXHIBIT C	
Page 2 of 2	
EXHIBIT D	
OMPLIANCE CERTIFICATE	

The consolidated financial statements dated as of _______ of TEGAL CORPORATION, a Delaware corporation ("BORROWER") attached hereto and submitted to IMPERIAL BANK ("Imperial") pursuant to that certain Amended and Restated Loan and Security Agreement dated as of August 15, 1998 (the "Agreement"), entered into between Borrower, Banks and Imperial, shows compliance with all financial covenants (unless otherwise noted below) as specified therein, as follows:

<tabl< th=""><th></th></tabl<>	
~	CC> <c></c>
a.	Minimum Quick Ratio:
	1.75:1.00
b.	Maximum Liabilities to Tangible Net Worth Ratio:
	0.75:1.00
c.	Minimum Tangible Net Worth of:
	\$28,000,000.00
d.	Maximum Quarterly Losses not greater than:
	\$6,500,000.00 (2Q period ending 9/30/98)
	\$7,100,000.00 (2Q period ending 12/31/98)
	\$8,200,000.00 (2Q period ending 3/31/99)
	\$6,800,000.00 (2Q period ending 6/30/99)
e.	Maximum Annual Losses not greater than:
	\$15,000,000.00
<td>LE></td>	LE>
Exception	ons: (if none, so state):
TOI 1	
that Bor	ersigned authorized officer of Borrower hereby certifies in such capacity rower is in complete compliance with the terms and conditions of the
	ent for the period ending, and as of the date of npliance Certificate the representations and
	EXHIBIT D
warranti	es stated therein are true, accurate and complete as of the date hereof
	as to those representations and warranties which specifically reference alar date and except as noted above).
The und	ersigned further certifies that s/he knows of no pending conditions which
may cau	use an Event of Default (as defined in the Agreement) to exist in the next 0) days. The required support documents for this certification are
attached	and prepared in accordance with generally accepted accounting es, consistently applied.
Date:	TEGAL CORPORATION
Date.	a Delaware corporation
	Den
	By:Printed Name:
	Title:
	Ву:
	By: Printed Name:
	Title:

EXHIBIT E

FORM OF ASSIGNMENT AND ACCEPTANCE AGREEMENT

ASSIGNMENT AND ACCEPTANCE dated ("Assignor") and	,between ("Assignee").
PRELIMINARY STATEMENT	
A. Reference is made to the Amended and Agreement dated as of August 15, 1998 (as the sam hereafter be amended, modified, supplemented or ramong TEGAL CORPORATION, a Delaware corp ("Imperial"), the BANKS and Imperial Bank, as the Banks. Capitalized terms used but not otherwise de given them in the Loan Agreement. B. Assignor is a Bank under and as defined	te may from time to time estated, the "Loan Agreement"), soration (the "Borrower"), IMPERIAL BANK of Collateral Agent for the fined herein have the meanings
B. Assignor is a Bank under and as defined and, as such, presently has the following Commitm	
Committed Revolving Line \$	
C. On the terms and conditions set forth be sell and assign to Assignee, and Assignee desires to Assignor, a% interest (the "Revolvin and to all of Assignor's rights and obligations und Line as of the Effective Date (as defined below), reunder the Committed Revolving Line of D. After giving effect to the assignments deabove, the respective Loans of Assignor and Assign will be:	purchase and assume from ring Line Assigned Percentage") der the Committed Revolving presenting a Commitment
ASSIGNOR	
Committed Revolving Line \$	
ASSIGNEE	
Committed Revolving Line \$	
NOW, THEREFORE, Assignor and Assignee	hereby agree as follows:
1. Assignor hereby sells and assigns to Ass and Assignee hereby purchases and assumes from Assigned Percentage of Assignor's rights and obligated Agreement as of the Effective Date.	Assignor, the Revolving Line
2. ASSIGNOR:	
(a) represents and warrants that as of the principal amount outstanding under the Committed effect to assignments thereof which have not yet be follows:	Revolving Line (without giving
EXHIBIT E Page 1 of 3	
Committed Revolving Line \$	
(b) represents and warrants that it is the beneficial owner of the interest being assigned by it 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 of 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

EXHIBIT E Page 2 of 3

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.
- 8. This Assignment and Acceptance shall be governed by, and construed in accordance with, the law of the State of California.

	Ву:
	Printed Name:
	Title:
	ASSIGNEE
	By:Printed Name:
	Printed Name:
	Title:
	Address for notices:
ACCEPTED this _	day of
TEGAL CORPORA a Delaware corpora	
a Delaware corpora	tion
By:	
Printed Name:	
11116	
_	
By:	
rimea name: Title:	
11110	

EXHIBIT E Page 3 of 3

EXHIBIT 23.1

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the incorporation by reference in the Registration Statements on Forms S-8 (Nos. 333-66781, 333-12473 and 333-462) of our report dated April 28, 1999 appearing on page 38 of Tegal Corporation's Annual Report on Form 10-K for the year ended March 31, 1999.

PricewaterhouseCoopers LLP San Jose, California June 24, 1999

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