

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

FORM 10-Q

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

FOR QUARTER ENDED SEPTEMBER 30, 1998

Commission File No. 0-12933

LAM RESEARCH CORPORATION
(Exact name of Registrant as specified in its charter)

DELAWARE

(State or other jurisdiction of
incorporation or organization)

94-2634797

(I.R.S. Employer
Identification Number)

4650 CUSHING PARKWAY, FREMONT, CALIFORNIA

(Address of principal executive offices)

94538

(Zip Code)

Registrant's telephone number, including area code: (510) 659-0200

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 such reports), and (2) has been subject to such filing requirements for the past 90 days.

YES NO

As of September 30, 1998 there were 38,747,958 shares of Registrant's Common Stock outstanding.

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ITEM 1. FINANCIAL STATEMENTS

LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)

	September 30, 1998 (unaudited) -----	June 30, 1998 -----
Assets		
Cash and cash equivalents	\$ 129,841	\$ 13,509
Short-term investments	209,999	383,647
Accounts receivable, net	152,575	176,029
Inventories	214,233	220,610
Prepaid expenses and other assets	41,283	25,809

Deferred income taxes	77,485	77,485
	-----	-----
Total Current Assets	825,416	897,089
Equipment and leasehold improvements, net	137,530	144,252
Restricted cash	51,357	51,357
Other assets	55,735	58,074
	-----	-----
Total Assets	\$ 1,070,038	\$ 1,150,772
	=====	=====
Liabilities and Stockholders' Equity		
Trade accounts payable	\$ 54,330	\$ 67,703
Accrued expenses and other		
current liabilities	172,116	208,442
Current portion of long-term debt and		
capital lease obligations	16,863	17,364
	-----	-----
Total Current Liabilities	243,309	293,509
Long-term debt and capital lease		
obligations, less current portion	331,645	334,174
	-----	-----
Total Liabilities	574,954	627,683
Preferred stock: 5,000 shares authorized;		
none outstanding		
Common Stock at par value of \$0.001 per share		
Authorized -- 90,000 shares; issued and		
outstanding 38,748 shares at September 30,		
1998 and 38,267 shares at June 30, 1998	39	38
Additional paid-in capital	380,782	381,011
Accumulated other comprehensive income (loss)	(710)	295
Retained earnings	114,973	141,745
	-----	-----
Total Stockholders' Equity	495,084	523,089
	-----	-----
	\$ 1,070,038	\$ 1,150,772
	=====	=====

See Notes to condensed consolidated financial statements.

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LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three Months Ended	
	September 30,	
	1998	1997
	-----	-----
Net sales	\$ 142,137	\$ 289,392
Royalty income	62	534
	-----	-----
Total revenue	142,199	289,926
Costs and expenses:		
Cost of goods sold	92,043	176,940
Research and development	35,114	54,177
Selling, general and administrative	41,836	53,204
Merger costs	--	17,685
	-----	-----
Operating loss	(26,794)	(12,080)

Other (income) expense, net	(22)	798
	-----	-----
Loss before income taxes	(26,772)	(12,878)
Income tax benefit	--	706
	-----	-----
Net loss	\$ (26,772)	\$ (12,172)
	=====	=====
Net loss per share		
Basic	\$ (0.70)	\$ (0.32)
	=====	=====
Diluted	\$ (0.70)	\$ (0.32)
	=====	=====
Number of shares used in per share calculations		
Basic	38,400	37,600
	=====	=====
Diluted	38,400	37,600
	=====	=====

See Notes to condensed consolidated financial statements.

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LAM RESEARCH CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Three Months Ended	
	September 30, 1998	September 30, 1997
	-----	-----
Cash flows from operating activities:		
Net loss	\$ (26,772)	\$ (12,172)
Adjustments to reconcile net loss to net cash provided by (used in) operating activities:		
Depreciation and amortization	15,013	15,148
Deferred taxes	(724)	--
Change in certain working capital accounts	(36,915)	16,070
	-----	-----
Net cash provided by (used in) operating activities	(49,398)	19,046
Cash flows from investing activities:		
Capital expenditures, net	(6,268)	(13,091)
Purchase of short-term investments	(874,693)	(4,559,637)
Sale/maturities of short-term investments	1,048,341	4,157,485
Other	2,613	(1,232)
	-----	-----
Net cash provided by (used in) investing activities	169,993	(416,475)
	-----	-----

Cash flows from financing activities:

Repayments of borrowings under line of credit	--	(35,000)
Common stock repurchase	(3,937)	
Sale of stock, net of issuance costs	3,709	9,275
Net proceeds from issuance of long-term debt	--	301,000
Principal payments on long-term debt and capital lease obligations	(3,030)	(4,074)
Foreign currency translation adjustment	(1,005)	(42)
	-----	-----
Net cash provided by (used in) financing activities	(4,263)	271,159
	-----	-----
Net increase (decrease) in cash and cash equivalents	116,332	(126,270)
Cash and cash equivalents at beginning of period	13,509	140,872
	-----	-----
Cash and cash equivalents at end of period	\$ 129,841	\$ 14,602
	=====	=====

See Notes to condensed consolidated financial statements.

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LAM RESEARCH CORPORATION
 NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
 September 30, 1998
 (Unaudited)

NOTE A -- BASIS OF PRESENTATION

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles for interim financial information and with the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by generally accepted accounting principles for complete financial statements. In the opinion of management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair presentation have been included. The accompanying unaudited condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements of Lam Research Corporation (the "Company" or "Lam") for the fiscal year ended June 30, 1998, which are included in the Annual Report on Form 10-K, File number 0-12933.

NOTE B -- INVENTORIES

Inventories consist of the following:

(in thousands)	Sept. 30, 1998	June 30, 1998
	-----	-----
Raw materials	\$156,460	\$147,794
Work-in-process	41,789	52,374
Finished goods	15,984	20,442
	-----	-----
	\$214,233	\$220,610
	=====	=====

NOTE C -- EQUIPMENT AND LEASEHOLD IMPROVEMENTS

Equipment and leasehold improvements consist of the following:

(in thousands)	Sept. 30, 1998 -----	June 30, 1998 -----
Equipment	\$ 136,763	\$ 139,358
Furniture & fixtures	62,184	60,353
Leasehold improvements	99,445	95,075
	-----	-----
	298,392	294,786
Accumulated depreciation and amortization	(160,862)	(150,534)
	-----	-----
	\$ 137,530	\$ 144,252
	=====	=====

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NOTE D -- OTHER (INCOME) EXPENSE, NET

The significant components of other (income) expense, net are as follows:

(in thousands)	Three Months Ended September 30, -----	
	1998	1997
	-----	-----
Interest expense	\$ 4,871	\$ 2,715
Interest income	(5,932)	(3,199)
Other	1,039	1,282
	-----	-----
	\$ (22)	\$ 798
	=====	=====

NOTE E -- NET LOSS PER SHARE

All net loss amounts for all periods have been presented and, where necessary, restated to conform to the FAS 128 requirements. Basic net loss per share, is calculated using the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share is calculated using the weighted average number of shares of common stock outstanding during the period. The assumed conversion of the convertible subordinated notes to potential common shares were excluded from the diluted earnings per share because their effect was antidilutive. Options were outstanding during the three month periods ended September 30, 1998 and September 30, 1997, respectively, but were excluded from the computation of diluted net loss per common share because the effect in periods with a net loss would be antidilutive. The Company's basic and diluted net loss per share, as calculated according to FAS 128, are as follows:

(in thousands, except per share data)	Three Months Ended September 30,	
	1998	1997
Numerator:		
Numerator for basic net loss per share	\$ (26,772)	\$ (12,172)
Numerator for diluted net loss per share	\$ (26,772)	\$ (12,172)
Denominator:		
Basic net loss per share - average shares outstanding	38,400	37,600
Diluted net loss per share - average shares outstanding and assumed conversions	38,400	37,600
Basic net loss per share	\$ (0.70)	\$ (0.32)
Diluted net loss per share	\$ (0.70)	\$ (0.32)

NOTE F -- COMPREHENSIVE LOSS

As of July 1, 1998, the Company has adopted Statement of Financial Accounting Standards No. 130, "Reporting Comprehensive Income," ("FAS 130"). FAS 130 establishes new rules for the reporting and display of comprehensive income and its components; however the adoption of this statement had no impact on the Company's net loss or stockholders' equity. FAS 130 requires that unrealized gains or losses on available-for-sale securities and foreign currency translation adjustments are to

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be included in other comprehensive loss. Prior to adoption, unrealized gains and losses and foreign currency translation adjustments were reported as a component of stockholder's equity.

The components of comprehensive loss, net of tax, are as follows:

(in thousands)	Three Months Ended	
	September 30,	
	1998	1997
Net loss	\$ (26,772)	\$ (12,172)
Foreign currency translation adjustment	(1,005)	(42)
Comprehensive loss	\$ (27,777)	\$ (12,214)

Accumulated other comprehensive income (loss) presented on the accompanying consolidated condensed balance sheets consists of the accumulated foreign currency translation adjustment.

NOTE G -- RESTRUCTURING

During the quarters ended March 31, 1998 and June 30, 1998, the Company announced plans to restructure its operations to focus more on its core etch and Chemical Mechanical Planarization ("CMP") product groups, and to exit its Flat Panel Display ("FPD") and Chemical Vapor Deposition ("CVD") operations.

As a result of the restructurings, the Company reduced its global workforce by approximately 28% and downsized and consolidated its manufacturing operations and facilities. The Company recorded a total restructuring charge of \$148.9 million for severance compensation and benefits, the write-off of facilities, fixed assets and excess and obsolete inventory and other exit costs. At September 30, 1998, \$30.2 million of the charge remains accrued on the balance sheet. During the quarter ended September 30, 1998 the Company made approximately \$17 million of cash payments, relating primarily to severance, benefits and rent on unoccupied facilities. At September 30, 1998, the Company has approximately \$28 million of future cash payments relating to the restructurings. There will be further charges against the restructuring reserves established in fiscal 1998 during fiscal 1999, as the Company completes this restructuring program.

Restructuring activity:

(in thousands)	Severance and Benefits	Facilities and Fixed Assets	Excess and Obsolete Inventory	Other Exit Costs	Total
Restructuring provision	\$ 40,317	\$ 64,339	\$ 31,933	\$ 12,269	\$148,858
Spending and charges	9,766	48,859	31,933	9,857	100,415
Balance at June 30, 1998	\$ 30,551	\$ 15,480	\$ --	\$ 2,412	\$ 48,443
Spending and charges	17,312	911	--	--	18,223
Balance at September 30, 1998	\$ 13,239	\$ 14,569	\$ --	\$ 2,412	\$ 30,220

NOTE H -- DEBT

During the quarter ended September 30, 1998, the Company renegotiated a replacement facility for a yen 1.7 billion yen-

denominated loan. Principal payments on the new facility are due annually on September 30 through September 30, 2001. The new facility was renegotiated at terms which were more favorable than the previous yen-denominated loan.

NOTE I -- LITIGATION

See Part II, item 1 for discussion of litigation.

ITEM 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

With the exception of historical facts, the statements contained in this discussion are forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Exchange Act, and are subject to the Safe Harbor provisions created by that statute. Such forward-looking statements include, but are not limited to, statements that relate to the Company's future revenue, product development, demand, acceptance and market share, competitiveness, royalty income, gross margins, levels of research and development and operating expenses, management's plans and objectives for current and future operations of the Company, the effects of the Company's on-going reorganization and consolidation of operations and facilities, the ability of the Company to complete contemplated reorganizations or consolidations on time or within anticipated costs, and the sufficiency of financial resources to support future operations and capital expenditures. Such statements are based on current expectations and are subject to risks, uncertainties, and changes in condition, significance, value and effect, including those discussed below under the heading Risk Factors, and other documents the Company files from time to time with the Securities and Exchange Commission, specifically the Company's last filed Annual Report on the Form 10-K. Such risks, uncertainties and changes in condition, significance, value and effect could cause actual results to differ materially from those expressed herein and in ways not readily foreseeable. Readers are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof and of information currently and reasonably known. The Company

undertakes no obligation to release the results of any revisions to these forward-looking statements which may be made to reflect events or circumstances which occur after the date hereof or to reflect the occurrence or effect of anticipated or unanticipated events. This discussion should be read in conjunction with the Condensed Consolidated Financial Statements and Notes presented thereto on pages 3 to 9 of this Form 10-Q for a full understanding of the Company's financial position and results of operations for the quarter ended September 30, 1998.

Results of Operations

Net sales for the first quarter of fiscal 1999 decreased 51% compared to the first quarter of fiscal 1998. The Company experienced decreased revenues for all of its product lines. Total foreign sales represented 42% of total revenue during the first quarter of fiscal 1999 compared to 51% of total revenue for the year-ago period. Revenue from the Asia Pacific and Japan regions decreased to 15% and 6%, respectively, of total revenue during the first quarter of fiscal 1999 from 31% and 9%, respectively of total revenue during the first quarter of fiscal 1998. Revenue from the North America and Europe regions increased to 58% and 21%, respectively, of total revenue during the first quarter

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of fiscal 1999 from 49% and 11%, respectively, of total revenue during the first quarter of fiscal 1998. The semiconductor industry is currently experiencing a severe worldwide slowdown in equipment demand which was and continues to be brought on by depressed DRAM pricing, production overcapacity as well as uncertainty in the worldwide financial markets. The Company anticipates that net sales will decrease, compared to the quarter ended September 30, 1998, for the remainder of calendar 1998.

In response to the continued decline in net sales, and as part of a restructuring plan, the Company commenced a reduction of its work force in November 1998. In addition, Management anticipates that as part of the restructuring plan it will consolidate facilities. The Company has not yet finalized its restructuring plan and therefore, it cannot quantify the associated costs at this time. The Company will record a restructuring charge during the fiscal quarter ending December 1998.

Royalty income decreased 88% from the year-ago period. The Company expects that royalty income will remain relatively flat for the remainder of the fiscal year. The reduction in royalty income is a result of the slowdown in equipment sales in the Japan region.

Gross margin percentage declined to 35.3% in the first quarter of fiscal 1999 compared with 39.0% for the year-ago period. The lower overall gross margin percentage is primarily a result of excess manufacturing capacity which is a result of the Company's lower volume of sales.

Research and development ("R&D") expenses for the quarter ended September 30, 1998 were 35.2% lower than the year-ago period. As a percentage of total revenue R&D expenses increased to 24.7% of total revenue for the quarter ended September 30, 1998 compared to 18.7% of total revenue for the quarter ended September 30, 1997. The decrease in R&D expenses is a result of the Company's efforts to exit from its FPD and CVD operations and to focus more on its core etch and CMP product groups.

Selling, general and administrative ("SG&A") expenses decreased 21.4% during the first quarter of fiscal 1999 compared to the year-ago period. The decrease in SG&A expenses is a result of the Company's restructurings in fiscal 1998. The Company continues to monitor closely its expenditures and capital spending relative to revenue levels.

During the first quarter of fiscal 1998, the Company recorded costs of \$17.7 million related to the merger with OnTrak Systems, Inc. ("OnTrak"). Such expenses relate to investment advisory fees, legal and accounting fees, financial printing costs and other merger-related costs.

Other income increased \$0.8 million during the first quarter of fiscal 1999 compared to the first quarter of fiscal 1998. During the first

quarter of fiscal 1998, the Company issued \$310.0 million of convertible subordinated notes ("the Notes") bearing interest at 5% which are due to mature on September 1, 2002. During the first quarter of fiscal 1999, the Company's rate of return on its investments exceeded the interest rate it pays on the Notes.

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Due to the Company's significant tax loss and credit carryovers, Lam did not record any tax benefit during the first quarter of fiscal 1999.

During the quarters ended March 31, 1998 and June 30, 1998, the Company announced plans to restructure its operations to focus more on its core etch and CMP product groups, and to exit its FPD and Chemical Vapor Deposition ("CVD") operations. As a result of the restructurings, Lam reduced its global workforce by approximately 28% and downsized and consolidated its manufacturing operations and facilities. The Company recorded a total restructuring charge of \$148.9 million for severance compensation and benefits, the write-off of facilities, fixed assets and excess and obsolete inventory and other exit costs. At September 30, 1998, \$30.2 million of the charge remains accrued on the balance sheet. During the quarter ended September 30, 1998, the Company made approximately \$17 million of cash payments, relating primarily to severance, benefits and rent on unoccupied facilities. At September 30, 1998 the Company has approximately \$28 million of future cash payments relating to the restructurings. There will be further charges against the restructuring reserves established in fiscal 1998 during fiscal 1999, as the Company completes its restructuring program.

The Company has established a team to address issues raised by the introduction of the Single European Currency ("Euro") for initial implementation as of January 1, 1999, and through the transition period to January 1, 2002. Lam expects to be able to meet related legal requirements by January 1, 1999, and through the transition period. Lam does not expect the cost of any system modifications to be material and does not currently expect that introduction and use of the Euro will materially affect its foreign exchange and hedging activities or will result in any material increase in transaction costs. The Company will continue to evaluate the impact over time of the introduction of the Euro; however, based on currently available information management does not believe that the introduction of the Euro will have a material adverse impact on the Company's financial condition or the overall trends in results of its operations.

The Company relies heavily on its existing application software and operating systems. The Year 2000 compliance issue (in which systems do not properly recognize date sensitive information when the year changes to 2000) creates risks for the Company: if internal data management, accounting and/or manufacturing or operational software and systems do not adequately or accurately process or manage day or date information beyond the year 1999, there could be an adverse impact on the Company's operations. To address the issue, the Company has assembled a task force to review and assess internal software, data management, accounting and manufacturing and operational systems to ensure that they do not malfunction as a result of the Year 2000 date transition. The review and corrective measures are proceeding in parallel. These review and corrective measures are intended to encompass all significant categories of systems used by the Company, including data management, accounting, manufacturing, sales, human resources and operational software and systems. The Company is also working with its significant suppliers of products and systems to assure that the products and systems supplied to the Company, and the products the Company supplies to its customers, are Year 2000 compliant. With respect to compliance of the products the Company supplies to its customers, the Company intends to adhere to Year 2000

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test case scenarios established by SEMATECH, an industry group comprised of US semiconductor manufacturers. The Company's compliance efforts are substantially complete, and the Company currently expects that its review, corrective measures

and contingency planning (where necessary) will be complete by the end of fiscal 1999, with the goal of resolving all material internal programs and systems prior to the Year 2000 date transition.

In connection with its review and corrective measures, both to ensure that its internal products and systems, and the operating systems accompanying the products sold to its customers, are Year 2000 compliant, the Company expects both to replace some software and systems and to upgrade others where appropriate. As a contingency with respect to products the Company currently offers to its customers, the Company may replace all non-compliant operating systems with systems demonstrated to be Year 2000 compliant. With respect to products and systems supplied to the Company for use internally, the Company may upgrade all non-compliant products and systems and, where necessary or where no reasonable upgrade is available, replace such non-compliant products and systems with products and systems demonstrated to be Year 2000 compliant.

The Company is in the process of identifying for its customers the corrective measures necessary to ensure that its installed products are Year 2000 compliant, including compliance of third-party products (such as software) incorporated into the Company's installed products. In this regard, the Company is incurring, and will continue to incur throughout fiscal 1999, various costs to provide customer support regarding Year 2000 issues, and certain of such costs are expected to be borne not by the Company but, instead, to be passed on to the customers. The full cost of these activities, including corrective measures, is not fully known. However, the Company believes that the potential future financial impact of assuring such Year 2000 compliance is not expected to be material. The Company's failure to ensure, at all or in a timely or reasonable manner, that its products are Year 2000 compliant may cause disruption in the customer's ability to derive expected productivity from those products or to integrate the products fully and functionally into certain automated manufacturing environments. With respect to products and systems the Company purchases for use internally, failure to ensure Year 2000 compliance may cause disruption in the Company's automated accounting, financial planning, data management and manufacturing operations which could have a material effect on the Company's short-term ability to manage its day-to-day operations in an efficient, cost-effective and reliable manner.

The Company believes that its Year 2000 compliance project will be completed on a timely basis, and in advance of the Year 2000 date transition and will not have a material adverse effect on the Company's financial condition or overall trends in the results of operations. However, there can be no assurance that unexpected delays or problems, including the failure to ensure Year 2000 compliance by systems or products supplied to the Company by a third party, will not have an adverse effect on the Company, its financial performance, or the competitiveness or customer acceptance of its products. Further, the Company's current understanding of expected costs is subject to change as the project progresses, and does not include potential costs related to actual customer claims, or the cost of internal software and hardware replaced in the normal course of business (whose installation

otherwise in the normal course of business may be accelerated to provide solutions to Year 2000 compliance issues).

Liquidity and Capital Resources

As of September 30, 1998, the Company had \$391.2 million in cash, cash equivalents, short-term investments and restricted cash, compared with \$448.5 million at June 30, 1998. The Company has a total of \$100.0 million available under a syndicated bank line of credit which is due to expire in April 2001. Borrowings under the line of credit bear interest at the bank's prime rate or 0.55% to 0.95% over London Interbank Offered Rate.

Net cash used in operating activities was \$49.4 million for the three months ended September 30, 1998. The Company used \$36.9 million of working capital. Cash payouts relating to the fiscal 1998 restructurings were approximately \$17 million. Decreases in accounts payable, accrued liabilities and increases in prepaid expenses were offset by decreases in accounts receivables and inventory resulting in a use of cash of \$19.9 million. Cash provided by investing activities was \$170.0 million, which was primarily from

the net sales of short-term investments. Capital expenditures, net of retirements, for the three month period ended September 30, 1998 were \$6.3 million. The Company used \$4.3 million in financing activities primarily from the principal payments of long-term debt and capital lease obligations of \$3.0 million. During the quarter ended September 30, 1998, the Company used \$3.9 million for the repurchase of common stock which was offset by the sale of common stock.

The Company's cash, cash equivalents, short-term investments and available lines of credit at the end of the first quarter of fiscal 1999 are considered adequate to support current levels of operations for at least the next twelve months.

Risk Factors

Fluctuations in Quarterly Revenues and Operating Results

The Company's quarterly revenues have fluctuated in the past and may fluctuate in the future. The Company's revenues are dependent on many factors, including, but not limited to, the economic conditions in the semiconductor industry generally, and equipment industry specifically, customer capacity requirements, the size and timing of the receipt of orders from customers, customer cancellations or delays of shipments, the Company's ability to develop, introduce and market new, enhanced and competitive products, at all and on a timely basis, the introduction of new products by its competitors, challenges to the Company's products and technology, changes in average selling prices and product mix, and exchange rate fluctuations, among others. The Company's expense levels will be based, in part, on expectations of future revenues. If revenue levels in a particular quarter do not meet expectations, operating results could be adversely affected.

The Company derives its revenue primarily from the sale of a relatively small number of high-priced systems. The Company's systems can range in price from approximately \$150,000 to over \$2.5 million per unit. The sale of fewer systems than anticipated in any

quarter may have a substantial negative impact on the Company's operating results for the quarter. The Company's results of operations for a particular quarter could be adversely affected if anticipated orders are not received in time to enable shipment during such quarter, if anticipated shipments are delayed or canceled by one or more customers, or if shipments are delayed due to procurement shortages or manufacturing difficulties. Further, as a result of the continuing consolidation of manufacturing operations and capacity at the Company's Fremont, California facility, natural, physical or other events affecting the facility, including labor disruptions, could adversely impact the Company's operations and revenue.

Volatility in the Semiconductor Equipment Industry

The business of the Company depends on the capital equipment expenditures of semiconductor manufacturers, which in turn depend on the current and anticipated market demand for integrated circuits and products utilizing integrated circuits. The semiconductor industry has been cyclical in nature and has historically experienced periodic downturns. During the past nine months the semiconductor industry has been experiencing a severe slowdown of product demand and extreme volatility in product pricing. This slowdown and volatility has caused the semiconductor industry to reduce or delay significantly purchases of semiconductor manufacturing equipment and construction of new fabrication facilities. This slowdown and volatility is expected to continue throughout fiscal 1999. As previously announced, these conditions have adversely affected and will continue to affect materially the Company's aggregate bookings, revenues and operating results. Even during periods of reduced revenues, in order to remain competitive the Company will continue to invest in R&D and to maintain extensive ongoing worldwide customer service and support capabilities, which could adversely affect its financial results.

Dependence on New Products and Processes; Rapid Technological Change

Rapid technological changes in semiconductor manufacturing processes

subject the semiconductor equipment industry to increased pressure to maintain technological parity with deep submicron process technology. The Company believes that its future success will depend in part upon its ability to develop, manufacture and introduce successfully new products and product lines with improved capabilities and to continue to enhance existing products. Due to the risks inherent in transitioning to new products, the Company will be required to forecast accurately demand for new products while managing the transition from older products. If new products have reliability or quality problems, reduced orders, higher manufacturing costs, delays in acceptance of and payment for new products and additional service and warranty expenses may result. In the past, the Company has experienced some delays, as well as reliability and quality problems, in connection with product introductions. There can be no assurance that the Company will successfully develop and manufacture new products, or that new products introduced by it will be accepted in the marketplace. If Lam does not successfully introduce new products, the Company's results from operations will be materially adversely affected.

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The Company expects to continue to make significant investments in R&D and to explore joint development relationships with other members of the industry. The Company must manage product transitions or joint development relationships successfully, as introduction of new products could adversely affect sales of existing products. There can be no assurance that future technologies, processes or product developments will not render the Company's current product offerings obsolete or that the Company will be able to develop and introduce new products or enhancements to existing products which satisfy customer needs in a timely manner or achieve market acceptance. The failure to do so could adversely affect the Company's business. Furthermore, if the Company is not successful in the marketing and selling of advanced processes or equipment to customers with whom it has formed strategic alliances, selling of its existing products to those customers could be adversely affected. In addition, in connection with the development of the Company's new products, the Company will invest in high levels of preproduction inventory, and the failure to complete development and commercialization of these new products in a timely manner could result in inventory obsolescence, which could have an adverse effect on its financial results.

Introduction of New Product

Lam currently anticipates shipping its Teres CMP system in fiscal 1999, which is expected to face significant competition from multiple current and future competitors. Among the companies currently offering polishing systems are Applied Materials, Inc., Cybeq Systems, Ebara Corporation, IPEC, SpeedFam Corp., Strasbaugh and Sumitomo. Lam believes that other companies are developing polishing systems and are planning to introduce new products to this market before or during the same time frame as the Company's anticipated introduction of its Teres CMP polishing system.

Product Concentration; Lack of Product Revenue Diversification

A substantial percentage of the Company's revenues to date have been derived from a limited number of products, and such products are expected to continue to account for a substantial percentage of the Company's revenues in the near term. Continued market acceptance of its primary products is therefore critical to the future success of the Company. Any decline in demand for or failure to achieve continued market acceptance of such products or any new version of these products, if any, as a result of competition, technological change, failure of the Company to release new versions of these products on time, or otherwise, could have a material adverse effect on the business, operating results, financial condition and cash flows of the Company.

Dependence Upon Key Suppliers and Key Distributors

Certain of the components and subassemblies included in the products of the Company are obtained from a single supplier or a limited group of suppliers. The Company's key suppliers include Bullen Ultrasonics, Inc., which supplies electrodes, Edwards High Vacuum Inc., Lam's supplier of chillers, and Advanced Energy Industries, Lam's RF generator supplier. The Company purchases in excess of \$500,000 of supplies on a monthly basis from these

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suppliers. Each of these suppliers has a one year blanket purchase contract under which Lam may issue purchase orders. These contracts may be renewed periodically. Each of these suppliers has sold products to Lam during at least the last four years, and there is no reason to expect that these contracts will not continue to be renewed in the future or otherwise replaced with competent alternative source suppliers. Management believes that alternative sources could be obtained and qualified to supply these products. Nevertheless, a prolonged inability to obtain certain components could have an adverse effect on the Company's operating results and could result in damage to customer relationships.

Highly Competitive Industry

The semiconductor equipment manufacturing industry is highly competitive. The Company expects to continue to face substantial competition throughout the world. A substantial investment is required by semiconductor manufacturers to install and integrate capital equipment into a semiconductor production line. The Company believes that as a result, once a semiconductor manufacturer has selected a particular supplier's capital equipment, the manufacturer generally relies upon that equipment for the specific production line application and frequently will attempt to consolidate its other capital equipment requirements with the same supplier. Accordingly, Lam would expect to experience difficulty in selling to a given customer if that customer had initially selected or selects a competitor's capital equipment. The Company believes that to remain competitive, significant financial resources are required in order to offer a broad range of products, to maintain customer service and support centers worldwide, and to invest in product and process R&D.

The semiconductor equipment industry is becoming increasingly dominated by large manufacturers who have the resources to support customers on a worldwide basis, and certain of Lam's competitors have substantially greater financial resources and more extensive engineering, manufacturing, marketing and customer service and support. In addition, there are smaller, emerging semiconductor equipment companies that provide innovative technology that may have performance advantages over systems offered by the Company.

Competitors are expected to continue to improve the design and performance of their current products and processes and to introduce new products and processes with improved price and performance characteristics. If competitors enter into strategic relationships with leading semiconductor manufacturers covering products similar to those sold or being developed by the Company, its ability to sell products to those manufacturers could be adversely affected. No assurance can be given that Lam will continue to compete successfully in the United States or worldwide.

Present or future competitors may be able to develop products comparable or superior to those offered by the Company or adapt more quickly to new technologies or evolving customer requirements. In particular, while Lam currently is developing additional product enhancements that it believes addresses customer requirements, there can be no assurance that the development or introduction of these additional product enhancements will be successfully completed, at all or on a timely basis, or that these product enhancements will

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achieve market acceptance or be competitive. Accordingly, there can be no assurance that the Company will be able to continue to compete effectively in its markets, that competition will not intensify or that future competition will not have a material adverse effect on the business, operating results, financial condition and cash flows of the Company.

International Sales

International sales accounted for 42% and 51%, respectively, of net revenues for the first quarter of fiscal 1999 and 1998, and 55%, 57% and 63%,

respectively, of net revenues for fiscal years 1998, 1997 and 1996. Historically, sales to the Asia regions have accounted for a substantial portion of international sales. Recent banking and currency problems in the Asia regions have had and will continue to have a significant adverse impact on the Company's revenue and operations, including specifically revenues and operations for fiscal 1999.

Sales of products currently are denominated in United States dollars. In Korea, devaluation of the Won and difficulties by customers in obtaining credit have curtailed semiconductor equipment investment and have led to cancellation or delay of orders by the Company's customers, and are likely to continue to do so in fiscal 1999.

In Japan, the Company's sales are denominated in Japanese Yen. A weakening of the value of the Japanese Yen as compared to the U.S. dollar could negatively impact operating margins. Currently, the Company enters into foreign currency forward contracts to minimize the impact of exchange rate fluctuations on yen-denominated assets and liabilities and will continue to enter into such hedging transactions in the future.

In Europe, sales following January 1, 1999 will be subject to certain provisions governing the transition of commercial transactions to the Euro. Lam expects to be able to meet related legal requirements by January 1, 1999, and through the transition period. The Company does not currently expect that introduction and use of the Euro will materially affect its foreign exchange and hedging activities or will result in any material increase in transaction costs. Lam will continue to evaluate the impact over time of the introduction of the Euro. Based on currently available information management does not believe that the introduction of the Euro will have a material adverse impact on Lam's financial condition or the overall trends in results of operations.

The impact of these and other factors on the Company's revenues and operating results in any future period is difficult to forecast. There can be no assurance that these and other factors relating to international sales and operations by the Company will not materially adversely affect future business and financial results, or in ways not readily foreseeable.

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Potential Volatility of Common Stock Price

The market price for Lam Common Stock has been volatile and it could continue to be subject to significant fluctuations in response to market or industry conditions generally, or specific variations in quarterly operating results, shortfalls in revenues or earnings from levels expected by securities analysts and other factors such as announcements of restructurings, technological innovations, reductions in force, departure of key employees, consolidations of operations or introduction of new products by the Company or by the Company's competitors, government regulations, developments in patent or other proprietary rights, disruptions with key customers or the occurrence of political, economic or environmental events globally or in key sales regions. In addition, the stock market has in recent years experienced significant price fluctuations. These fluctuations often have been unrelated to the operating performance of the specific companies whose stocks are traded. Recent fluctuations affecting Lam Common Stock have been tied in part to the Asian and Russian financial crisis and the price of and market for semiconductors. Broad market fluctuations, as well as economic conditions generally in the semiconductor industry, may adversely affect the market price of Lam Common Stock.

Intellectual Property Matters

From time to time, Lam has received notices from third parties alleging infringement of such parties' patent or other intellectual property rights by the Company's products. In such cases, it is the policy of the Company to defend the claims or negotiate licenses on commercially reasonable terms, where considered appropriate. However, no assurance can be given that Lam will be able in the future to negotiate necessary licenses on commercially reasonable terms, or at all, or that any litigation resulting from such claims would not have a material adverse effect on the Company's business and financial results.

In October 1993, Varian brought suit against Lam in the United States District Court for the Northern District of California, seeking monetary damages and injunctive relief based on the Company's alleged infringement of certain patents held by Varian. The Company has asserted defenses of invalidity and unenforceability of the patents that are the subject of the lawsuit, as well as non-infringement of such patents by the Company's products. No trial date is currently scheduled. While litigation is subject to inherent uncertainties and no assurance can be given that Lam will prevail in such litigation or will obtain a license under such patents on commercially reasonable terms, or at all, if such patents are held valid and infringed by the Company's products, the Company believes that the Varian lawsuit will not have a material adverse effect on the Company's operating results or the Company's financial position.

The Company's success depends in part on its proprietary technology. While Lam attempts to protect its proprietary technology through patents, copyrights and trade secret protection, it believes that its success will depend on more technological expertise, continuing the development of new systems, market penetration and growth of its installed base and the ability to provide comprehensive support and service to customers. There can be no assurance that the Company will be able to protect its technology or that competitors will not be able to develop similar or more competitive technology independently. Lam currently holds a number of United States and foreign patents and patent applications pending. There can be no

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assurance that any patents issued to the Company will not be challenged, invalidated or circumvented, that pending applications will be issued or that the rights granted or anticipated thereunder will provide competitive advantages.

Year 2000 Compliance

See discussion in Management Discussion and Analysis of Financial Condition and Results of Operation on page 11 to 13.

Restructurings and Consolidation of Operations

The Company substantially restructured and consolidated its operations during the quarters ended March 31, 1998 and June 30, 1998. Implementation of these restructurings and consolidations involves several risks, including that of simplifying and modifying its product line offerings (which will increase its dependence on fewer products and potentially reduce overall sales).

Although the Company believes that the actions it is taking and contemplates taking in connection with the restructurings and consolidations, including the reduction in workforce, the consolidation of manufacturing operations and the exiting from FPD and CVD operations, should help more closely align Lam with its business outlook, there can be no assurance that such actions will enable the Company to achieve its objectives of reducing costs, or can be accomplished at specific or optimum values or on time or as intended. In addition, there can be no assurance that the size of the restructuring charge will not exceed current estimates. The Company's future consolidated operating results and financial condition could be adversely affected should it encounter difficulty in effectively managing the restructurings and consolidations.

ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURE ABOUT MARKET RISKS

For financial market risks related to changes in interest rates and foreign currency exchange rates, refer to Part II, Item 7A, Quantitative and Qualitative Disclosures About Market Risk, in the Company's Annual Report on Form 10-K for the year ended June 30, 1998.

PART II. OTHER INFORMATION

ITEM 1. Legal Proceedings

In October 1993, Varian brought suit against the Company in the United States District Court for the Northern District of California, seeking monetary damages and injunctive relief based on the Company's alleged

infringement of certain patents held by Varian. The Company has asserted defenses of invalidity and unenforceability of the patents that are the subject of the lawsuit, as well as non-infringement of such patents by the Company's products. No trial date is currently scheduled. While litigation is subject to inherent uncertainties and no assurance can be given that Lam will prevail in such litigation or will obtain a license under such patents on commercially reasonable terms, or at all, if such patents are held valid and infringed by the Company's products, the

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Company believes that the Varian lawsuit will not have a material adverse effect on the Company's operating results or the Company's financial position.

In addition, the Company is from time to time notified by various parties that its products may be in violation of certain patents. In such cases, it is the Company's intention to seek negotiated licenses where it is considered appropriate. The outcome of these matters will not, in management's opinion, have a material impact on the Company's consolidated financial position, operating results or cash flow statements.

ITEM 6. Exhibits and Reports on Form 8-K

(a) Exhibits

Exhibit 10.58 Loan Agreement between Lam Research Co., LTD and ABN AMRO Bank N.V., dated September 30, 1998.

Exhibit 10.59 Guaranty to Loan Agreement between Lam Research Co., LTD and ABN AMRO Bank N.V., dated September 30, 1998.

Exhibit 10.60 Second Addendum to Employment Agreement between Lam Research Corporation and Roger D. Emerick, effective September 1, 1998.

Exhibit 27 Financial Data Schedule

(b) Reports on Form 8-K

The Company filed a Form 8-K on July 10, 1998 making an Item 5 disclosure to disclose the Company's announcement of a restructuring.

The Company filed a Form 8-K on August 14, 1998 making an Item 5 disclosure to disclose its year end press release.

The Company filed a Form 8-K on September 16, 1998 making an Item 5 disclosure to disclose that the Company had announced a stock repurchase.

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SIGNATURES

Pursuant to the requirements 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.

Date: November 12, 1998

LAM RESEARCH CORPORATION

By: /s/ Mercedes Johnson

Mercedes Johnson, Vice President,
Finance & Chief Financial Officer

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EXHIBIT INDEX

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- Exhibit 27 Financial Data Schedule

DATED September 30, 1998

LOAN AGREEMENT

between

LAM RESEARCH CO., LTD.
as Borrower

THE BANKS AND FINANCIAL INSTITUTIONS NAMED HEREIN
as Lenders

ABN AMRO BANK N.V., TOKYO BRANCH
as Agent

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THIS LOAN AGREEMENT is made the 30th of September, 1998 BETWEEN:

LAM RESEARCH CO., LTD., as Borrower;

THE BANKS AND FINANCIAL INSTITUTIONS details of which are set out in Schedule 1, as Lenders; and

ABN AMRO BANK N.V., acting through its TOKYO BRANCH, as Agent.

IT IS AGREED as follows:

1. PURPOSE AND DEFINITIONS

1.1 Purpose

This Agreement sets out the terms and conditions on and subject to which the Lenders agree, according to their several obligations, to make available to the Borrower a loan of up to (Y)1,700,000,000 (one billion seven hundred million Yen) to be used for the purpose of refinancing the Borrower's current term debt.

1.2 Definitions

In this Agreement, unless the context otherwise requires:

"Advance" means the borrowing of all of the Commitments by the Borrower or (as the context may require) the principal amount of such borrowing for the time being outstanding;

"Agent" means ABN AMRO Bank N.V., acting through its Tokyo Branch or such other person as may be appointed agent for the Lenders pursuant to Clause 16.11;

"Arranger" means ABN AMRO North America, Inc.;

"Banking Day" means a day (other than Saturday or Sunday) on which banks are open for business in Tokyo;

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"Borrower" means Lam Research Co., Ltd., a Japanese corporation, whose current address is 1-1-10, Oyama, Sagami-hara-shi, Kanagawa Prefecture, Japan;

"Borrower's Account" means the account of the Borrower maintained at ABN AMRO Bank N.V., Tokyo Branch, bearing the number 13-23-016, or such other account as the Borrower from time to time shall designate in a written notice to the Agent for the deposit of funds borrowed under this Agreement.

"Capital Adequacy Requirement" has the meaning given to it in Clause 13.3;

"Change of Law" has the meaning given to it in Clause 13.1;

"Commitment" means, in relation to a Lender, the amount set opposite its name in Schedule 1 or, as the case may be, in any relevant Substitution Certificate, as reduced by any relevant term of this Agreement;

"Contribution" means, in relation to a Lender, the principal amount of the Advance owing to such Lender at any relevant time;

"Default" means any Event of Default or any event or circumstance which would, on the giving of a notice by the Agent and/or the expiry of the relevant period and/or the fulfillment of any other condition (in each case as specified in Clause 11.1), constitute an Event of Default;

"Drawdown" means the payment of the Advance to the Borrower by the Agent;

"Drawdown Date" mean September 30, 1998 or such other date as may be agreed upon between the Borrower and the Agent;

"Event of Default" means any of the events or circumstances described in Clause 11.1;

"Governmental Authority" means any domestic or foreign national, state or local government, any political subdivision thereof, any department, agency, authority or bureau of any of the foregoing, or any other entity exercising

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executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including, without limitation, any central bank or any comparable authority;

"Governmental Rule" means any law, rule, regulation, ordinance, order, code interpretation, judgment, decree, directive, guidelines, policy or similar form of decision of any Governmental Authority;

"Guaranty" means a guaranty in the form of Exhibit 1, to be given by the Guarantor;

"Guarantor" means Lam Research Corporation, a Delaware corporation, whose current address is at 4650 Cushing Parkway, Fremont, CA 94538, U.S.A.;

"Interest Payment Date" means a date specified for the payment of interest pursuant to Clause 5.1;

"Interest Period" means the period determined in accordance with Clause 5.4 and Clause 5.5.

"Lenders" means the banks and financial institutions listed in Schedule 1 and includes their successors in title and Substitutes;

"Lien" means any mortgage, charge, pledge, lien, encumbrance or other security interest with respect to any present or future assets or revenues of the party referred to in the context in which the term is used;

"Loan" means the Advance;

"Majority Lenders" means Lenders the aggregate of whose Contributions at any relevant time equals or exceeds 66 2/3 percent of the Advances or, if no Advance has been made, the aggregate of whose Commitments equals or exceeds 66 2/3 percent of the total of the Commitments of all the Lenders;

"Margin" means a percentage per annum calculated in accordance with Clause 5.3;

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"Margin Certificate" means a certificate in the form of Exhibit 3;

"Margin Determination Date" means the fifteenth day following the date by which the Guarantor shall be required to deliver the quarterly financial statements and information under clauses (i) and (iii) of Subparagraph 4(a) of the Guaranty;

"Margin Period" means the period commencing on and including December 27, 1999 and ending on but excluding the Margin Determination Date falling immediately following December 27, 1999, and thereafter each successive period commencing on and including the last preceding Margin Determination Date and ending on but excluding the next succeeding Margin Determination Date;

"Maturity Date" means the third anniversary of the Drawdown Date;

"month" in respect of any Interest Period means a period beginning in one calendar month and ending in the next calendar month on the day numerically corresponding to the day of the calendar month on which it started, provided that (i) if the period started on the last Banking Day in a calendar month or if there is no such numerically corresponding day, it shall end on the last Banking Day in the next calendar month and (ii) if the numerically corresponding day is not a Banking Day, the period shall end on the next following Banking Day in the same calendar month but if there is no such Banking Day it shall end on the preceding Banking Day, and "months" and "monthly" shall be construed accordingly;

"Principal Payment Date " has the meaning given to it in Clause 6.1;

"Reserve Requirement" shall mean, with respect to any day in an Interest Period for a Loan, the aggregate of the reserve requirement rates (expressed as a decimal) in effect on such day. As used herein, the term "reserve requirement" shall include, without limitation, any basic, supplemental or emergency reserve requirements imposed on a Lender by any Governmental Authority;

"Senior Indebtedness Ratio" has the meaning set out in the Guaranty;

"Substitute" has the meaning given to it in Clause 15.5;

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"Substitution Certificate" means a certificate substantially in the form of Exhibit 2;

"TIBOR" in relation to any period means (i) the average rate at which deposits in Yen are offered to all banks for that period (or a period most comparable to that period) calculated in accordance with Reuter Screen TIBM page or, if that page is no longer published, its successor or equivalent in respect of a deposit for that period (or a period most comparable to that period) at or about 11:00 a.m. (Tokyo time) on the date falling two Banking Days prior to the first day of that period, or (ii) if no such rate is quoted, the rate which a major Japanese city bank selected by the Agent in its discretion was offering deposits to prime banks in the Tokyo Interbank market for that period (or a period most comparable to that period) at or about 11:00 a.m. (Tokyo time) on the date falling two Banking Days prior to the first day of that period;

"U.S. Dollars" or the sign "US\$" means the lawful currency for the time being of the United States of America;

"written" or "in writing" means any method of representing or reproducing words or characters in permanent visible form; and

"Yen" or the sign "(Y)" means the lawful currency for the time being of Japan and, in respect of all payments to be made under this Agreement, means immediately available, freely transferable, cleared funds.

1.3 Headings

Clause headings and the table of contents are inserted for convenience

of reference only and shall be ignored in the interpretation of this Agreement.

1.4 Construction of certain terms

In this Agreement, unless the context otherwise requires: (a) references to clauses, schedules and exhibits are to be construed as references to the clauses of, and schedules and exhibits to, this Agreement and references to this

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Agreement include its schedules which form an integral part of this Agreement; (b) references to a "regulation" include any present or future regulation, rule, directive, requirement, request or guideline (whether or not having the force of law) of any agency, authority, central bank or government department or any self-regulatory or other national or supra-national authority; (c) words importing the plural shall include the singular and vice versa and words importing a gender shall include every gender; (d) references to any enactment shall be deemed to include references to such enactment as re-enacted, amended or extended; (e) references to "law" include, without limitation, any legislation or decree or any decision of any court or tribunal in any applicable jurisdiction; (f) references to "consent" include, without limitation, any license, approval, waiver, filing, registration or authorization; (g) references to a "party" are to a party to this Agreement and "parties" shall be construed accordingly; (h) references to statutes or regulations are to be construed as including all statutory and regulatory provisions consolidating, amending or replacing the statute or regulation referred to; (i) references to agreements and other contractual instruments shall be deemed to include all subsequent amendments and other modifications thereto, but only to the extent such amendments and other modifications are not prohibited by the terms of this Agreement or the Guaranty; (j) the words "hereof," "herein," "hereto," "hereunder" and the like mean and refer to this Agreement as a whole and not merely to the specific Article, Section, subsection, paragraph or clause in which the respective word appears; and (k) the words "including," "includes" and "include" shall be deemed to be followed by the words "without limitation".

2. THE FACILITY

2.1 Amount

The Lenders, relying on each of the representations and warranties in Clause 9, agree to make available to the Borrower on and subject to the terms of this Agreement a loan of up to (Y)1,700,000,000 (one billion seven hundred million Yen). The obligation of each Lender under this Agreement shall be to contribute that proportion of the Advance which its Commitment bears to the total of the Commitments of all the Lenders.

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2.2 Obligations several

The obligations of each Lender under this Agreement are several; the failure of any Lender to perform its obligations shall not relieve any other party of any of its respective obligations or liabilities under this Agreement nor shall any party be responsible for the obligations of any other party under this Agreement.

2.3 Interests several

The interests of the Agent, the Arranger and the Lenders are several and the amount due to the Agent (for its own account), to the Arranger and to each Lender is a separate and independent debt. The Agent, the Arranger and (acting through the Agent in accordance with the terms of this Agreement) each Lender shall have the right to protect and enforce its rights arising out of this Agreement and may do so without joining any other party to any proceedings taken for that purpose.

3. CONDITIONS

3.1 Documents and evidence

The obligation of each Lender to make its Commitment available is conditional on the Agent, or its duly authorized representative, having received the documents and evidence specified in Schedule 2 in form and substance satisfactory to the Agent by the respective dates specified in that schedule. The Agent shall notify the Lenders promptly after receipt by it of the documents and evidence referred to in this Clause 3 in form and substance satisfactory to it.

3.2 Further conditions precedent

The obligation of each Lender to contribute to the Advance is subject to the further conditions that:

- (a) as of the Drawdown Date;
 - (i) the representations and warranties set out in Clause 9 (and so that the representation and warranty in Clause 9.1(f) shall for this

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purpose refer to the then latest audited financial statements delivered to the Agent under Clause 10.1) and in Paragraph 3 of the Guaranty are true and correct on and as of each such time as if each was made with respect to the facts and circumstances then existing; and

- (ii) no Default shall have occurred and be continuing or would result from the making of the Advance;
- (iii) all the covenants of the Borrower set forth in this Agreement and all the covenants of the Guarantor set forth in the Guaranty then required to have been met and performed have been fully met and performed as of the Drawdown Date; and
- (iv) all of the conditions of drawdown required to be met by the Borrower and which have not been waived by the Agent acting on the instructions of the Majority Lenders have been met as of the Drawdown Date and all documents delivered by or on behalf of the Borrower as conditions precedent continue in full force and effect.

- (b) the Agent shall have received payment of all fees then due in accordance with the fee letter between the Borrower and the Arranger dated on or around the date hereof.

Nothing in this Clause 3.2 constitutes a waiver of any right of the Lenders arising from any Event of Default which shall have occurred and be outstanding at the time of the drawing of the Advance.

3.3 Representations

The making of the Drawdown hereunder shall be deemed to be a representation and warranty by the Borrower of the facts stated in Clause 3.2(a).

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3.4 Waiver of conditions precedent

The conditions specified in this Clause 3 are solely for the benefit of the Lenders and may be waived on their behalf in whole or in part and with or without conditions by the Agent acting on the instructions of

the Majority Lenders.

4. DRAWDOWN

- (a) Subject to the fulfillment of the conditions precedent set forth in Clause 3, the Borrower shall borrow the Commitments in a single drawing on the Drawdown Date. The drawdown shall be in the total amount of the unterminating Commitments. The Lenders shall not have any obligation to lend hereunder after such date.
- (b) Upon and subject to the terms and conditions hereof, and subject to the due satisfaction or waiver by the Agent acting on the instructions of the Majority Lenders of the conditions to the obligations of the Lenders hereunder set forth in Clause 3, each Lender shall, not later than 10:00 a.m. (Tokyo time) on the Drawdown Date, make available to the Agent at its Tokyo Branch Yen in immediately available funds in an amount equal to its Commitment. The Agent shall promptly transfer on the Drawdown Date all such amounts so made available to the Borrower's Account upon which the Loan shall have been drawn down in accordance with this Agreement.
- (c) Without prejudice to the Borrower's obligations under Clause 10.1(b), none of the Lenders, the Arranger or the Agent shall have any responsibility for the application by the Borrower of the proceeds of the Advance.

5. INTEREST RATES AND INTEREST PERIODS

5.1 Usual interest rate

- (a) The Borrower shall pay interest on the Loan in respect of each Interest Period on the last day of each Interest Period (provided that if the Borrower selects a duration of six months for any Interest Period, interest shall be payable on the date which is three months after the first day of such

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Interest Period in respect of the three-month period then ending as well as on the last day of such Interest Period in respect of the remaining three-month period) (each an "Interest Payment Date") at the rate per annum determined by the Agent to be the aggregate of (i) the applicable Margin and (ii) TIBOR during such Interest Period.

- (b) Notwithstanding the provisions of Clause 5.1(a), the Borrower shall pay on October 30, 1998 interest on the Loan in respect of the period commencing on and including the Drawdown Date and ending on but excluding October 30, 1998 at the rate per annum determined by the Agent to be the aggregate of (i) the applicable Margin and (ii) the rate, expressed as a decimal, equal to the cost to each Lender (as certified by it, which certification shall be binding upon the parties hereto in the absence of manifest error, and expressed as a rate per annum) of funding its Contribution in Tokyo and in Yen during such period in the Tokyo interbank market.

5.2 Default interest

During the existence of a Default the Borrower shall pay interest (both before and after judgment) on (a) the outstanding Loan and (b) on any amount (other than principal of the outstanding Loan) not paid when due at a rate determined by the Agent pursuant to this Clause 5.2.

- (a) The period beginning on the occurrence of the Default (the "Default Date") and ending on the date any such Default is cured or waived in accordance with the terms hereof shall be divided into successive periods of not more than three months (each a "default period") as selected by the Agent (after consultation with the Lenders) each of which (other than the first, which shall commence on the Default Date) shall

commence on the last day of the preceding default period.

- (b) The rate of interest applicable to each default period shall be the rate per annum determined by adding (i) two percent and (ii) the applicable Margin then in effect to TIBOR as in effect for such default period.

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- (c) Default interest under this Clause 5.2 shall be due and payable on the last day of each default period or, if earlier, on the date on which the sum in respect of which that default interest is accruing is actually paid.
- (d) If the Agent is unable to determine a rate in accordance with the foregoing provisions of this Clause 5.2, each Lender shall promptly notify the Agent of the cost of funds to such Lender and interest on any sum not paid on its due date for payment shall be calculated for each Lender at a rate determined by the Agent to be two percent per annum above the aggregate of the Margin and the cost of funds to such Lender, as determined by such Lender in its sole discretion.

5.3 Margin

- (a) The Margin shall be, in respect of the period from and including the Drawdown Date to and including December 26, 1999, 0.90 percent per annum.
- (b) On or after December 27, 1999, the Margin shall be, in respect of any Margin Period:
 - (i) if the Guarantor does not have net profits of greater than US\$1, as determined in accordance with generally accepted accounting principles and practices in the United States of America as consistently applied, during both the fiscal quarter ending on September 26, 1999 and the fiscal quarter ending on December 26, 1999, 0.90 percent per annum;
 - (ii) if the Guarantor has net profits of greater than US\$1, as determined in accordance with generally accepted accounting principles and practices in the United States of America as consistently applied, during both the fiscal quarter ending on September 26, 1999 and the fiscal quarter ending on December 26, 1999 and the Senior Indebtedness Ratio of the Guarantor as set forth in the quarterly financial statements and information of the Guarantor for the fiscal

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quarter ending immediately preceding the first day of the relevant Margin Period is less than 0.10, 0.75 percent per annum;

- (iii) if the Guarantor has net profits of greater than US\$1, as determined in accordance with generally accepted accounting principles and practices in the United States of America as consistently applied, during both the fiscal quarter ending on September 26, 1999 and the fiscal quarter ending on December 26, 1999 and the Senior Indebtedness Ratio of the Guarantor as set forth in the quarterly financial statements and information of the Guarantor for the fiscal quarter ending immediately preceding the first day of the relevant Margin Period is greater than or equal to 0.10 but less than 0.15, 0.85 percent per annum; or
- (iv) if the Guarantor has net profits of greater than US\$1,

as determined in accordance with generally accepted accounting principles and practices in the United States of America as consistently applied, during both the fiscal quarter ending on September 26, 1999 and the fiscal quarter ending on December 26, 1999 and the Senior Indebtedness Ratio of the Guarantor as set forth in the quarterly financial statements and information of the Guarantor for the fiscal quarter ending immediately preceding the first day of the relevant Margin Period is greater than or equal to 0.15, 0.95 percent per annum.

- (c) Notwithstanding the provisions of Clause 5.3(b), if the Guarantor fails to deliver to the Agent the financial statements and information required under clause (i) and (ii) of Subparagraphs 4(a) of the Guaranty within the time periods set forth therein, the Margin shall be, in respect of any period from and including the fifteenth day following the date of such failure to and including the fifteenth day following receipt by the Agent of such financial statements and information (at which time subclause (b) above shall apply), 0.95 percent per annum.

Except where item (i) of subclause (b) above shall be applicable, the Borrower shall notify the Agent of the Senior Indebtedness Ratio of the Guarantor

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applicable to each Margin Period and shall submit Margin Certificates (duly completed and signed by a duly authorized officer of the Guarantor), and supporting evidence in respect thereof on or before the first day of such Margin Period.

5.4 Selection of Interest Periods

Before the beginning of the initial Interest Period (which shall commence on the date that is one month after the Drawdown Date) with respect to the Loan, the Borrower may by notice received by the Agent not later than 10 a.m. (Tokyo time) on the fifth Banking Day prior to the first day of the initial Interest Period and subject to Clause 5.5 specify whether that Interest Period shall have a duration of one, two, three or six months. The Borrower may, subject to Clause 5.5, select subsequent Interest Periods with respect to the Loan. Before the beginning of each subsequent Interest Period, the Borrower may by notice received by the Agent not later than 10 a.m. (Tokyo time) on the fifth Banking Day prior to the first day of such subsequent Interest Period and subject to Clause 5.5 specify whether that Interest Period shall have a duration of one, two, three or six months.

5.5 Determination of Interest Periods

Each Interest Period shall be of the duration specified by the Borrower pursuant to Clause 5.4 except that:

- (a) the initial Interest Period in respect of the Loan will commence on the Drawdown Date and each subsequent Interest Period in respect of the Loan will commence on the last day of the previous Interest Period for the Loan;
- (b) any Interest Period that would otherwise overrun the Maturity Date shall end on the Maturity Date;
- (c) the Borrower may choose an Interest Period of less than one month in order that the Interest Period may end on a Principal Payment Date;

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- (d) the Borrower may not choose an Interest Period if as a result thereof the Borrower would be unable to make the payment due

on the next Principal Payment Date on a day which is an Interest Payment Date; and

- (e) if the Borrower fails to specify the duration of an Interest Period in accordance with the provisions of Clause 5.4 and this Clause 5.5, that Interest Period shall have a duration of one month or such other period as shall comply with this Clause 5.5.

5.6 Notification of Interest Periods and interest rate

The Agent shall notify the Borrower and the Lenders promptly of the duration of each Interest Period or other period for the calculation of interest (or, as the case may be, default interest) and of each rate of interest determined by it under this Clause 5.

5.7 Market disruption; non-availability

- (a) If and whenever, at any time prior to the making or continuation of the Advance:
 - (i) the Agent shall have determined (which determination shall, in the absence of manifest error, be conclusive), that adequate and fair means do not exist for ascertaining TIBOR in respect of any Interest Period in accordance with this Agreement; or
 - (ii) the Agent shall have received notification from Lenders with Contributions aggregating not less than one-third of the total of the Loan (or, if no Advance has been made, Commitments aggregating not less than one third of the Commitments of all the Lenders) that deposits in Yen are not available to those Lenders in the relevant interbank market in the ordinary course of business in sufficient amounts to fund (or maintain) their Contributions to the Loan or that their funding costs in respect of the Loan are not accurately reflected by TIBOR having regard to the likely interest rate in respect of such Interest Period,

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the Agent shall immediately give notice (a "Determination Notice") of that fact to the Borrower and to each of the Lenders. A Determination Notice shall give particulars of the relevant circumstances giving rise to its issue.

- (b) After the Interest Period in which any Determination Notice falls, the Loan shall bear interest at the rate per annum determined by the Agent to be the aggregate of (i) the applicable Margin and (ii) the rate, expressed as a decimal, equal to the cost to each Lender (as certified by it, which certification shall be binding upon the parties hereto in the absence of manifest error, and expressed as a rate per annum) of funding its Contribution in Tokyo and in Yen during such period in the Tokyo interbank market on each day during the relevant period. The Borrower shall pay such interest on the Loan on a monthly basis. The provisions of Clause 5.5 shall apply mutatis mutandis as if the Borrower has chosen a duration of one month for any Interest Period. If the Agent deems that the relevant circumstances stated in such Determination Notice have ceased to exist, the parties hereto agree to return to the TIBOR based pricing as soon as reasonably practicable.

5.8 Fixed rate option

On the effective date of the initial assignment by the initial Lender hereunder of all or any of its rights hereunder to a Substitute pursuant to Clause 15.4 (the "Conversion Date"), the parties hereto shall convert the interest rate payable by the Borrower hereunder to a fixed rate. Not later than five Banking Days prior to the Conversion

Date (which shall be the last day of an Interest Period), the Agent will provide the Borrower with a quotation of the fixed interest rate at which the initial Lender and such Substitute are prepared to continue to maintain the Loan for the remaining term up to the Maturity Date. If such quotation is acceptable to the Borrower, the Borrower will notify the Agent of its intention to convert the Loan from a floating rate loan to a fixed rate loan on or before 10:00 a.m. (Tokyo time) on the fourth Banking Day prior to the Conversion Date, in which case the Loan shall, commencing on the Conversion Date, bear interest at the fixed rate quoted as aforesaid. Interest shall be calculated on the basis of the actual number of days elapsed and a year of 365 days and shall be payable on each

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Fixed Rate Payment Date for the Fixed Rate Period then ending. "Fixed Rate Payment Date" means the date which (save as mentioned below) falls three months after the last preceding Fixed Rate Payment Date or, in the case of the first Fixed Rate Payment Date, after the Conversion Date, provided that (x) on the first and the second Principal Payment Dates, any interest accrued up to each such date on the amount of the principal of the Loan due on such date shall be payable and (y) the last Fixed Rate Payment Date shall be the Maturity Date. If any Fixed Rate Payment Date falls on a day which is not a Banking Day, any payment due on such date shall be made on the immediately succeeding Banking Day (unless such succeeding Banking Day falls in the next calendar month, in which case (i) such Fixed Rate Payment Date shall be the immediately preceding Banking Day, and (ii) each subsequent Fixed Rate Payment Date shall be the last Banking Day of the third month after the month in which the preceding Fixed Rate Payment Date shall have fallen). "Fixed Rate Period" means the period commencing on and including the Conversion Date and ending on and including the first Fixed Rate Payment Date, and thereafter each successive period commencing on and including the date immediately following the last preceding Fixed Rate Payment Date and ending on and including the next succeeding Fixed Rate Payment Date. During the existence of a Default the Borrower shall pay interest (both before and after judgment) on (a) the outstanding Loan and (b) on any amount (other than principal of the outstanding Loan) not paid when due at a rate per annum equal to the applicable fixed rate plus two percent. If the fixed rate quotation provided by the Agent is not acceptable to the Borrower, the Borrower shall repay the Loan in full on the proposed Conversion Date.

6. REPAYMENT, PREPAYMENT AND CANCELLATION

6.1 Repayment

The Loan shall be repaid in three installments payable on September 30, 1999, September 30, 2000 and the Maturity Date (each such date, a "Principal Payment Date") as follows:

September 30, 1999	(Y)425,000,000
September 30, 2000	(Y)425,000,000
Maturity Date	(Y)850,000,000

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6.2 Voluntary prepayment

The Borrower may voluntarily prepay the Loan subject to the provisions of this Clause 6 and of Clause 12.1. Any voluntary prepayment of the Loan when it then bears interest at one of the rates specified in Clause 5.1 may be in whole or in part, with any partial prepayment to be in a minimum of (Y)100,000,000 (one hundred million Yen) or a larger sum which is an integral multiple of (Y)100,000,000 (one hundred million Yen). Any voluntary prepayment of the Loan when it then bears interest at a fixed rate pursuant to Clause 5.8 may be in whole only.

6.3 Additional voluntary prepayment

The Borrower may also prepay (in whole but not in part only), without

premium or penalty, but without prejudice to its obligations under Clause 8.8, Clause 12.1 or Clause 13.2, the Contribution of any Lender to which the Borrower has become obliged to pay additional amounts under Clause 8.8 or Clause 13.2. On notice of such a prepayment being given, the Commitment of the relevant Lender shall be reduced to zero.

6.4 Timing, amounts and application of prepayments

Prepayments made on a date other than an Interest Payment Date will be subject to, *inter alia*, the provisions of Clause 12.1(c) and (d). Prepayments under this Agreement shall be made together with: (a) accrued interest to the date of prepayment; (b) any additional amount payable under Clause 8.8 or Clause 13.2; and (c) all other sums payable by the Borrower to the relevant Lender under this Agreement and any amounts payable under Clause 12.1.

6.5 Notice and effect of prepayment

No prepayment may be effected under this Clause 6 unless the Borrower shall have given the Agent at least 10 days' notice of its intention to make such prepayment. Every notice of prepayment shall be effective only on actual receipt by the Agent, shall be irrevocable and shall oblige the Borrower to make such prepayment on the date specified in the notice. On a prepayment being made,

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the Commitments shall be automatically reduced by an amount equal to the amount so prepaid and sums prepaid may not be re-borrowed. Any such prepayment shall be applied to the then outstanding repayment installments of the principal of the Loan as set out in Clause 6.1 in the inverse order of their maturity.

7. FEES AND EXPENSES

7.1 Fees

The Borrower shall pay to the Agent whether or not any part of the Commitments is ever advanced an arrangement fee, in the amount and at the time agreed between the Borrower and the Arranger in a letter dated on or around the date hereof.

7.2 Expenses

The Borrower shall pay to the Agent:

- (a) as soon as reasonably practicable in accordance with the Borrower's customary procedures for reviewing and processing such items, and in any event within 30 days following receipt of the Agent's invoice therefor, all reasonable expenses (including legal and out-of-pocket expenses) incurred by the Agent and the Arranger in connection with the negotiation, preparation, syndication, execution and delivery of this Agreement whether or not any part of the Commitments is ever advanced;
- (b) as soon as reasonably practicable in accordance with the Borrower's customary procedures for reviewing and processing such items, and in any event within 30 days following receipt of the Agent's invoice therefor, all reasonable expenses (including legal and out-of-pocket expenses) incurred by the Agent and the Arranger in connection with any amendment or extension of or the granting of any waiver or consent under this Agreement; and

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- (c) on demand, all reasonable expenses (including legal and out-of-pocket expenses) incurred by the Agent, the Arranger, the Lenders or any of them in contemplation of, or otherwise in connection with, the enforcement of, or preservation of any

rights under, this Agreement, or otherwise in respect of the moneys owing under this Agreement, together with interest at the rate referred to in Clause 5.2 from the date on which such expenses were incurred to the date of payment (as well after as before judgment).

7.3 Consumption, etc. tax

All fees and expenses payable pursuant to this Clause 7 shall be paid together with an amount equal to any consumption, sales, value added or similar tax payable by the Agent, the Arranger or any Lender in respect of those fees and expenses.

7.4 Stamp and other duties

The Borrower shall pay all stamp, documentary, registration or other like duties or taxes (including any duties or taxes payable by the Lenders) imposed on or in connection with this Agreement and shall indemnify the Agent, the Arranger and the Lenders against any liability arising by reason of any delay or omission by the Borrower to pay such duties or taxes.

8. PAYMENTS AND TAXES; ACCOUNTS AND CALCULATIONS

8.1 No set-off or counterclaim; distribution to the Lenders

The Borrower acknowledges that, in performing their obligations under this Agreement, the Lenders will be incurring liabilities to third parties in relation to the funding of amounts advanced to the Borrower, those liabilities matching the liabilities of the Borrower to the Lenders, and that it is reasonable for the Lenders to be entitled to receive payments from the Borrower gross on their due date in order that the Lenders are put in a position to perform their matching obligations to the relevant third parties. Accordingly all payments to be made by the Borrower under this Agreement shall be made in full, without any set-off or counterclaim whatsoever and, subject to Clause 8.8, free and clear of any deductions or withholdings, in Yen (except for costs, charges or expenses which

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shall be payable in the currency in which they are incurred) on their due date to the account of the Agent specified in Schedule 1 or such other bank and/or account as the Agent may from time to time specify for this purpose. Except where this Agreement specifically provides for a payment to be made for the account of a particular Lender, the Agent or the Arranger, payments to be made by the Borrower under this Agreement shall be for the account of all the Lenders and the Agent shall forthwith distribute those payments in like funds as are received by the Agent to the Lenders ratably in accordance with their Commitments or Contributions, as the case may be.

8.2 Payments by the Lenders

Sums to be advanced by the Lenders to the Borrower under this Agreement shall be remitted in Yen on the Drawdown Date to the account of the Agent at such bank as the Agent may have notified to the Lenders and shall be paid by the Agent on that date in like funds as are received by the Agent to the Borrower's Account.

8.3 Agent may assume receipt

Where any sum is to be paid under this Agreement to the Agent for the account of the Borrower or any Lender, the Agent may assume that the payment will be made when due and may (but shall not be obliged to) make that sum available to the person so entitled. If that payment is then not made to the Agent, then the person to whom that sum was made available shall on request refund that sum to the Agent together with interest on it sufficient to compensate the Agent for the cost of making the sum available up to the date of repayment and the person by whom the sum was payable shall indemnify the Agent for all loss or expense which the Agent may sustain or incur as a consequence of that sum not having been paid on its due date.

8.4 Time of payment

Any sum payable by the Borrower to the Agent, the Arranger or to any Lender under this Agreement shall be paid so as to be received in immediately available funds in the payee's designated account by 11:00 a.m. (Tokyo time) for that

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account. Any payment received by the Agent from the Borrower for the account of the Arranger or any Lender or Lenders which is received on its due date but after the time specified above and too late to be made available on that due date to the Arranger or the relevant Lender or Lenders, as appropriate, shall be deemed to be received on the next Banking Day (though the Agent shall give credit to the Borrower for any interest earned by the Agent on that sum prior to its distribution). In holding any such sum, the Agent shall not be acting as agent of or trustee for the Borrower and may invest, deposit or otherwise deal with that sum as it may, in its absolute discretion, see fit without any duty or obligation to the Borrower in respect of that sum other than as specifically provided for in this Agreement.

8.5 Non-Banking Days

When any payment under this Agreement would otherwise be due on a day which is not a Banking Day, the due date for payment shall be extended to the next following Banking Day unless that Banking Day falls in the next calendar month in which case payment shall be made on the immediately preceding Banking Day.

8.6 Calculations

Except with respect to interest on the Loan and unless provided otherwise, all interest and other payments of an annual nature under this Agreement shall accrue from day to day and be calculated on the basis of actual days elapsed and a 365 day year. Interest on the Loan shall accrue from day to day and be calculated on the basis of actual days elapsed and a 360 day year.

8.7 Certificates conclusive

Any certificate or determination of the Agent or any Lender as to any rate of interest or any amount payable under this Agreement shall, in the absence of manifest error and so long as it acts in good faith, be conclusive and binding on the Borrower and (in the case of a certificate or determination by the Agent) on the Lenders; provided that, in the case of expenses required to be paid by the Borrower pursuant to Clause 7.2, the Agent, the Arranger, or any Lender, as the case may be, shall provide such invoices, receipts or other documents evidencing

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or supporting such determination as is reasonably available to it, and such evidence or support shall be prima facie evidence of the amount payable by the Borrower pursuant to Clause 7.2.

8.8 Grossing-up for Taxes

If at any time the Borrower is required to make any deduction or withholding in respect of taxes, duties, assessments or governmental charges of whatsoever nature ("Taxes") from any payment due under this Agreement for the account of any Lender, the Arranger or the Agent (or if the Agent is required to make any such deduction or withholding from a payment to the Arranger or a Lender), the sum due from the Borrower in respect of such payment shall be increased to the extent necessary to ensure that, after the making of such deduction or withholding, each Lender, the Arranger and the Agent receives on the due date for such payment (and retains, free from any liability in respect of such deduction or withholding) a net sum equal to the sum which it would

have received had no such deduction or withholding been required to be made and the Borrower shall indemnify each Lender, the Arranger and the Agent against any losses or costs incurred by any of them by reason of any failure of the Borrower to make any such deduction or withholding or by reason of any increased payment not being made on the due date for such payment. The Borrower shall promptly deliver to the Agent any receipts, certificates or other proof evidencing the amounts (if any) paid or payable in respect of any deduction or withholding as aforesaid.

8.9 Lender accounts

Each Lender shall maintain, in accordance with its usual practices, an account or accounts evidencing the amounts from time to time lent by, owing to and paid to it under this Agreement. The Agent shall maintain a control account showing the Loan and other sums owing by the Borrower under this Agreement and all payments in respect thereof made by the Borrower from time to time. The control account shall, in the absence of manifest error, be conclusive as to the amount from time to time owing by the Borrower under this Agreement.

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8.10 Partial payments

If, on any date on which a payment is due to be made by the Borrower under this Agreement, the amount received by the Agent from the Borrower falls short of the total amount of the payment due to be made by the Borrower on that date then, without prejudice to any rights or remedies available to the Agent, the Arranger or the Lenders under this Agreement, the Agent shall apply the amount actually received from the Borrower in or towards discharge of the obligations of the Borrower under this Agreement in the following order, notwithstanding any appropriation made, or purported to be made, by the Borrower:

- (a) firstly, in or towards payment of any unpaid fees, costs and expenses of the Agent under this Agreement;
- (b) secondly, in or towards payment to the Arranger of any portion of the arrangement fee payable under Clause 7.1 which remains unpaid;
- (c) thirdly, in or towards payment of any default interest which is due but remains unpaid;
- (d) fourthly, in or towards payment to the Lenders, on a pro rata basis, of any accrued interest (other than default interest) which is due but remains unpaid;
- (e) fifthly, in or towards payment to the Lenders, on a pro rata basis, of any principal which is due but remains unpaid; and
- (f) sixthly, in or towards payment of any other sum which is due but remains unpaid (and, if more than one such sum so remains unpaid, on a pro rata basis).

8.11 Variation of application

The order of application set out in Clause 8.10(c) - 8.10(f) may be varied by the Agent only if all the Lenders so direct.

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9. REPRESENTATIONS AND WARRANTIES

9.1 Representations and Warranties

The Borrower represents and warrants to each of the Lenders, the Arranger and the Agent that:

- (a) Due incorporation

the Borrower is duly incorporated and validly existing under the laws of Japan as a limited liability stock company and has power to carry on its business as it is now being conducted and to own its property and other assets;

(b) Corporate power to borrow

the Borrower has power to execute, deliver and perform its obligations under this Agreement and to borrow the Commitments; all necessary corporate, shareholder and other action has been taken to authorize the execution, delivery and performance of the same and no limitation on the powers of the Borrower to borrow will be exceeded as a result of borrowings under this Agreement;

(c) Binding obligations

this Agreement constitutes valid and legally binding obligations of the Borrower enforceable against the Borrower in accordance with its terms;

(d) No conflict with other obligations

the execution and delivery of, the performance of its obligations under, and compliance with the provisions of, this Agreement by the Borrower will not (i) contravene any existing material law or license to which the Borrower is subject; (ii) conflict with, or result in any breach of any of the terms of, or constitute a default under, any material agreement or other instrument to which the Borrower is a party or is subject or by which it or any of its

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property is bound; (iii) contravene or conflict with any provision of the Borrower's Articles of Incorporation or (iv) result in the creation or imposition of or oblige the Borrower to create any Lien on any of the Borrower's undertaking, assets, rights or revenues;

(e) Consents obtained

No authorization, consent, approval, license, exemption of, or notarization, filing, recordation, registration or enrollment in or with, any Governmental Authority, or approval or consent of any other person, is required for the due execution, delivery, validity, enforceability or admissibility in evidence of this Agreement or the performance by the Borrower of its obligations under this Agreement;

(f) Financial statements correct and complete

the unaudited financial statements of the Borrower in respect of the financial year ended on June 30, 1998, as delivered to Agent, have been prepared in accordance with generally accepted accounting principles and practices in the United States of America, which have been consistently applied and present fairly and accurately the financial position of the Borrower as at such date and the results of the operations of the Borrower for the year ended on such date and, as at such date, the Borrower did not have any significant liabilities (contingent or otherwise) or any unrealized or unanticipated losses which are not disclosed by, or reserved against or provided for in, those financial statements;

(g) Ranking of Loan

the payment obligations of the Borrower hereunder will be ranked by the Borrower at least pari passu in priority of payment with all other unsecured and unsubordinated indebtedness of the Borrower;

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(h) Choice of law

the choice by the Borrower of the laws of Japan to govern this Agreement is valid and binding;

(i) No immunity

neither the Borrower nor any of its assets is entitled to immunity on the grounds of sovereignty or otherwise from any legal action or proceeding (which shall include, without limitation, suit, attachment prior to judgment, execution or other enforcement); and

(j) No withholding Taxes

provided that each Lender is incorporated in or has its lending office in Japan, no Taxes (other than consumption and stamp duties) are imposed by withholding or otherwise on any payment to be made by the Borrower under this Agreement or are imposed on or by virtue of the execution or delivery by the Borrower of this Agreement or any document or instrument to be executed or delivered under this Agreement.

9.2 Repetition

The representations and warranties in Clause 9.1 (and so that the representation and warranty in Clause 9.1(f) shall for this purpose refer to the then latest financial statements delivered to the Agent under Clause 10.1) shall be deemed to be repeated by the Borrower on and as of the Drawdown Date, the first day of each Interest Period and the Conversion Date as if made with reference to the facts and circumstances existing on each such day.

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10. UNDERTAKINGS

10.1 Undertakings

The Borrower undertakes with each of the Lenders and the Agent that, from the date of this Agreement and so long as any moneys are owing under this Agreement, it will, or will cause to happen on its behalf:

(a) Notice of Default

promptly inform the Agent of any occurrence of which it becomes aware which is reasonably likely to materially and adversely affect its ability to perform its obligations under this Agreement and of any Default immediately on becoming aware of it and will from time to time, if so requested by the Agent, confirm to the Agent that, except as otherwise stated in that confirmation, no Default has occurred and is continuing;

(b) Use of proceeds

use the Advances exclusively for the purposes specified in Clause 1.1;

(c) Pari passu

ensure that its obligations under this Agreement shall, without prejudice to the provisions of Clause 10.2, at all times rank at least pari passu with all its other present and future unsecured and unsubordinated indebtedness;

(d) Financial statements

prepare unaudited financial statements in accordance with

generally accepted accounting principles and practices in the United States of America consistently applied in respect of each financial year and prepare summary financial statements (in a form reasonably acceptable to the Agent) in respect of each quarter in accordance with generally accepted accounting principles and practices in the United States of America

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consistently applied and deliver sufficient copies of the same to the Agent for distribution to all the Lenders as soon as practicable but not later than 100 days (in the case of the annual financial statements) or 50 days (in the case of quarterly financial statements) after the end of the financial period to which they relate;

(e) Delivery of reports, etc.

deliver to the Agent, for distribution to the Lenders, sufficient copies for all the Lenders of every report, circular, notice or like document issued by the Borrower to its creditors generally, at the time of issue thereof, and provide the Agent with such other information relating to the Borrower and the Guarantor as any Lender (through the Agent) may reasonably request from time to time;

(f) Pension schemes

ensure that the levels of contribution to the pension schemes for the time being operated by the Borrower are and continue to be sufficient to cover the liabilities of such schemes in full to the extent contributions to cover such liabilities are permitted or will not result in taxation on participants thereof in the year in which contribution is made; and

(g) Additional evidence

not later than October 15, 1998, deliver to the Agent, or its duly authorized representative, all of the documents and evidence specified in Schedule 3 in form and substance satisfactory to the Agent.

10.2 Pledges

The Borrower undertakes with each of the Lenders and the Agent that, from the date of this Agreement and so long as any moneys are owing under this Agreement, without the prior written consent of the Agent acting on the instructions of the Majority Lenders, it will not create, incur, assume or suffer to exist any Lien upon or with respect to any of its properties, revenues or assets,

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whether now owned or hereafter acquired, except for Permitted Liens (as defined in the Guaranty).

11. EVENTS OF DEFAULT

11.1 Events of Default

Each of the events and circumstances set out below is an Event of Default (whether or not caused by any reason outside the control of the Borrower or the Guarantor):

(a) Non-payment: the Borrower fails to pay in Yen in the manner provided in this Agreement (i) on the Maturity Date, any amount payable by it hereunder on that date; (ii) on the due date, any principal payable by it hereunder; or (iii) within five Banking Days after the due date, any other amount payable by it hereunder; or

- (b) Mis-representations: any representation or warranty made or deemed to be made by the Borrower under this Agreement or by the Guarantor under the Guaranty or in any certificate, document or financial or other statement furnished at any time under or in connection with this Agreement or the Guaranty proves to have been incorrect or misleading in any material respect when made or deemed to be made and such incorrectness or misleadingness shall not be cured within 30 days after written notice thereof is given by the Agent to the Borrower; or
- (c) Breach of other obligations: the Borrower commits any material breach of or omits to observe in any material respect any of the obligations or undertakings expressed to be assumed by it under this Agreement (other than failure to pay any sum when due) and, in respect of any such breach or omission which in the opinion of the Majority Lenders is capable of remedy, such breach or omission shall continue for 30 or more days after the occurrence of such default; or the Guarantor commits any breach of or omits to observe any of the obligations or undertakings expressed to be assumed by it under the Guaranty and, in respect of any such breach or omission which in the opinion of the Majority Lenders is capable of

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remedy, such breach or omission shall continue for 30 or more days after the occurrence of such default; or

- (d) Cross default: the Borrower or the Guarantor (i) defaults in any payment of principal of or interest on any indebtedness (other than the Loan), in an aggregate amount of US\$10,000,000 (or its equivalent in any other currency) or more beyond the period of grace, if any, provided in the instrument or agreement under which such indebtedness was created; or (ii) defaults in the observance or performance of any other agreement or condition relating to any such indebtedness or contained in any instrument or agreement evidencing, securing or relating thereto, the effect of which is to cause, or to permit the holder or holders of such indebtedness (or trustee or agent on behalf of such holder or holders) to cause, with the giving of notice if required, such indebtedness to become due prior to its stated maturity and any such default shall continue for more than the applicable period of grace, if any, provided in the instrument or agreement under which such indebtedness was created; or
- (e) Insolvency:
- (i) the Borrower or the Guarantor commences any case, proceeding or other action under any existing or future law of any jurisdiction, domestic or foreign, relating to bankruptcy, insolvency, reorganization or other relief of debtors, seeking to have an order for relief entered on its behalf as debtor, or seeking to adjudicate it a bankrupt or insolvent, or seeking reorganization, arrangement, winding-up, liquidation, dissolution, composition, readjustment of debt or other relief with respect to it or its debts, or seeking appointment of a receiver, trustee, custodian, liquidator, conservator, sequestrator or other similar official for it or for all or any substantial part of its assets; or
- (ii) the Borrower or the Guarantor makes a general assignment for the benefit of its creditors; or

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- (iii) there is commenced against the Borrower or the Guarantor any case proceeding or other action of a

nature referred to in clause (i) or (ii) which (A) results in the entry of an order for relief or any such adjudication or appointment with respect to the Borrower or the Guarantor or all or any substantial part of its assets, or (B) remains undismissed, unstayed, undischarged or unbonded for a period of 60 days; or

- (iv) there is commenced against the Borrower or the Guarantor any case, proceeding or other action seeking issuance of a warrant of attachment, execution, distraint or similar process against all or any substantial part of its assets which results in the entry of an order for any such relief which shall not have been vacated, discharged, or stayed or bonded pending appeal within 60 days after the entry thereof; or
- (v) the Borrower or the Guarantor takes any action in furtherance of, or indicating its consent to, approval of, or acquiescence in, any of the acts set forth in items (i), (ii), (iii) or (iv) above; or
- (vi) the Borrower or the Guarantor is unable to, or admits in writing its inability to, pay its debts as they become due; or
- (vii) any clearing house for the settlement of promissory notes in observance of its rules takes procedures for suspension of the Borrower's transactions with banks and similar institutions; or

- (f) Judgments: a final judgment for the payment of money in excess of US\$10,000,000 (or its equivalent in any other currency) in the aggregate is rendered by a court against the Borrower or the Guarantor and the Borrower or the Guarantor, as the case may be, shall not discharge the same or provide for its discharge in accordance with its terms, or procure a stay of execution thereof within 120 days after the date of entry thereof and within said period of 120 days, or such longer period during which execution of such judgment shall have been stayed, appeal therefrom and cause the execution thereof to be stayed during such appeal; or

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- (g) Guaranty effective: the Guaranty ceases to be (or the Guarantor claims that the Guaranty has ceased to be) in full force and effect; or
- (h) Change in control: (i) the Guarantor ceases to own 100% of the total issued shares in the Borrower or (ii) any Change of Control (as defined in the Guaranty) occurs; or
- (i) Material adverse effect: (i) any event or circumstance (other than those referred to elsewhere in Clause 11.1) occurs that would have a material adverse effect on the ability of the Borrower to perform its obligations hereunder or (ii) any Material Adverse Effect (as defined in the Guaranty) occurs.

11.2 Acceleration

The Agent may, or if so instructed by the Majority Lenders, shall, without prejudice to any other rights of the Lenders, at any time after the happening of an Event of Default so long as the same is continuing by notice to the Borrower declare that:

- (a) the obligation of each Lender to make its Commitment available shall be terminated and the Commitments shall then immediately be reduced to zero; and/or
- (b) the outstanding Loan and all interest accrued and all other sums payable under this Agreement have become immediately due

and payable or have become due and payable on demand, whereupon the same shall, immediately or in accordance with the terms of that notice, become so due and payable;

provided that, upon the occurrence of any Event of Default described in Clause 11.1(e), the result which would otherwise occur only upon declaration by the Agent shall occur automatically, without the necessity of any action by the Agent or the Lenders.

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On or at any time after the making of any such declaration, the Agent shall be entitled, to the exclusion of the Borrower (and without prejudice to Clause 5.2), to select the duration of Interest Periods.

11.3 Demand basis

If, pursuant to Clause 11.2(b), the Agent declares the outstanding Loan to be due and payable on demand then, at any time thereafter, the Agent may, or, if so instructed by the Majority Lenders, shall, by written notice to the Borrower (a) call for repayment of the Loan on such date as may be specified in that notice and the Loan shall become due and payable on the date so specified together with all interest accrued and all other sums payable under this Agreement or (b) withdraw that declaration with effect from the date specified in the notice.

12. INDEMNITIES

12.1 Broken funding and other indemnities

The Borrower shall on demand indemnify each Lender, the Arranger and the Agent, without prejudice to any of their other respective rights under this Agreement, against any loss or expense which such Lender, the Arranger or the Agent shall certify (which certification shall be provided in writing within six months after such Lender, the Arranger or the Agent determines that such indemnification is due) as having been sustained or incurred by it as a consequence of:

- (a) any default in payment by the Borrower of any sum under this Agreement when due;
- (b) the occurrence of any other Event of Default or any acceleration pursuant to Clause 11.2;
- (c) any prepayment of the Advance or part thereof when it then bears interest at one of the rates specified in Clause 5.1 being made under Clause 6.2, Clause 6.3 or Clause 13.1 otherwise than on an Interest Payment Date;

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- (d) any prepayment of the Advance when it then bears interest at a fixed rate pursuant to Clause 5.8 being made under Clause 6.2, Clause 6.3 or Clause 13.1 at any time (whether on an Interest Payment Date or otherwise); or
- (e) the Advance not being made for any reason (excluding any default by the Agent, the Arranger or any Lender) on the Drawdown Date,

including, in any such case, any loss or expense sustained or incurred by such Lender in maintaining or funding its Contribution or any part thereof or in liquidating or re-employing deposits from third parties acquired or contracted for to fund its Contribution or any part thereof or any other amount owing to such Lender.

12.2 Currency indemnity

If any sum due from the Borrower under this Agreement or any order or judgment given or made in relation hereto has to be converted from the currency (the "first currency") in which the same is payable under this

Agreement or under such order or judgment into another currency (the "second currency") for the purpose of (a) making or filing a claim or proof against the Borrower, (b) obtaining an order or judgment in any court or other tribunal or (c) enforcing any order or judgment given or made in relation to this Agreement, the Borrower shall indemnify and hold harmless the Agent, the Arranger and each Lender from and against any loss suffered as a result of any difference between (i) the rate of exchange used for such purpose to convert the sum in question from the first currency into the second currency and (ii) the rate or rates of exchange at which the Agent, the Arranger or such Lender may in the ordinary course of business purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof. Any amount due from the Borrower under this Clause 12.2 shall be due as a separate debt and shall not be affected by judgment being obtained for any other sums due under or in respect of this Agreement and the term "rate of exchange" includes any premium and costs of exchange payable in connection with the purchase of the first currency with the second currency.

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13. UNLAWFULNESS AND INCREASED COSTS

13.1 Illegality

If, after the date of this Agreement, the adoption of any Governmental Rule, any change in any Governmental Rule or the application or requirements thereof (whether such change occurs in accordance with the terms of such Governmental Rule as enacted, as a result of amendment or otherwise), any change in the interpretation or administration of any Governmental Rule by any Governmental Authority, or compliance by any Lender with any request or directive (whether or not having the force of law) of any Governmental Authority (a "Change of Law") shall make it unlawful or impossible for any Lender to make or maintain its Contribution, such Lender shall immediately notify Agent and Borrower of such Change of Law and the Borrower shall, not later than the date specified by such Lender, repay such Lender's Contribution.

13.2 Increased costs

If, after the date of this Agreement, any Change of Law:

(a) Shall subject any Lender to any tax, duty or other charge with respect to its Contribution or shall change the basis of taxation of payments by the Borrower to any Lender on its Contribution or in respect to such Contribution under this Agreement (except for changes in the rate of taxation on the overall net income of any Lender imposed by its jurisdiction of incorporation or the jurisdiction in which its principal executive office is located); or

(ii) Shall impose, modify or hold applicable any reserve (excluding any Reserve Requirement or other reserve to the extent included in the calculation of TIBOR for the Loan), special deposit or similar requirement against assets held by, deposits or other liabilities in or for the account of, advances or loans by, or any other acquisition of funds by any Lender for its Contribution; or

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(iii) Shall impose on any Lender any other condition related to its Contribution, the Loan or such Lender's Commitment;

And the effect of any of the foregoing is to increase the cost to such Lender of making, renewing, or maintaining its Contribution, the Loan or its Commitment or to reduce any amount receivable by such Lender hereunder; then the Borrower shall from time to time, within five (5) days after demand by such Lender, pay to such Lender additional amounts

sufficient to reimburse such Lender for such increased costs or to compensate such Lender for such reduced amounts. A certificate as to the amount of such increased costs or reduced amounts, submitted by such Lender to the Borrower shall, in the absence of manifest error, be conclusive and binding on the Borrower for all purposes. The obligations of the Borrower under this Clause 13.2 shall survive the payment and performance of the Borrower's obligations under this Agreement and the termination of this Agreement; provided, however, that any Lender must submit a demand for payment pursuant to this provision within six (6) months after such Lender has first conclusively determined that such reimbursement or compensation is due such Lender under this and similar agreements.

13.3 Capital requirements

If, after the date of this Agreement, any Lender determines that (i) any Change of Law affects the amount of capital required or expected to be maintained by such Lender or any party controlling such Lender (a "Capital Adequacy Requirement") and (ii) the amount of capital maintained by such Lender or such party which is attributable to or based upon such Lender's Contribution, the Loan or such Lender's Commitments or this Agreement must be increased as a result of such Capital Adequacy Requirement (taking into account such Lender's or such party's policies with respect to capital adequacy), the Borrower shall pay to such Lender or such party, within five (5) days after demand of such Lender, such amounts as such Lender or such party shall determine are necessary to compensate such Lender or such party for the increased costs to such Lender or such party of such increased capital. A certificate of any Lender setting forth in reasonable detail the computation of any such increased costs, delivered by such Lender to the Borrower shall, in the absence of manifest error, be conclusive and binding on the Borrower for all purposes. The

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obligations of the Borrower under this Clause 13.3 shall survive the payment and performance of the Borrower's obligations under this Agreement and the termination of this Agreement; provided, however, that any Lender must submit a demand for payment pursuant to this provision within six (6) months after such Lender has first conclusively determined that such reimbursement or compensation is due such Lender under this and similar agreements.

13.4 Mitigation

Any Lender which becomes aware of (i) any Change of Law which will make it unlawful or impossible for such Lender to make or maintain its Contribution or (ii) any Change of Law or other event or condition which will obligate Borrower to pay any amount pursuant to Clause 13.2 or Clause 13.3 shall notify the Borrower and the Agent thereof as promptly as practical. If any Lender that has given notice of any such Change of Law or other event or condition thereafter becomes aware that such Change of Law or other event or condition has ceased to exist, such Lender shall notify the Borrower and the Agent thereof as promptly as practical. Each Lender affected by any Change of Law which makes it unlawful or impossible for such Lender to make or maintain its Contribution or to which the Borrower is obligated to pay any amount pursuant to Clause 13.2 or Clause 13.3 shall use reasonable commercial efforts (including changing the jurisdiction of its lending office) to avoid the effect of such Change of Law or to avoid or materially reduce any amounts which Borrower is obligated to pay pursuant to Clause 13.2 or Clause 13.3 if, in the reasonable opinion of such Lender, such efforts would not be disadvantageous to such Lender or contrary to such Lender's normal banking practices.

14. SET-OFF AND PRO RATA PAYMENTS

14.1 Set-off

The Borrower authorizes each Lender to apply any credit balance to which the Borrower is then entitled on any account of the Borrower with the Lender at any of its branches in or towards satisfaction of any sum

then due and payable from the Borrower to the Lender under this Agreement. For this purpose each Lender

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is authorized to purchase with the moneys standing to the credit of any such account such other currencies as may be necessary to effect that application. None of the Lenders shall be obliged to exercise any right given to it by this Clause 14.1. Each Lender shall notify the Agent and the Borrower immediately on the exercise or purported exercise of any right of set-off, giving full details in relation thereto and the Agent shall inform the other Lenders.

14.2 Pro rata payments

- (a) If at any time any Lender (the "Recovering Lender") receives or recovers any amount owing to it by the Borrower under this Agreement by direct payment, set-off or in any manner other than by payment through the Agent pursuant to Clause 8.1 or Clause 8.10, the Recovering Lender shall, within two Banking Days of such receipt or recovery (a "Direct Receipt") notify the Agent of the amount of the Direct Receipt. If the Direct Receipt exceeds the amount which the Recovering Lender would have received if the Direct Receipt had been received by the Agent and distributed pursuant to Clause 8.1 or Clause 8.10 (as the case may be) then:
- (i) within two Banking Days of demand by the Agent, the Recovering Lender shall pay to the Agent an amount equal (or equivalent) to the excess;
 - (ii) the Agent shall treat the excess amount so paid by the Recovering Lender as if it were a payment made by the Borrower and shall distribute the same to the Lenders (other than the Recovering Lender) in accordance with Clause 8.1 or Clause 8.10, as appropriate; and
 - (iii) as between the Borrower and the Recovering Lender the excess amount so re-distributed shall be treated as not having been paid but the obligations of the Borrower to the other Lenders shall, to the extent of the amount so re-distributed to them, be treated as discharged.

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- (b) If any part of the Direct Receipt subsequently has to be wholly or partly refunded by the Recovering Lender each Lender to which any part of such Direct Receipt was so re-distributed shall on request from the Recovering Lender repay to the Recovering Lender its pro rata share of the amount which has to be refunded by the Recovering Lender.
- (c) Each Lender shall on request supply to the Agent such information as the Agent may from time to time request for the purpose of this Clause 14.2.
- (d) Any amount received or recovered by a Lender under a transfer, assignment, sub-participation (or the like) shall be ignored for the purpose of this Clause 14.2.

15. ASSIGNMENT, SUBSTITUTION AND LENDING OFFICES

15.1 Benefit and burden

This Agreement shall be binding upon, and enure for the benefit of, the Lenders, the Agent and the Borrower and their respective successors and Substitutes. This Agreement shall also enure for the benefit of the Arranger.

15.2 No assignment by Borrower

The Borrower may not assign, transfer or otherwise dispose of any of its rights or obligations under this Agreement without the prior written consent of the Agent and each Lender.

15.3 Participation

Any Lender may, in its absolute discretion and without any requirement to obtain the consent of or to give notice or any information to any other party, grant one or more participating interests in its proportion of the Loan to any third party (a "Participant"). The granting of such a participating interest shall not affect the relevant Lender's rights and obligations under this Agreement nor shall the Participant acquire any rights or assume any obligations under this Agreement other than with the agreement of the Borrower and the Agent.

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15.4 Transfer

Otherwise than in accordance with this Clause 15.4, each Lender may not assign all or any of its rights hereunder. Each Lender (a "Transferring Lender") may, in its absolute discretion and without any requirement to obtain the consent of any other party (other than the consent of the Agent and (if no Default shall have occurred or be continuing) the Borrower, which consent shall not be unreasonably withheld or delayed), transfer all or any part of its rights, benefits and/or obligations under this Agreement to another person (a "Substitute"), provided that the amount to be transferred shall not be less than (Y)500,000,000. Any such transfer shall be effected on five Banking Days' prior notice by delivery to the Agent of a duly completed Substitution Certificate duly executed by the Transferring Lender and the Substitute (which the Agent shall promptly execute for itself, the Borrower and the other Lenders (the "other parties")). Subject to the execution of that Substitution Certificate by all parties to it, on the effective date specified in a Substitution Certificate, to the extent that they are expressed in that Substitution Certificate to be the subject of the transfer effected pursuant to this Clause 15.4:

- (a) the other parties and the Transferring Lender shall be released from their respective obligations towards one another under this Agreement (the "discharged obligations") and their respective rights against one another under this Agreement (the "discharged rights") shall be cancelled;
- (b) the relevant Substitute and the other parties shall assume obligations towards each other which differ from the discharged obligations only insofar as they are owed to or assumed by that Substitute instead of to or by the Transferring Lender; and
- (c) the relevant Substitute and the other parties shall acquire rights against each other which differ from the discharged rights only insofar as they are exercisable by or against such Substitute instead of by or against the Transferring Lender.

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The Agent shall promptly notify the other parties of the receipt by it of any Substitution Certificate and shall promptly deliver a copy of that Substitution Certificate to the Borrower.

15.5 Reliance on Substitution Certificate

The Agent and the Borrower may rely on any Substitution Certificate delivered to the Agent in accordance with the foregoing provisions of this Clause 15 which is complete and regular on its face as regards its contents and purportedly signed on behalf of the Transferring Lender and the Substitute and neither the Agent nor the Borrower shall have any liability or responsibility to any party as a consequence of placing reliance on and acting in accordance with any such Substitution

Certificate if it proves to be the case that the same was not authentic or duly authorized.

15.6 Authorization of Agent

The Borrower and each Lender irrevocably authorizes the Agent to counter-sign each Substitution Certificate on its behalf without any further consent of, or consultation with, the Borrower or such Lender.

15.7 Construction of certain references

If any Lender transfers any of its rights, benefits and obligations as provided in Clause 15.4 all relevant references in this Agreement to such Lender shall thereafter be construed as a reference to that Lender and/or its Substitute (as the case may be) to the extent of their respective interests.

15.8 Lending offices

Each Lender shall lend through its office at the address specified in Schedule 1 or, as the case may be, in any relevant Substitution Certificate or through any other office of that Lender selected from time to time by that Lender through which such Lender wishes to lend for the purposes of this Agreement. If the office through which a Lender is lending is changed pursuant to this Clause 15.8, the Lender shall notify the Agent promptly of that change. Before a Lender changes its lending office pursuant to this Clause 15.8, such Lender shall

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consider whether such change will increase the amounts payable by the Borrower to such Lender under this Agreement.

15.9 Disclosure of information

Any Lender may disclose to a prospective transferee or Substitute or to any other Person who may propose entering into contractual relations with that Lender in relation to this Agreement such information about the Borrower as the Lender shall consider appropriate, subject to Clause 17.5.

16. ARRANGER, AGENT AND REFERENCE LENDERS

16.1 Appointment of Agent

Each Lender irrevocably appoints the Agent as its agent for the purposes of this Agreement and the Guaranty and authorizes the Agent (whether or not by or through employees or agents) to take such action on such Lender's behalf and to exercise such rights, remedies, powers and discretions as are specifically delegated to the Agent by this Agreement, together with such powers and discretions as are reasonably incidental thereto. Neither the Agent nor the Arranger shall, however, have any duties, obligations or liabilities to the Lenders beyond those expressly stated in this Agreement.

16.2 Amendments; Waivers

(a) Subject to Clause 16.2(b), the Agent may, with the consent of the Majority Lenders (or if and to the extent expressly authorized by the other provisions of this Agreement), (i) agree to amendments or modifications to this Agreement with the Borrower and/or (ii) vary or waive breaches of, or defaults under, or otherwise excuse performance of, any provision of this Agreement by the Borrower. Any such action so authorized and effected by the Agent shall be documented in such manner as the Agent shall (with the approval of the Majority Lenders) determine, shall be promptly notified to the Lenders by the Agent and shall be binding on all the Lenders.

(b) Except with the prior written consent of all the Lenders, the Agent shall not have authority on behalf of the Lenders to agree with the Borrower to

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any amendment or modification to this Agreement or to grant waivers in respect of breaches or defaults or to vary or excuse performance of or under this Agreement by the Borrower, if the effect of such amendment, modification, waiver, variation or excuse would be to (i) reduce any applicable Margin, (ii) postpone the due date or reduce the amount of any payment of principal, interest or other amount payable by the Borrower under this Agreement, (iii) change the currency in which any amount is payable by the Borrower under this Agreement, (iv) increase any Lender's Commitment, (v) change the definition of "Majority Lenders" in Clause 1.2, (vi) change any provision of this Agreement which expressly or impliedly requires the approval or consent of all the Lenders such that the relevant approval or consent may be given otherwise than with the sanction of all the Lenders, (vii) change the order of distribution under Clause 8.10, (viii) change Clause 14.2 or (ix) change this Clause 16.2.

16.3 Rights of Agent as Lender; No partnership

With respect to its own Commitment and Contribution (if any) the Agent shall have the same rights and powers under this Agreement and the Guaranty as any other Lender and may exercise the same as though it were not performing the duties and functions delegated to it under this Agreement and the term "Lenders" shall, unless the context clearly otherwise indicates, include the Agent in its individual capacity as a Lender. This Agreement shall not and shall not be construed so as to constitute a partnership between the parties or any of them.

16.4 No liability of Arranger and Agent

Neither the Arranger nor the Agent shall:

- (a) be obliged to request any certificate under Clause 10.1 or to make any enquiry as to the use of the proceeds of the Loan unless (in the case of the Agent) so required in writing by any Lender, in which case the Agent shall promptly make the appropriate request of the Borrower, or be obliged to make any enquiry as to any default by the Borrower in the performance or observance of any of the provisions of this Agreement or as to the existence of a Default unless (in the case of the Agent) the Agent has actual

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knowledge thereof or has been notified in writing thereof by a Lender, in which case the Agent shall promptly notify the Lenders of the relevant event or circumstance; or

- (b) be liable to any Lender for any action taken or omitted under or in connection with this Agreement unless caused by its gross negligence or willful misconduct.

For the purposes of this Clause 16 the Agent shall not be treated as having actual knowledge of any matter of which the corporate finance or any other division outside the agency or loan administration department of the person for the time being acting as the Agent may become aware in the context of corporate finance, advisory or lending activities from time to time undertaken by the Agent for the Borrower or any of its subsidiaries or associated companies or any other person which may be a trade competitor of the Borrower or may otherwise have commercial interests similar to those of the Borrower.

16.5 Agent's duty to notify and take action

The Agent shall:

- (a) promptly notify each Lender of the contents of each notice, certificate or other document received by the Agent from the

Borrower under or pursuant to Clauses 10.1(a) or 10.1(e); and

(b) (subject to its being indemnified to its satisfaction) take such action or, as the case may be, refrain from taking such action with respect to any Default of which the Agent has actual knowledge as the Majority Lenders may reasonably direct.

16.6 Identity of Lenders

The Agent may deem and treat (a) each Lender as the person entitled to the benefit of the Contribution of such Lender for all purposes of this Agreement unless and until a Substitution Certificate shall have been filed with the Agent, and (b) the office set opposite the name of each Lender in Schedule 1 or, as the

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case may be, in any relevant Substitution Certificate as such Lender's lending office unless and until a written notice of change of lending office shall have been received by the Agent; and the Agent may act upon any such notice unless and until the same is superseded by a further such notice.

16.7 Non-reliance on Arranger or Agent

Each Lender acknowledges that it has not relied on any statement, opinion, forecast or other representation made by the Arranger or the Agent to induce it to enter into this Agreement and that it has made and will continue to make, without reliance on the Agent or the Arranger and based on such documents as it considers appropriate, its own appraisal of the creditworthiness of the Borrower and its own independent investigation of the financial condition and affairs of the Borrower in connection with the making and continuation of the Loan under this Agreement. Neither the Arranger nor the Agent shall have any duty or responsibility, either initially or on a continuing basis, to provide any Lender with any credit or other information with respect to the Borrower whether coming into its possession before the making of any Advance or at any time or times thereafter, other than (in the case of the Agent) as provided in Clause 16.5(a).

16.8 No Responsibility on Arranger or Agent for Borrower's performance

Neither the Arranger nor the Agent shall have any responsibility to any Lender on account of the failure of the Borrower or the Guarantor to perform its obligations under this Agreement or the Guaranty or for the financial condition of the Borrower or the Guarantor or for the completeness or accuracy of any statements, representations or warranties in this Agreement or the Guaranty or any document delivered under this Agreement or for the execution, effectiveness, adequacy, genuineness, validity, enforceability or admissibility in evidence of this Agreement or of any certificate, report or other document executed or delivered under this Agreement or its negotiation or for acting (or, as the case may be, refraining from acting) in accordance with the instructions of the Majority Lenders. The Arranger and the Agent shall be entitled to rely on any communication, instrument or document believed by it to be genuine and correct and to have been signed or sent by the proper person and shall be entitled to rely

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as to legal or other professional matters on opinions and statements of any legal or other professional advisers selected or approved by it.

16.9 Other dealings

The Arranger and the Agent may, without any liability to account to the Lenders, accept deposits from, lend money to, and generally engage in any kind of banking or trust business with, the Borrower or any of its subsidiaries or associated companies or any of the Lenders as if it were not the Arranger or the Agent as the case may be.

16.10 Reimbursement and indemnity by Lenders

Each Lender shall reimburse the Arranger and the Agent (ratably in accordance with such Lender's Commitment or Contribution), to the extent that the Arranger or the Agent is not reimbursed by the Borrower or the Guarantor, for the charges and expenses incurred by the Arranger and the Agent in connection with the contemplation of, or otherwise in connection with, the enforcement of, or the preservation of any rights under, or in carrying out its duties under, this Agreement including (in each case) the fees and expenses of legal or other professional advisers. Each Lender shall indemnify the Agent (ratably in accordance with its Commitment or Contribution) against all liabilities, damages, costs and claims whatsoever incurred by the Agent in connection with this Agreement or the performance of its duties under this Agreement or any action taken or omitted by the Agent under this Agreement, unless such liabilities, damages, costs or claims arise from the Agent's own gross negligence or willful misconduct.

16.11 Retirement of Agent

- (a) The Agent may retire from its appointment as Agent under this Agreement having given to the Borrower and each of the Lenders not less than 30 days' notice of its intention to do so, provided that no such retirement shall take effect unless there has been appointed by the Agent as a successor agent:

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- (i) a Lender nominated by the Majority Lenders or, failing such a nomination,
- (ii) any reputable and experienced bank or financial institution with offices in Tokyo and nominated by the Agent,

which shall have consented to such appointment.

- (b) On any such successor being appointed, the retiring Agent shall be discharged from any further obligation under this Agreement and its successor and each of the other parties to this Agreement shall have the same rights and obligations among themselves as they would have had if such successor had been a party to this Agreement in place of the retiring Agent.

16.12 Variation of Exhibits

The Agent may require such changes to any of the Exhibits as are reasonable, in the opinion of the Agent after consultation with the Lenders, to protect the interests of the Lenders under this Agreement.

17. NOTICES AND OTHER MATTERS

17.1 Notices

Every notice, request, demand or other communication under this Agreement shall:

- (a) be in writing delivered personally or by prepaid letter (airmail if the addressee is abroad), telex or telefax;
- (b) be deemed to have been received, subject as otherwise provided in this Agreement, in the case of a letter when delivered personally or two business days after it has been put into the post (seven business days if delivered through international airmail), in the case of a telex, at the time of dispatch with confirmed answerback of the addressee appearing at the

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beginning and end of the transmission and, in the case of a

telefax, when a complete and legible copy is received by the addressee (provided that if the date of receipt of a letter is not a business day in the country of the addressee or if the time of receipt of any telex or telefax is after the close of business in the country of the addressee it shall be deemed to have been received at the opening of business on the next such business day); and

- (c) be sent to the addressee at the relevant address telex number or telefax number stated in Schedule 1 or to such other address, telex number or telefax number as has been notified by the addressee to the other parties.

17.2 Notices through the Agent

Every communication under this Agreement to be given by the Borrower to any other party shall be given to the Agent for onward transmission as appropriate and to be given to the Borrower shall (except as otherwise provided in this Agreement) be given by the Agent.

17.3 No implied waivers, remedies cumulative

No failure or delay on the part of the Agent, the Arranger, the Lenders or any of them to exercise any power, right or remedy under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise by the Agent, the Arranger, the Lenders or any of them of any power, right or remedy preclude any other or further exercise thereof or the exercise of any other power, right or remedy. The remedies provided in this Agreement are cumulative and are not exclusive of any remedies provided by law.

17.4 English language

This Agreement is made in and shall be construed in the English language; all certificates, instruments and other documents to be delivered under or supplied in connection with this Agreement shall be in the English language or (if prepared in any other language) shall be accompanied by an English translation.

55 17.5 Confidentiality

Agent and each Lender agree to take and to cause its affiliates to take normal and reasonable precautions and exercise due care to maintain the confidentiality of all information identified as "confidential" or "secret" by the Borrower or the Guarantor and provided to it by the Borrower, the Guarantor or any subsidiary, or by Agent on the Borrower's, the Guarantor's or such subsidiary's behalf, under this Agreement, and neither it nor any of its affiliates shall use any such information other than in connection with or in enforcement of this Agreement or in connection with other business now or hereafter existing or contemplated with the Borrower, the Guarantor or any subsidiary, except to the extent such information (i) was or becomes generally available to the public other than as a result of disclosure by the Agent or such Lender, or (ii) was or becomes available on a non-confidential basis from a source other than the Borrower, provided that such source is not bound by a confidentiality agreement with the Borrower known to the Agent or such Lender; provided, however, that the Agent or any Lender may disclose such information (A) at the request or pursuant to any requirement of any Governmental Authority to which the Agent or such Lender is subject or in connection with an examination of the Agent or such Lender by any such authority; (B) pursuant to subpoena or other court process; (C) when required to do so in accordance with the provisions of any applicable Governmental Rule or Governmental Authority; (D) to the extent reasonably required in connection with any litigation or proceeding to which the Agent, any Lender or their respective affiliates may be party; (E) to the extent reasonably required in connection with the exercise of any remedy hereunder; (F) to the Agent or such Lender's independent auditors and other professional advisors; (G) to any Participant or Substitute, actual or potential, provided that such party agrees in writing to keep such information confidential to the same extent required of the

Lenders hereunder; (H) as to the Agent, any Lender or and of their respective affiliates, as expressly permitted under the terms of any other document or agreement regarding confidentiality to which the Borrower, the Guarantor or any subsidiary is party or is deemed party with the Agent, such Lender or such affiliate; and (I) to its affiliates.

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18. GOVERNING LAW AND JURISDICTION

18.1 Governing law

This Agreement shall be governed by, and construed in accordance with, the laws of Japan.

18.2 Jurisdiction

- (a) Each party irrevocably agrees that the Tokyo District Court shall have jurisdiction to hear and determine any suit, action or proceedings, and to settle any disputes, which may arise out of or in connection with this Agreement and, for those purposes, irrevocably submits to the jurisdiction of that court.
- (b) Each party irrevocably waives any objection which it might now or hereafter have to the court referred to in Clause 18.2(a) being nominated as the forum to hear and determine any suit, action or proceedings, and to settle any disputes, which may arise out of or in connection with this Agreement and agrees not to claim that court is not a convenient or appropriate forum.
- (c) The submission to the jurisdiction of the court referred to in Clause 18.2(a) shall not (and shall not be construed so as to) limit any right of any party to take proceedings against any other party in any other court of competent jurisdiction nor shall the taking of proceedings in any one or more jurisdictions preclude the taking of proceedings in any other jurisdiction if and to the extent permitted by applicable law.
- (d) Each party consents generally in respect of any legal action or proceedings arising out of or in connection with this Agreement to the giving of any relief or the issue of any process in connection with such action or proceedings including the making, enforcement or execution against any property whatsoever (irrespective of its use or intended use) of any order or judgment which may be made or given in such action or proceeding.

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IN WITNESS WHEREOF the parties have caused this Agreement to be duly executed on the date first above written.

Borrower: LAM RESEARCH CO., LTD.

By _____
Name:
Title:

Agent and Lender: ABN AMRO BANK N.V., Tokyo Branch

By _____
Name:
Title:

Schedule 1

The Parties and the Commitments

A. The Borrower

- (1) Name: Lam Research Co., Ltd.
- (2) Incorporated in: Japan
- (3) Principal Office: 1-1-10, Oyama, Sagamihara-shi, Kanagawa Prefecture
229, Japan
- (4) Fax: 81-427-70-0347
- (5) Notices to: (a) Lam Research Co., Ltd.
same as stated in (3) above
- (b) with a copy to
Lam Research Corporation
4650 Cushing Parkway
Fremont, CA 94538-6470 U.S.A.
Fax: 1-510-659-2876
- (6) Notices for the attention of:
- (a) Mr. Hiroyuki Ishihara
Controller, Finance & Accounting Department
- (b) Brian J. Sereda
Director of Finance

B. The Lenders and their Commitments

Name	Address, telex and Telefax number	Commitment (Y)
(1) ABN AMRO Bank N.V.	Lending Office: Tokyo Branch 13F, Shiroyama JT Mori Building 4-3-1, Toranomon Minato-ku, Tokyo 105 Japan Attn: Structured Finance Tel: 81-3-5405-6503 Fax: 81-3-5405-6903/6902 Notices to: Same as above.	(Y)1,700,000,000

C. The Agent

- (1) Name: ABN AMRO BANK N.V., Tokyo Branch
- (2) Incorporated in:

- (3) Principal Office: 13F, Shiroyama JT Mori Building
4-3-1, Toranomon, Minato-ku
Tokyo 105, Japan
- (4) Telex:
- (5) Fax: 81-3-5405-6903/6902
- (6) Notices to: Same as above
- (7) Notices for the attention of: Structured Finance
- (8) Payment Account
Bank: The Sakura Bank, Limited
Branch: Tokyo Main Office (Tokyo eigyo-bu)
Address: 1-1-2, Yurakucho, Chiyoda-ku, Tokyo 100-0006, Japan
A/c No: 1008000

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Schedule 2
Documents and evidence required as conditions precedent

A. Borrower

- (a) A copy, certified as then true and complete and up-to-date as of the Drawdown Date by a duly authorized officer of the Borrower, of the Articles of Incorporation of the Borrower.
- (b) A copy, certified as a true copy by a duly authorized officer of the Borrower, of resolutions of the Board of Directors of the Borrower effective as of the Drawdown Date evidencing approval of this Agreement and authorizing its appropriate officers or attorney (as applicable) to execute and deliver this Agreement and to give all notices and take all other action required by the Borrower under this Agreement.
- (c) Specimen signatures, authenticated by a duly authorized officer of the Borrower, of the persons authorized in the resolutions of the Board of Directors referred to in paragraph (b) above together with the executed Power of Attorney empowering that person to execute and deliver this Agreement and to give all notices and take all other action required by the Borrower under this Agreement (if applicable).

B. The Guarantor

- (a) The Guaranty, executed by the Guarantor.
- (b) Copies of the resolutions of the board of directors of the Guarantor and other necessary corporate action authorizing the Guarantor to enter into the Guaranty and the transactions contemplated thereby, certified as of the Drawdown Date or a recent date prior thereto by the Secretary or Assistant Secretary of the Guarantor.
- (c) A certificate of the Secretary or Assistant Secretary of the Guarantor certifying as of the Drawdown Date or a recent date prior thereto the names and true signatures of the officers of the Guarantor authorized to execute, deliver and

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perform, as applicable, the Guaranty, and all other documents to be delivered by it thereunder.

- (d) The certificate or articles of incorporation and the bylaws of the Guarantor as in effect on the Drawdown Date or a recent date prior thereto, certified by the Secretary or Assistant Secretary of the Guarantor as of such date, together with a good standing certificate from the Secretary of State of its jurisdiction of incorporation, dated the Drawdown Date or a recent date prior thereto.

- (e) An opinion dated the Drawdown Date or a recent date prior thereto of California counsel to the Guarantor and addressed to the Agent and the Lenders, in a form satisfactory to and previously approved by the Agent.
- (f) A certificate signed by a duly authorized officer of the Guarantor, dated the Drawdown Date or a recent date prior thereto, stating that:
 - i. The representations and warranties contained in Paragraph 3 of the Guaranty are true and correct on and as of such date, as though made on and as of such date;
 - ii. no Default or Event of Default has occurred and is continuing as of the date hereof or will occur on the date hereof as a result of the execution of the Guaranty;
 - iii. no event or circumstance has occurred since June 30, 1998 which has had or is reasonably likely to have a Material Adverse Effect (as defined in the Guaranty); and
 - iv. each of the documents previously delivered pursuant to this Schedule 2, Part B remains true, complete and accurate.
- (g) Evidence that as of the Drawdown Date all approvals or consent of any other person (including, if any, any necessary shareholder consents), required in connection with the execution, delivery and performance of the Guaranty and any other document to be executed and delivered by the Guarantor shall have been obtained.

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C. General

Such other documents, confirmations, information or opinions as the Agent may have previously reasonably requested in writing.

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Schedule 3

Additional documents and evidence required after the Drawdown Date

- (a) An opinion of legal advisers to the Borrower on Japanese law, dated the Drawdown Date, in a form satisfactory to and previously approved by the Agent.
- (b) An opinion of Nishimura & Partners, special legal advisers in Japan to the Agent and the Lenders, dated the Drawdown Date, in a form satisfactory to and previously approved by the Agent.
- (c) A certified copy of the commercial registry and a certificate of seal impression (each as of the date as close as possible to the Drawdown Date) of a representative director of the Borrower executing this Agreement or the Power of Attorney referred to in item (c) of Part A. of Schedule 2 hereto (as the case may be).

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Exhibit 1
Form of Guaranty
See Attachment

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Exhibit 2
Form of Substitution Certificate

To: [Name and address of Agent]

Date: _____

Attention:

Substitution Certificate

This Substitution Certificate relates to a Loan Agreement (the "Agreement") dated September 30, 1998 between Lam Research Co., Ltd. as Borrower (1), the banks and financial institutions whose respective names and addresses are set out in schedule 1 thereto as Lenders (2) and ABN AMRO Bank N.V., Tokyo Branch as Agent (3) and the Guaranty as defined in the Agreement. Terms defined in the Agreement shall have the same meaning in this Substitution Certificate.

- 1 [Existing Lender] (the "Existing Lender") (a) confirms the accuracy of the summary of its participation in the Loan set out in the schedule hereto; and (b) requests [Substitute Lender] (the "Substitute") to accept by way of transfer the portion of that participation specified in the schedule hereto by counter-signing and delivering this Substitution Certificate to the Agent at its address for the service of notices specified in the Agreement.
- 2 The Substitute hereby requests the Agent (on behalf of itself, the Borrower and the Lenders) to accept this Substitution Certificate as being delivered to the Agent pursuant to and for the purposes of Clause 15.4 of the Agreement and Subparagraph 8(e) of the Guaranty, so as to take effect in accordance with the respective terms thereof on [date of transfer] (the "Effective Date") or on such later date as may be determined in accordance with the terms thereof.

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- 3 The Agent (for itself, the Borrower and the other Lenders and the Guarantor) confirms the transfer effected by this Substitution Certificate pursuant to and for the purposes of Clause 15.4 of the Agreement and Subparagraph 8(e) of the Guaranty so as to take effect in accordance with the terms thereof.
- 4 The Substitute confirms:
 - (a) that it has received a copy of the Agreement and the Guaranty and all other documentation and information required by it in connection with the transactions contemplated by this Substitution Certificate;
 - (b) that it has made and will continue to make its own assessment of the validity, enforceability and sufficiency of the Agreement the Guaranty and this Substitution Certificate and has not relied and will not rely on the Existing Lender, the Arranger or the Agent or any statements made by any of them in that respect;
 - (c) that it has made and will continue to make its own credit assessment of the Borrower and has not relied and will not rely on the Existing Lender, the Arranger or the Agent or any statements made by either of them in that respect; and
 - (d) accordingly, none of the Existing Lender, the Arranger nor the Agent shall have any liability or responsibility to the Substitute in respect of any of the foregoing matters.
- 5 Execution of this Substitution Certificate by the Substitute constitutes its representation to the Existing Lender and all other parties to the Agreement that it has power to become party to the Agreement as a Lender on the terms herein and therein set out and has taken all necessary steps to authorize execution and delivery of this Substitution Certificate.
- 6 The Existing Lender makes no representation or warranty and assumes no responsibility with respect to the legality, validity, effectiveness,

adequacy or enforceability of the Agreement the Guaranty or any document relating thereto and assumes no responsibility for the financial condition of the Borrower or any

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other party to the Agreement or the Guaranty or for the performance and observance by the Borrower or any other such party of any of its obligations under the Agreement or any document relating thereto and any and all such conditions and warranties, whether express or implied by law or otherwise, are hereby excluded.

7 The Substitute hereby undertakes to the Existing Lender, the Borrower and Agent that it will perform in accordance with their terms all those obligations which by the respective terms of the Agreement will be assumed by it after acceptance of this Substitution Certificate by the Agent.

8 This Substitution Certificate and the rights and obligations of the parties hereunder shall be governed by and construed in accordance with the laws of Japan.

Note: This Substitution Certificate is not a security, bond, note, debenture, investment or similar instrument.

Executed by the authorized signatories of the parties on the date appearing below.

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The Schedule

Amount of Contribution (Y)	Portion transferred (Y)

Administrative Details of Substitute

Lending office:
Account for payments:
Telephone:
Telefax:
Telex:
Attention:

[Existing Lender]	[Substitute]
By:	By:
Title:	Title:
Date:	Date:

The Agent
(for itself and on behalf of the Borrower and the Lenders and the Guarantor./)
By:
Title:
Date:

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Exhibit 3
Form of Margin Certificate

To: [Name and address of Agent]

Attention:

[Date]

Loan Agreement dated September 30, 1998

We refer to the above Agreement (terms used in this letter having the meanings given to them in that Agreement) and notify you that the Senior Indebtedness Ratio of the Guarantor as set forth in the quarterly financial statements and information of the Guarantor for the fiscal quarter ending on [] is [].

for and on behalf of
Lam Research Corporation

By _____
Name:
Title:

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GUARANTY

THIS GUARANTY, dated as of September 30, 1998, is executed by LAM RESEARCH CORPORATION, a Delaware corporation ("Guarantor"), in favor of ABN AMRO BANK N.V., acting as agent (in such capacity, and each successor thereto in such capacity, "Agent") for the financial institutions which are from time to time parties to the Loan Agreement referred to in Recital A below (collectively, "Lenders").

RECITALS

A. Pursuant to a Loan Agreement dated as of September 30, 1998 (as amended from time to time, the "Borrower Loan Agreement"), among Lam Research Co., Ltd., a Japanese limited liability stock company ("Borrower"), the Lenders and Agent, the Lenders have agreed to extend a certain credit facility to Borrower upon the terms and subject to the conditions set forth therein. Borrower is a wholly-owned Subsidiary of Guarantor.

B. The Lenders' obligations to extend the credit facility to Borrower under the Borrower Loan Agreement are subject, among other conditions, to receipt by Agent of this Guaranty, duly executed by Guarantor.

AGREEMENT

NOW, THEREFORE, in consideration of the above recitals and for other good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, Guarantor hereby agrees with Agent, for the ratable benefit of the Lenders and Agent, as follows:

1. DEFINITIONS AND INTERPRETATION.

(a) Definitions. When used in this Guaranty, the following terms shall have the following respective meanings:

"Affiliate" shall mean, with respect to any Person, (a) each Person that, directly or indirectly, owns or controls, whether beneficially or as a trustee, guardian or other fiduciary, ten percent (10%) or more of any class of Equity Securities of such Person, (b) each Person that controls, is controlled by or is under common control with such Person or any Affiliate of such Person or (c) each of such Person's officers, directors, joint venturers and partners; provided, however, that in no case shall Agent or any Lender be deemed to be an Affiliate of Guarantor or any of its Subsidiaries for purposes of this Guaranty. For the purpose of this definition, "control" of a Person shall mean the possession, directly or indirectly, of the power to direct or cause the direction of its

management or policies, whether through the ownership of voting securities, by contract or otherwise.

"Agent" shall have the meaning given to that term in the introductory paragraph hereof.

"Base Rate" shall mean, on any day, the greater of (a) the Prime Rate in effect on such date and (b) the Federal Funds Rate for such day plus one-half percent (0.50%). ("Federal Funds Rate" shall mean, for any day, the rate per annum 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 publication, "H.15 (519)") for such day opposite the caption "Federal Funds (Effective)"). "Prime Rate" shall mean the per annum rate publicly announced by ABN AMRO Bank N.V. from time to time at its Chicago, Illinois office. The Prime Rate is determined by ABN AMRO Bank N.V. from time to time as a means of pricing credit extensions to some customers and is neither directly tied to any external rate of interest or index nor necessarily

the lowest rate of interest charged by ABN AMRO Bank N.V. at any given time for any particular class of customers or credit extensions. Any change in the Base Rate resulting from a change in the Prime Rate shall become effective on the Business Day on which each change in the Prime Rate occurs.)

"Borrower" shall have the meaning given to that term in Recital A hereof.

"Borrower Loan Agreement" shall have the meaning given to that term in Recital A hereof.

"Borrower Loan Documents" shall mean and include the Borrower Loan Agreement, this Guaranty and all other documents, instruments and agreements delivered by Borrower, Guarantor or any Subsidiary of Guarantor in connection with the Borrower Loan Agreement.

"Business Day" shall mean any day on which commercial banks are not authorized or required to close in San Francisco, California, New York, New York or Tokyo.

"Capital Asset" shall mean, with respect to any Person, any tangible fixed or capital asset owned or leased (in the case of a Capital Lease) by such Person, or any expense incurred by such Person that is required by GAAP to be reported as a non-current asset on such Person's balance sheet.

"Capital Expenditures" shall mean, with respect to any Person and any period, all amounts expended and indebtedness incurred or assumed by such Person during such period for the acquisition of Capital Assets (including all amounts expended and indebtedness incurred or assumed in connection with Capital Leases).

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"Capital Leases" shall mean any and all lease obligations that, in accordance with GAAP, are required to be capitalized on the books of a lessee.

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"Change of Control" shall mean (a) the acquisition of beneficial ownership by any "person" or "group" (as defined in Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended) of a direct or indirect interest in more than thirty-three percent (33%) of the voting power of the then outstanding capital stock of the Guarantor; or (b) a merger or consolidation of the Guarantor with any other Person or the merger of any other Person into the Guarantor or any other transaction, as a result of which the stockholders of the Guarantor immediately prior to such transaction own, in the aggregate, less than a majority of the voting power of the outstanding capital stock of the surviving or resulting entity; or (c) the first day on which a majority of the members of the Board of Directors of the Guarantor are not Continuing Directors. A "Continuing Director" shall mean any director of the Board of Directors of the Guarantor who is either (i) a member of such Board of Directors on the date of this Agreement or (ii) nominated or elected to such Board of Directors with the approval of a majority of the Continuing Directors who were members of such Board of Directors at the time of such nomination or elections.

"Code" shall mean the Internal Revenue Code of 1986, as amended from time to time.

"Compliance Certificate" shall have the meaning given to that term in Subparagraph 4(a) hereof.

"Contingent Obligation" shall mean, with respect to any Person, without duplication, (a) any Guaranty Obligation of that Person; and (b)

any direct or indirect obligation or liability, contingent or otherwise, of that Person (i) in respect of any letters of credit, acceptances, bank guaranties, surety bonds or similar instrument issued for the account of that Person or as to which that Person is otherwise liable for reimbursement of drawings, (ii) as a partner or joint venturer in any partnership or joint venture, or (iii) incurred pursuant to any interest rate swap, currency swap, forward, cap, floor or other similar contract that is not entered into in connection with a bona fide hedging operation that provides offsetting benefits to such Person. The amount of any Contingent Obligation shall (subject, in the case of Guaranty Obligations, to the last sentence of the definition of "Guaranty Obligation") be deemed equal to the maximum reasonably anticipated liability in respect thereof.

"Contractual Obligation" of any Person shall mean, any indenture, note, lease, loan agreement, security, deed of trust, mortgage, security agreement, guaranty, instrument, contract, agreement or other form of contractual obligation or undertaking to which such Person is a party or by which such Person or any of its property is bound.

"Debt Service Coverage Ratio" shall mean, with respect to any Person for any fiscal quarter, the ratio, determined on a consolidated basis in accordance with

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GAAP where applicable, of;

(a) The EBITDAR of such Person and its Subsidiaries for such quarter;

to

(b) The sum of (i) all Interest Expenses of such Person and its Subsidiaries for such quarter, (ii) all rental expenses for such Person and its Subsidiaries for such quarter, and (iii) one-fourth of all principal payments on Indebtedness for borrowed money of such Person and its Subsidiaries scheduled for payment during the four quarters immediately succeeding the quarter for which EBITDAR is calculated pursuant to clause (a).

"Default" shall have the meaning given to that term in the Borrower Loan Agreement.

"Disallowed Post-Commencement Interest and Expenses" shall mean interest computed at the rate provided in the Borrower Loan Agreement and claims for reimbursement, costs, expenses or indemnities under the terms of any of the Borrower Loan Documents accruing or claimed at any time after the commencement of any Insolvency Proceeding, if the claim for such interest, reimbursement, costs, expenses or indemnities is not allowable, allowed or enforceable against Borrower in such Insolvency Proceeding.

"Dollar Equivalent" shall mean, as to any amount denominated in Yen as of any date of determination, the equivalent amount in Dollars as determined by Agent on the basis of the Telegraphic Transfer Mid Rate quoted by Bank of Tokyo Mitsubishi at or about 10:00 a.m. (Tokyo time) on such date.

"Dollars" and "\$" shall mean the lawful currency of the United States of America and, in relation to any payment under this Guaranty, same day or immediately available funds.

"EBITDAR" shall mean, with respect to any Person for any period, the sum of the following, determined on a consolidated basis in accordance with GAAP where applicable:

(a) The net income or net loss of such Person and its Subsidiaries (including interest income) for such period before provision for income taxes;

plus

(b) The sum of (i) all Interest Expenses of such Person and its Subsidiaries accruing during such period and (ii) all depreciation, amortization and rental expenses of such Person and its Subsidiaries

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accruing during such period (in each case, to the extent deducted in calculating net income or loss in clause (a) above).

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"Employee Benefit Plan" shall mean any employee benefit plan within the meaning of section 3(3) of ERISA maintained or contributed to by Guarantor or any ERISA Affiliate, other than a Multiemployer Plan.

"Environmental Laws" shall mean all Requirements of Law relating to the protection of human health and the environment, including, without limitation, all Requirements of Law, pertaining to reporting, licensing, permitting, transportation, storage, disposal, investigation, and remediation of emissions, discharges, releases, or threatened releases of Hazardous Materials, chemical substances, pollutants, contaminants, or hazardous or toxic substances, materials or wastes, whether solid, liquid, or gaseous in nature, into the air, surface water, groundwater, or land, or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport, or handling of chemical substances, pollutants, contaminants, or hazardous or toxic substances, materials, or wastes, whether solid, liquid, or gaseous in nature.

"Equity Securities" of any Person shall mean (a) all common stock, preferred stock, participations, shares, partnership interests or other equity interests in and of such Person (regardless of how designated and whether or not voting or non-voting) and (b) all warrants, options and other rights to acquire any of the foregoing, other than convertible debt securities which have not been converted into common stock, preferred stock, participations, shares, partnership interests or other equity interests in any such Person.

"ERISA" shall mean the Employee Retirement Income Security Act of 1974, as the same may from time to time be amended or supplemented, including any rules or regulations issued in connection therewith.

"ERISA Affiliate" shall mean any Person which is treated as a single employer with Guarantor under Section 414 of the Code.

"Event of Default" shall have the meaning given to that term in the Borrower Loan Agreement.

"Federal Reserve Board" shall mean the Board of Governors of the Federal Reserve System.

"Financial Statements" shall mean, with respect to any accounting period for any Person, statements of income, shareholders' equity and cash flows of such Person for such period, and a balance sheet of such Person as of the end of such period, setting forth in each case in comparative form figures for the corresponding period in the preceding fiscal year if such period is less than a full fiscal year or, if such period is a full fiscal year, corresponding figures from the preceding annual audit, all prepared in reasonable detail and in accordance with GAAP.

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"Funded Debt" of any Person shall mean, without duplication, all

Indebtedness of such Person, as described in Subparagraphs (a)-(d) of the definition of Indebtedness.

"GAAP" shall mean generally accepted accounting principles and practices as in effect in the United States of America from time to time, consistently applied.

"Governmental Authority" shall mean any domestic or foreign national, state or local government, any political subdivision thereof, any department, agency, authority or bureau of any of the foregoing, or any other entity exercising executive, legislative, judicial, regulatory or administrative functions of or pertaining to government, including, without limitation, the Federal Deposit Insurance Corporation, the Federal Reserve Board, the Comptroller of the Currency, any central bank or any comparable authority.

"Governmental Charges" shall mean, with respect to any Person, all levies, assessments, fees, claims or other charges imposed by any Governmental Authority upon such Person or any of its property or otherwise payable by such Person.

"Governmental Rule" shall mean any law, rule, regulation, ordinance, order, code interpretation, judgment, decree, directive, guidelines, policy or similar form of decision of any Governmental Authority.

"Guaranteed Obligations" shall mean all loans, advances, debts, liabilities and obligations, howsoever arising, owed by Borrower to Agent or any Lender of every kind and description (whether or not evidenced by any note or instrument and whether or not for the payment of money), direct or indirect, absolute or contingent, due or to become due, now existing or hereafter arising pursuant to the terms of the Borrower Loan Agreement or any of the other Borrower Loan Documents, including, without limitation, all principal, interest, rent, fees, taxes, charges, expenses, attorneys' fees and accountants' fees chargeable to Borrower or payable by Borrower thereunder.

"Guarantor" shall have the meaning given to that term in the introductory paragraph hereof.

"Guarantor Credit Agreement" shall mean the Credit Agreement dated as of April 13, 1998 among Guarantor, the financial institutions from time to time parties thereto as lenders, and ABN AMRO Bank N.V., as agent for such financial institutions.

"Guarantor Credit Documents" shall have the meaning given to the term "Credit Documents" under the Guarantor Credit Agreement.

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"Guaranty Obligation" shall mean, with respect to any Person, any direct or indirect liability of that Person with respect to any Indebtedness, lease, dividend, or other obligation (the "primary obligations") of another Person (the "primary obligor"), including any obligation of that Person, whether or not contingent, (a) to purchase, repurchase or otherwise acquire such primary obligations or any property constituting direct or indirect security therefor, or (b) to advance or provide funds (i) for the payment or discharge of any such primary obligation, or (ii) to maintain working capital or equity capital of the primary obligor or otherwise to maintain the net worth or solvency or any balance sheet item, level of income or financial condition of the primary obligor, or (c) to purchase property, securities or services primarily for the purpose of assuring the owner of any such primary obligation of the ability of the primary obligor to make payment of such primary obligation, or (d) otherwise to assure or hold harmless the holder of any such primary obligation against loss in respect thereof. The amount of any Guaranty Obligation shall be deemed equal to the stated or determinable amount of the primary obligation in respect of which such Guaranty Obligation is made or, if not stated or if indeterminable, the maximum reasonably anticipated liability in respect thereof.

"Hazardous Materials" shall mean all materials, substances and

wastes which are classified or regulated as "hazardous," "toxic" or similar descriptions under any Environmental Law or which are hazardous, toxic, harmful or dangerous to human health.

"Indebtedness" of any Person shall mean, without duplication:

(a) All obligations of such Person evidenced by notes, bonds, debentures or other similar instruments and all other obligations of such Person for borrowed money;

(b) All obligations of such Person for the deferred purchase price of property or services (including obligations under credit facilities which secure or finance such purchase price and obligations under synthetic leases), other than trade payables incurred by such Person in the ordinary course of its business on ordinary terms;

(c) All obligations of such Person under conditional sale or other title retention agreements with respect to property acquired by such Person (to the extent of the value of such property if the rights and remedies of the seller or lender under such agreement in the event of default are limited solely to repossession or sale of such property);

(d) All obligations of such Person as lessee under or with respect to Capital Leases;

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(e) All obligations of such Person with respect to accounts receivable and related rights and property sold, assigned or transferred by such Person with recourse to such Person;

(f) All Contingent Obligations of such Person; and

(g) All Indebtedness of other Persons of the types described in clauses (a) - (f) above to the extent secured by (or for which any holder of such Indebtedness has an existing right, contingent or otherwise, to be secured by) any Lien in any property (including accounts and contract rights) of such Person, even though such Person has not assumed or become liable for the payment of such Indebtedness.

"Insolvency Proceeding" shall mean any case or proceeding under the United States Bankruptcy Code or any other similar law, rule or regulation of the United States or any jurisdiction or any other action or proceeding for the reorganization, liquidation, appointment of a receiver, rearrangement of debts, marshalling of assets or similar action relating to Borrower or Guarantor, their respective creditors or any substantial part of their respective assets, whether or not any such case, proceeding or action is voluntary or involuntary.

"Interest Expenses" shall mean, with respect to any Person for any period, the sum, determined on a consolidated basis in accordance with GAAP, of all interest accruing on the Indebtedness of such Person during such period (including interest attributable to Capital Leases).

"Investment" of any Person shall mean any loan or advance of funds by such Person to any other Person (other than advances to employees of such Person in the ordinary course of business), any purchase or other acquisition of any Equity Securities or Indebtedness of any other Person, any capital contribution by such Person to or any other investment by such Person in any other Person (including any Guaranty Obligations of such Person and any indebtedness of such Person of the type described in clause (g) of the definition of "Indebtedness" on behalf of any other Person); provided, however, that Investments shall not include (a) accounts receivable or other indebtedness owed by customers of such Person which are current assets and arose from sales of inventory in the ordinary course of such Person's business, (b) prepaid expenses of such Person incurred and prepaid in the ordinary course of business, and (c) Capital Expenditures of such Person incurred

in the ordinary course of business.

"Lenders" shall have the meaning given to that term in the introductory paragraph hereof.

"Lien" shall mean, with respect to any property, any security interest, mortgage, deed of trust, pledge, lien, charge or other encumbrance in, of, or on such property or the income therefrom, including, without limitation, the interest

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of a vendor or lessor under a conditional sale agreement, Capital Lease or other title retention agreement, or any agreement to provide any of the foregoing, and the filing of any financing statement or similar instrument under the Uniform Commercial Code or comparable law of any jurisdiction.

"Majority Lenders" shall have the meaning given to that term in the Borrower Loan Agreement.

"Margin Stock" shall have the meaning given to that term in Regulation U issued by the Federal Reserve Board, as amended from time to time, and any successor regulation thereto.

"Material Adverse Effect" shall mean a material adverse effect on (a) the business, assets, operations or financial condition of Guarantor and its Subsidiaries; (b) the ability of Guarantor to pay or perform the Guaranteed Obligations in accordance with the terms of this Guaranty and the other Borrower Loan Documents; or (c) the rights and remedies of Agent or any Lender under this Guaranty, the other Borrower Loan Documents or any related document, instrument or agreement.

"Material Subsidiary" shall mean, with respect to any Subsidiary of the Guarantor, any Subsidiary whose (a) total assets exceed ten percent (10%) of the consolidated total assets of Guarantor and its Subsidiaries at any time or (b) gross revenues exceed five percent (5%) of the consolidated gross revenues of Guarantor and its Subsidiaries at any time.

"Multiemployer Plan" shall mean any multiemployer plan within the meaning of section 3(37) of ERISA maintained or contributed to by Guarantor or any ERISA Affiliate.

"Net Proceeds" shall mean, with respect to any sale or issuance of any Equity Security by any Person, the aggregate consideration received by such Person from such sale or issuance less the sum of the actual amount of the reasonable fees and commissions payable to Persons other than such Person or any Affiliate of such Person, the reasonable legal expenses and the other reasonable costs and expenses directly related to such sale or issuance that are to be paid by such Person.

"Overnight Rate" shall mean, for any amount payable in Yen on any day, the per annum interest rate at which overnight deposits in Yen in an amount approximately equal to such amount would be offered for such day by ABN AMRO Bank N.V.'s Tokyo Office to major banks in the Tokyo interbank market.

"PBGC" shall mean the Pension Benefit Guaranty Corporation, or any successor thereto.

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"Permitted Indebtedness" shall have the meaning given to that term in Subparagraph 5(a) hereof.

"Permitted Liens" shall have the meaning given to that term in Subparagraph 5(b) hereof.

"Person" shall mean and include an individual, a partnership, a corporation (including a business trust), a joint stock company, an unincorporated association, a limited liability company, a joint venture, a trust or other entity or a Governmental Authority.

"Quick Ratio" shall mean, with respect to any Person at any time, the ratio, determined on a consolidated basis in accordance with GAAP, of:

(a) The remainder at such time of (i) the sum of all cash, cash equivalents (less than ninety (90) days in term), short-term marketable securities (less than one (1) year in term) and accounts receivable of such Person and its Subsidiaries (less all reserves therefor) minus (ii) the sum of (A) the aggregate amount of such cash, cash equivalents, short-term marketable securities and accounts receivable which are subject to any Lien or are otherwise encumbered or restricted (to the extent such amounts do not secure a corresponding current liability amount included in the calculation of subpart (b) below), and (B) with respect to any accounts receivable sold, assigned or transferred, to the extent included under subpart (a)(i) above, the aggregate amount of any accounts receivable representing the discounted portion of such accounts receivable so sold, assigned or transferred;

to

(b) The sum at such time of (i) the current liabilities of such Person and its Subsidiaries, (ii) the aggregate principal amounts outstanding under any revolving credit facility (including, without limitation, in the case of Guarantor, the aggregate principal amount of all Loans then outstanding), and (iii) in the event such Person or any of its Subsidiaries exercises a purchase option under a synthetic lease or a purchase payment otherwise becomes due under a synthetic lease, the portion of any synthetic lease payment that would be utilized to purchase the underlying property within one year of the date of such exercise or acceleration.

"Reportable Event" shall have the meaning given to that term in ERISA and applicable regulations thereunder.

"Requirement of Law" applicable to any Person shall mean (a) the Articles or Certificate of Incorporation and By-laws, Partnership Agreement or other organizational or governing documents of such Person, (b) any Governmental

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Rule applicable to such Person, (c) any license, permit, approval or other authorization granted by any Governmental Authority to or for the benefit of such Person or (d) any judgment, decision or determination of any Governmental Authority or arbitrator, in each case applicable to or binding upon such Person or any of its property or to which such Person or any of its property is subject.

"Senior Funded Debt" of any Person shall mean any Funded Debt which is not Subordinated Debt.

"Senior Indebtedness" of any Person shall mean, without duplication:

(a) all Senior Funded Debt of such Person;

(b) all Contingent Obligations of such Person;

(c) all obligations of such Person with respect to any synthetic leases (excluding the portion of such obligations which are irrevocably secured by cash or cash equivalents); and

(d) all obligations of such Person with respect to any sale, transfer or assignment of accounts receivable and related rights and property by such Person with recourse to such Person.

"Senior Indebtedness Ratio" shall mean, with respect to any Person at any time, the ratio, determined on a consolidated basis in accordance with GAAP, of:

(a) The total Senior Indebtedness of such Person and its Subsidiaries at such time;

to

(b) The sum at such time of (i) the total Senior Indebtedness and Subordinated Debt of such Person and its Subsidiaries at such time plus (ii) the total Tangible Net Worth of such Person and its Subsidiaries at such time.

"Subordinated Debt" shall mean, collectively, (i) Guarantor's \$310,000,000 Five Percent (5%) Convertible Subordinated Notes due 2002, and (ii) and any other subordinated debt permitted by clause (xi) of Subparagraph 5(a) hereof.

"Subordinated Obligations" shall have the meaning given to that term in Paragraph 7 hereof.

"Subsidiary" of any Person shall mean (a) any corporation of which more than 50% of the issued and outstanding Equity Securities having ordinary voting power to elect a majority of the Board of Directors of such corporation (irrespective of whether at the time capital stock of any other class or classes of

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such corporation shall or might have voting power upon the occurrence of any contingency) is at the time directly or indirectly owned or controlled by such Person, by such Person and one or more of its other Subsidiaries or by one or more of such Person's other Subsidiaries, (b) any partnership, joint venture, or other association of which more than 50% of the equity interest having the power to vote, direct or control the management of such partnership, joint venture or other association is at the time owned and controlled by such Person, by such Person and one or more of the other Subsidiaries or by one or more of such Person's other Subsidiaries or (c) any other Person included in the Financial Statements of such Person on a consolidated basis.

"Tangible Net Worth" shall mean, with respect to any Person at any time, the remainder at such time, determined on a consolidated basis in accordance with GAAP, of (a) the total assets of such Person and its Subsidiaries minus (b) the sum (without limitation and without duplication of deductions) of (i) the total liabilities of such Person and its Subsidiaries, (ii) all reserves established by such Person and its Subsidiaries for anticipated losses and expenses (to the extent not deducted in calculating total assets in clause (a) above), and (iii) all intangible assets of such Person and its Subsidiaries (to the extent included in calculating total assets in clause (a) above), including, without limitation, goodwill (including any amounts, however designated on the balance sheet, representing the cost of acquisition of businesses and investments in excess of underlying tangible assets), trademarks, trademark rights, trade name rights, copyrights, patents, patent rights, licenses, unamortized debt discount, marketing expenses, organizational expenses, non-compete agreements and deferred research and development.

"Yen" and "(Y)" shall mean the lawful currency of Japan and, in relation to any payment under this Guaranty, same day or immediately available funds.

(b) Other Interpretive Provisions. Unless otherwise indicated in this Guaranty, all accounting terms used in this Guaranty shall be construed, and all accounting and financial computations hereunder shall be computed, in accordance with GAAP. Headings in this Guaranty are for convenience of reference only and

are not part of the substance hereof. All terms defined in this Guaranty in the singular form shall have comparable meanings when used in the plural form and vice versa. References in this Guaranty to any document, instrument or agreement (i) shall include all exhibits, schedules and other attachments thereto, (ii) shall include all documents, instruments or agreements issued or executed in replacement thereof and (iii) shall mean such document, instrument or agreement, or replacement or predecessor thereto, as amended, modified and supplemented from time to time and in effect at any given time. References in this Guaranty to any statute or other law (A) shall include any successor statute or law, (B) shall include all rules and regulations promulgated under such statute or law (or any successor statute or law), and (C) shall mean such statute or law (or successor statute or law) and such rules and regulations, as amended, modified, codified or reenacted from time to time and in effect at any given time. References in this Guaranty to any Person in

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a particular capacity (1) shall include any permitted successors to and assigns of such Person in that capacity and (2) shall exclude such Person individually or in any other capacity. The words "hereof," "herein" and "hereunder" and words of similar import when used in this Guaranty shall refer to this Guaranty as a whole and not to any particular provision of this Guaranty. The words "include" and "including" and words of similar import when used in this Guaranty shall not be construed to be limiting or exclusive.

2. GUARANTY.

(a) Payment Guaranty. Guarantor unconditionally guarantees and promises to pay and perform as and when due, whether at stated maturity, upon acceleration or otherwise, any and all of the Guaranteed Obligations. If any Insolvency Proceeding relating to Borrower is commenced, Guarantor further unconditionally guarantees and promises to pay and perform, upon the demand of Agent, any and all of the Guaranteed Obligations (including any and all Disallowed Post-Commencement Interest and Expenses) in accordance with the terms of the Borrower Loan Documents, whether or not such obligations are then due and payable by Borrower and whether or not such obligations are modified, reduced or discharged in such Insolvency Proceeding. This Guaranty is a guaranty of payment and not of collection.

(b) Continuing Guaranty. This Guaranty is an irrevocable continuing guaranty of the Guaranteed Obligations which shall continue in effect until all obligations of the Lenders to extend credit to Borrower have terminated and all of the Guaranteed Obligations have been fully, finally and indefeasibly paid. If any payment on any Guaranteed Obligation is set aside, avoided or rescinded or otherwise recovered from Agent or any Lender, such recovered payment shall constitute a Guaranteed Obligation hereunder and, if this Guaranty was previously released or terminated, it automatically shall be fully reinstated, as if such payment was never made.

(c) Independent Obligation. The liability of Guarantor hereunder is independent of the Guaranteed Obligations, and a separate action or actions may be brought and prosecuted against Guarantor irrespective of whether action is brought against Borrower or any other guarantor of the Guaranteed Obligations or whether Borrower or any other guarantor of the Guaranteed Obligations is joined in any such action or actions.

(d) Fraudulent Transfer Limitation. If, in any action to enforce this Guaranty, any court of competent jurisdiction determines that enforcement against Guarantor for the full amount of the Guaranteed Obligations is not lawful under or would be subject to avoidance under Section 548 of the United States Bankruptcy Code or any applicable provision of any comparable law of any state or other jurisdiction, the liability of Guarantor under this Guaranty shall be limited to the maximum amount lawful and not subject to such avoidance.

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(e) Termination. Notwithstanding any termination of this Guaranty in accordance with Paragraph 6 hereof, this Guaranty shall continue to be in full force and effect and applicable to any Guaranteed Obligations arising thereafter which arise because prior payments of Guaranteed Obligations are rescinded or otherwise required to be surrendered by Agent or any Lender after receipt.

3. REPRESENTATIONS AND WARRANTIES. Guarantor hereby represents and warrants to Agent and the Lenders as follows:

(a) Due Incorporation, Qualification, Etc. Each of Guarantor and Guarantor's Subsidiaries (i) is a corporation duly organized, validly existing and in good standing under the laws of its state of incorporation; (ii) has the power and authority to own, lease and operate its properties and carry on its business as now conducted; and (iii) is duly qualified, licensed to do business and in good standing as a foreign corporation in each jurisdiction where the failure to be so qualified or licensed is reasonably likely to have a Material Adverse Effect.

(b) Authority. The execution, delivery and performance by Guarantor of each Borrower Loan Document executed, or to be executed, by Guarantor and the consummation of the transactions contemplated thereby (i) are within the power of Guarantor and (ii) have been duly authorized by all necessary actions on the part of Guarantor.

(c) Enforceability. Each Borrower Loan Document executed, or to be executed, by Guarantor has been, or will be, duly executed and delivered by Guarantor and constitutes, or will constitute, a legal, valid and binding obligation of Guarantor, enforceable against Guarantor in accordance with its terms, except as limited by bankruptcy, insolvency or other laws of general application relating to or affecting the enforcement of creditors' rights generally and general principles of equity.

(d) Non-Contravention. The execution and delivery by Guarantor of the Borrower Loan Documents executed by Guarantor and the performance and consummation of the transactions contemplated thereby do not (i) violate any Requirement of Law applicable to Guarantor; (ii) violate any provision of, or result in the breach or the acceleration of, or entitle any other Person to accelerate (whether after the giving of notice or lapse of time or both), any Contractual Obligation of Guarantor; or (iii) result in the creation or imposition of any Lien (or the obligation to create or impose any Lien) upon any property, asset or revenue of Guarantor.

(e) Approvals. No consent, approval, order or authorization of, or registration, declaration or filing with, any Governmental Authority or other Person (including, without limitation, the shareholders of any Person) is required in connection with the execution and delivery of the Borrower Loan Documents executed by Guarantor and the performance and consummation of the transactions contemplated thereby, except such as have been made or obtained and are in full force and effect.

(f) No Violation or Default. Neither Guarantor nor any of its Subsidiaries is in violation of or in default with respect to (i) any Requirement of Law applicable to such Person; (ii) any Contractual Obligation of such Person (nor is there any waiver in effect which, if not in effect, would result in such a violation or default), where, in each case, such violation or default is reasonably likely to have a Material Adverse Effect. Without limiting the generality of the foregoing, neither Guarantor nor any of its Subsidiaries (A) has violated any Environmental Laws, (B) has any liability under any Environmental Laws or (C) has received notice or other communication of an investigation or is under investigation by any Governmental Authority having authority to enforce Environmental Laws, where such violation, liability or investigation is reasonably likely to have a Material Adverse Effect. No Event of Default or Default has occurred and is

continuing.

(g) Litigation. No actions (including, without limitation, derivative actions), suits, proceedings or investigations are pending or, to the knowledge of Guarantor, threatened against Guarantor or any of its Subsidiaries at law or in equity in any court or before any other Governmental Authority which (i) is reasonably likely (alone or in the aggregate) to have a Material Adverse Effect or (ii) seeks to enjoin, either directly or indirectly, the execution, delivery or performance by Guarantor of the Borrower Loan Documents executed by Guarantor or the transactions contemplated thereby.

(h) Title; Possession Under Leases. Guarantor and its Subsidiaries (i) own and have good and marketable title (without regard to minor defects of title) to the real property owned by Guarantor and its Subsidiaries, as reflected in the most recent Financial Statements delivered to Agent (except those assets and properties disposed of since the date of such Financial Statements in compliance with this Guaranty), (ii) have valid leasehold interests in all real property leased by Guarantor and its Subsidiaries, (iii) own and have good title (without regard to minor defects of title) to all their other respective properties and assets which are material to the business of Guarantor and its Subsidiaries, as reflected in the most recent Financial Statements delivered to Agent (except those assets and properties disposed of since the date of such Financial Statements in compliance with this Guaranty) and (iv) own and have good title (without regard to minor defects of title) to all respective properties and assets acquired by Guarantor and its Subsidiaries since such date which are material to the business of Guarantor and its Subsidiaries (except those assets and properties disposed of in compliance with this Guaranty). Such assets and properties are subject to no Lien, except for Permitted Liens. Each of Guarantor and its Subsidiaries enjoys peaceful and undisturbed possession under all leases, except for any failure to enjoy such possession which (alone or in the aggregate with any other such failures) is not reasonably likely to have a Material Adverse Effect.

(i) Financial Statements. The Financial Statements of Guarantor and its Subsidiaries which have been delivered to Agent, (i) are in accordance with the books and records of Guarantor and its Subsidiaries, which have been maintained in accordance with good business practice; (ii) have been prepared in conformity with GAAP; and (iii) fairly present the financial conditions and results of operations of Guarantor and its Subsidiaries

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as of the date thereof and for the period covered thereby. Neither Guarantor nor any of its Subsidiaries has any contingent obligations, liability for taxes or other outstanding obligations which are material in the aggregate, except as disclosed in the audited Financial Statements of Guarantor and its Subsidiaries for the fiscal year ending June 30, 1997, and the unaudited Financial Statements of Guarantor and its Subsidiaries for the fiscal quarter ending March 31, 1998, furnished by Guarantor to Agent prior to the date hereof, or in the Financial Statements delivered to Agent and Lenders pursuant to clause (i) or (ii) of Subparagraph 4(a) hereof.

(j) Equity Securities. As of the date of this Guaranty, the authorized Equity Securities of Guarantor consist of ninety million (90,000,000) shares of common stock. All outstanding Equity Securities of Guarantor are duly authorized, validly issued, fully paid and non-assessable. All Equity Securities of Guarantor have been offered and sold in compliance with all federal and state securities laws and all other Requirements of Law.

(k) No Agreements to Sell Assets, Etc. Neither Guarantor nor any of its Subsidiaries has any legal obligation, absolute or contingent, to any Person to sell the assets of Guarantor or any of its Subsidiaries (other than sales in the ordinary course of business), or to effect any merger, consolidation or other reorganization of Guarantor or any of its Subsidiaries or to enter into any agreement with respect thereto, except

to the extent otherwise permitted pursuant to Subparagraph 5(c) and 5(d) hereof.

(1) Employee Benefit Plans.

(i) Based on the latest valuation of each Employee Benefit Plan that either Guarantor or any ERISA Affiliate maintains or contributes to, or has any obligation under (which occurred within twelve months of the date of this representation), the aggregate benefit liabilities of such plan within the meaning of Section 4001 of ERISA did not exceed the aggregate value of the assets of such plan. Neither Guarantor nor any ERISA Affiliate has any liability with respect to any post-retirement benefit under any Employee Benefit Plan which is a welfare plan (as defined in section 3(1) of ERISA), other than liability for health plan continuation coverage described in Part 6 of Title I(B) of ERISA, which liability for health plan contribution coverage is not reasonably likely to have a Material Adverse Effect.

(ii) Each Employee Benefit Plan complies, in both form and operation, in all material respects, with its terms, ERISA and the Code, and no condition exists or event has occurred with respect to any such plan which would result in the incurrence by either Guarantor or any ERISA Affiliate of any material liability, fine or penalty. Each Employee Benefit Plan, related trust agreement, arrangement and commitment of Guarantor or any ERISA Affiliate is legally valid and binding and in full force and effect. No Employee Benefit Plan is being audited or investigated by any government agency or is subject to any pending or

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threatened claim or suit. Neither Guarantor nor any ERISA Affiliate nor any fiduciary of any Employee Benefit Plan has engaged in a prohibited transaction under section 406 of ERISA or section 4975 of the Code.

(iii) Neither Guarantor nor any ERISA Affiliate contributes to or has any material contingent obligations to any Multiemployer Plan. Neither Guarantor nor any ERISA Affiliate has incurred any material liability (including secondary liability) to any Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan under Section 4201 of ERISA or as a result of a sale of assets described in Section 4204 of ERISA. Neither Guarantor nor any ERISA Affiliate has been notified that any Multiemployer Plan is in reorganization or insolvent under and within the meaning of Section 4241 or Section 4245 of ERISA or that any Multiemployer Plan intends to terminate or has been terminated under Section 4041A of ERISA.

(m) Other Regulations. Guarantor is not subject to regulation under the Investment Company Act of 1940, the Public Utility Holding Company Act of 1935, the Federal Power Act, the Interstate Commerce Act, any state public utilities code or to any other Governmental Rule limiting its ability to incur indebtedness.

(n) Patent and Other Rights. Guarantor and its Subsidiaries own or license under validly existing agreements, and have the full right to license without the consent of any other Person (or can demonstrate to the satisfaction of the Majority Lenders the ability to obtain or maintain), all patents, licenses, trademarks, trade names, trade secrets, service marks, copyrights and all rights with respect thereto, which are material to the conduct of their businesses as now conducted.

(o) Governmental Charges and Other Indebtedness. Guarantor and its Subsidiaries have filed or caused to be filed all tax returns which are required to be filed by them. Guarantor and its Subsidiaries have paid, or made provision for the payment of, all taxes and other Governmental Charges which have or may have become due pursuant to said returns or otherwise and all other indebtedness, except such

Governmental Charges or indebtedness, if any, which are being contested in good faith and as to which adequate reserves (determined in accordance with GAAP) have been provided or which are not reasonably likely to have a Material Adverse Effect if unpaid.

(p) Margin Stock. Guarantor owns no Margin Stock which, in the aggregate, would constitute a substantial part of the assets of Guarantor, and no proceeds of any loan under the Borrower Loan Agreement will be used to purchase or carry, directly or indirectly, any Margin Stock or to extend credit, directly or indirectly, to any Person for the purpose of purchasing or carrying any Margin Stock.

(q) Subsidiaries, etc. Set forth in Schedule 3(q) (as supplemented by Guarantor from time to time in a written notice to Agent and the Lenders) is a complete list of all of Guarantor's Subsidiaries, the jurisdiction of incorporation of each, and the percentage of shares of such Subsidiary owned directly or indirectly by Guarantor (which

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in the event there is more than one class of Equity Securities and/or Guarantor, directly or indirectly, owns less than 100% of any Equity Securities of such Subsidiary, such information shall list the classes of Equity Securities and/or the number and percentage of Equity Securities owned directly or indirectly by Guarantor). Except for such Subsidiaries, Guarantor has no Subsidiaries, is not a partner in any partnership or a joint venturer in any joint venture.

(r) Catastrophic Events. Neither Guarantor nor any of its Subsidiaries and none of their properties is or has been affected by any fire, explosion, accident, strike, lockout or other labor dispute, drought, storm, hail, earthquake, embargo, act of God or other casualty that is reasonably likely to have a Material Adverse Effect. There are no disputes presently subject to grievance procedure, arbitration or litigation under any of the collective bargaining agreements, employment contracts or employee welfare or incentive plans to which Guarantor or any of its Subsidiaries is a party, and there are no strikes, lockouts, work stoppages or slowdowns, or, to the best knowledge of Guarantor, jurisdictional disputes or organizing activities occurring or threatened which alone or in the aggregate are reasonably likely to have a Material Adverse Effect.

(s) Burdensome Contractual Obligations, Etc. Neither Guarantor nor any of its Subsidiaries and none of their properties is subject to any Contractual Obligation or Requirement of Law which is reasonably likely to have a Material Adverse Effect.

(t) No Material Adverse Effect. No event has occurred and no condition exists which is reasonably likely to have a Material Adverse Effect.

(u) Accuracy of Information Furnished. None of the Borrower Loan Documents and none of the other certificates, statements or information furnished to Agent or any Lender by or on behalf of Borrower, Guarantor or any of its Subsidiaries in connection with the Borrower Loan Documents or the transactions contemplated thereby contains or will contain any untrue statement of a material fact or omits or will omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

4. AFFIRMATIVE COVENANTS. Until all obligations of Agent or any Lender to extend credit to Guarantor have terminated and all of the Guaranteed Obligations have been fully, finally and indefeasibly paid, Guarantor shall comply, and shall cause compliance, with the following affirmative covenants, unless Majority Lenders shall otherwise consent in writing:

(a) Financial Statements, Reports, etc. Guarantor shall furnish to Agent for each Lender the following, each in such form and such detail as Agent shall reasonably request (copies of which Agent shall promptly deliver to each Lender):

(i) As soon as available and in no event later than fifty (50) days after the last day of each fiscal quarter of Guarantor, a copy of the Financial Statements of Guarantor and its Subsidiaries (prepared on a consolidated basis) for such

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quarter and for the fiscal year to date, certified by the chief executive officer, president, chief financial officer or treasurer of Guarantor to present fairly the financial condition, results of operations and other information reflected therein and to have been prepared in accordance with GAAP (subject to normal year-end audit adjustments);

(ii) As soon as available and in no event later than one hundred (100) days after the close of each fiscal year of Guarantor, (A) copies of the audited Financial Statements of Guarantor and its Subsidiaries (prepared on a consolidated basis) for such year, prepared by independent certified public accountants of recognized national standing acceptable to Agent, and (B) copies of the unqualified opinions (or qualified opinions reasonably acceptable to Agent) and management letters delivered by such accountants in connection with all such Financial Statements;

(iii) Contemporaneously with the quarterly and year-end Financial Statements required by the foregoing clauses (i) and (ii), a compliance certificate (the "Compliance Certificate") of the chief executive officer, president, chief financial officer or treasurer of Guarantor which (A) states that no Event of Default and no Default has occurred and is continuing, or, if any such Event of Default or Default has occurred and is continuing, a statement as to the nature thereof and what action Guarantor proposes to take with respect thereto, and (B) sets forth, for the quarter or year covered by such Financial Statements or as of the last day of such quarter or year (as the case may be), the calculation of the financial ratios and tests provided in Subparagraph 5(l) hereof;

(iv) [RESERVED];

(v) As soon as possible and in no event later than five (5) Business Days after any officer of Guarantor knows of the occurrence or existence of (A) any Reportable Event under any Employee Benefit Plan or Multiemployer Plan; (B) any actual litigation or threatened litigation which has a reasonable likelihood of leading to actual litigation, suits, claims or disputes against Guarantor or any of its Subsidiaries involving potential monetary damages payable by Guarantor or its Subsidiaries of \$10,000,000 or more alone and/or \$20,000,000 or more in the aggregate; (C) any other event or condition which is reasonably likely to have a Material Adverse Effect; or (D) any Default or Event of Default; the statement of the president or chief financial officer of Guarantor setting forth details of such event, condition, Default or Event of Default and the action which Guarantor proposes to take with respect thereto;

(vi) As soon as available and in no event later than five (5) Business Days after they are sent, made available or filed, copies of (A) all registration statements and reports filed by Guarantor or any of its Subsidiaries with any securities exchange or the Securities and Exchange Commission (including,

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without limitation, all 10-Q, 10-K and 8-K reports); (B) all

reports, proxy statements and financial statements sent or made available by Guarantor or any of its Subsidiaries to its security holders; and (C) all press releases and other similar public statements concerning any material developments in the business of Guarantor or any of its Subsidiaries made available by Guarantor or any of its Subsidiaries to the public generally;

(vii) Contemporaneously with any Investment by Guarantor consisting of any purchase or other acquisition of any Equity Securities or Indebtedness of any other Person or any capital contribution to or any other investment in any other Person having a value in excess of \$60,000,000, a pro forma Compliance Certificate certified by the chief executive officer, president, chief financial officer or treasurer of Guarantor which sets forth the calculation of the financial ratios and tests provided in Subparagraph 5(1) hereof after giving effect to any such Investment; and

(viii) Such other instruments, agreements, certificates, opinions, statements, documents and information relating to the operations or condition (financial or otherwise) of Guarantor or its Subsidiaries, and compliance by Guarantor with the terms of this Guaranty and the other Borrower Loan Documents as Agent may from time to time reasonably request.

(b) Books and Records. Guarantor and its Subsidiaries shall at all times keep proper books of record and account in which full, true and correct entries will be made of their transactions in accordance with GAAP, or if, with respect to any Subsidiary for which United States accounting principles are inapplicable, generally accepted accounting principles in the jurisdiction in which such Subsidiary is organized.

(c) Inspections. Guarantor and its Subsidiaries shall permit any Person designated by Agent or any Lender, upon reasonable notice and during normal business hours, to visit and inspect any of the properties and offices of Guarantor and its Subsidiaries, to examine the books and records of Guarantor and its Subsidiaries and make copies thereof and to discuss the affairs, finances and accounts of Guarantor and its Subsidiaries with, and to be advised as to the same by, their officers, auditors and accountants, all at such times and intervals as Agent or any Lender may reasonably request; provided, however, so long as no Default or Event of Default has occurred and is continuing, such inspection and examination by any Lender (other than Agent) shall be at the expense of such Lender.

(d) Insurance. Guarantor and its Subsidiaries shall:

(i) Carry and maintain insurance of the types and in the amounts customarily carried from time to time during the term of this Guaranty by others engaged in substantially the same business as such Person and operating in the same geographic area as such Person, including, but not limited to, fire, public liability, property damage and worker's compensation; and

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(ii) Deliver to Agent from time to time, as Agent may request, schedules setting forth all insurance then in effect.

(e) Governmental Charges and Other Indebtedness. Guarantor and its Subsidiaries shall promptly pay and discharge when due (i) all taxes and other Governmental Charges prior to the date upon which penalties accrue thereon, (ii) all indebtedness which, if unpaid, could become a Lien upon the property of Guarantor or its Subsidiaries and (iii) all other Indebtedness which, if unpaid, is reasonably likely to have a Material Adverse Effect, except such Indebtedness as may in good faith be contested or disputed, or for which arrangements for deferred payment have been made, provided that in each such case appropriate reserves are maintained to the reasonable satisfaction of Agent.

(f) Use of Proceeds. Borrower shall not use any part of the

proceeds of any loan under the Borrower Loan Agreement, directly or indirectly, for the purpose of purchasing or carrying any Margin Stock or for the purpose of purchasing or carrying or trading in any securities under such circumstances as to involve Guarantor, any Lender or Agent in a violation of Regulations T, U or X issued by the Federal Reserve Board.

(g) General Business Operations. Except as permitted in Subparagraph 5(d) hereof, each of Guarantor and its Subsidiaries shall (i) preserve and maintain its corporate existence and all of its rights, privileges and franchises reasonably necessary to the conduct of its business; provided, however, that from time to time, Guarantor may, in the ordinary course of business, dissolve any Subsidiary which is not a Material Subsidiary, so long as both immediately before and after giving effect to such dissolution, no Default or Event of Default shall have occurred and be continuing, (ii) conduct its business activities in compliance with all Requirements of Law and Contractual Obligations applicable to such Person, the violation of which is reasonably likely to have a Material Adverse Effect, and (iii) keep all property useful and necessary in its business in good working order and condition, ordinary wear and tear excepted. Guarantor shall maintain its chief executive office and principal place of business in the United States.

(h) Pari Passu Ranking. Guarantor shall take, or cause to be taken, all actions necessary to ensure that the obligations of Guarantor under this Guaranty are and continue to rank at least pari passu in right of payment with all other unsecured Senior Indebtedness of Guarantor.

5. NEGATIVE COVENANTS. Until all obligations of Agent or any Lender to extend credit to Guarantor have terminated and all of the Guaranteed Obligations have been fully, finally and indefeasibly paid, Guarantor shall comply, and shall cause compliance, with the following negative covenants, unless Majority Lenders shall otherwise consent in writing:

(a) Indebtedness. Neither Guarantor nor any of its Subsidiaries shall create, incur, assume or permit to exist any Indebtedness except for the following ("Permitted Indebtedness"):

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(i) The obligations of Guarantor under the Guarantor Credit Documents;

(ii) Indebtedness of Guarantor and its Subsidiaries listed in Schedule 5(a) hereto and existing on the date of this Guaranty;

(iii) Indebtedness of Guarantor and its Subsidiaries arising from the endorsement of instruments for collection in the ordinary course of Guarantor's or a Subsidiary's business;

(iv) Indebtedness of Guarantor and its Subsidiaries for trade accounts payable, provided that (A) such accounts arise in the ordinary course of business and (B) no material part of any such account is more than ninety (90) days past due (unless subject to a bona fide dispute and for which adequate reserves have been established);

(v) Indebtedness of Guarantor and its Subsidiaries under interest rate protection, currency swap and foreign exchange arrangements, provided that all such arrangements are entered into in connection with bona fide hedging operations and not for speculation;

(vi) Indebtedness of Guarantor and its Subsidiaries under purchase money loans (including any synthetic leases) and Capital Leases incurred by Guarantor or any of its Subsidiaries to finance the acquisition by such Person of real property, fixtures or equipment provided that in each case, (A) such Indebtedness is incurred by such Person at the time of, or not later than ninety (90) days after, the acquisition by such

Person of the property so financed and (B) such Indebtedness does not exceed the purchase price of the property so financed;

(vii) Indebtedness of Guarantor and its Subsidiaries under initial or successive refinancings of any Indebtedness permitted by clause (ii) above, provided that (A) the principal amount of any such refinancing does not exceed the principal amount of the Indebtedness being refinanced and (B) the material terms and provisions of any such refinancing (including maturity, redemption, prepayment, default and subordination provisions) are no less favorable to the Lenders than the Indebtedness being refinanced;

(viii) Indebtedness of Guarantor and its Subsidiaries with respect to surety, appeal, indemnity, performance or other similar bonds in the ordinary course of business;

(ix) Guaranty Obligations of Guarantor in respect of Permitted Indebtedness of its Subsidiaries;

(x) Indebtedness of Guarantor to any of its Subsidiaries, Indebtedness of any of Guarantor's Subsidiaries to Guarantor or Indebtedness of any of

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Guarantor's Subsidiaries to any of Guarantor's other Subsidiaries, provided that any Indebtedness of Guarantor to any of its Subsidiaries and any Indebtedness of any of Guarantor's Subsidiaries to Guarantor shall be subject to Subparagraph 5(e) hereof;

(xi) Unsecured Indebtedness of Guarantor which is subordinated to the obligations of Guarantor under the Guarantor Credit Documents, provided that the payment terms, interest rate and subordination provisions of such Indebtedness are reasonably acceptable to "Required Lenders" under the Guarantor Credit Agreement;

(xii) Indebtedness of Guarantor and its Subsidiaries with respect to the sale, transfer or assignment of accounts receivable of Guarantor and its Subsidiaries and certain rights and property related to the collection of or constituting proceeds of such accounts receivable, provided that such sale, assignment or transfer is (A) in the ordinary course of business, (B) for cash, (C) with recourse to Guarantor or such Subsidiary in an amount not to exceed the aggregate face amount of the accounts receivable sold and certain additional interest charges with respect to such Indebtedness, (D) otherwise permitted under clause (vii) of Subparagraph 5(c) hereof, and (E) both immediately before and after giving effect to such Indebtedness, no Default or Event of Default shall have occurred and be continuing; and

(xiii) Other unsecured Senior Indebtedness of Guarantor and its Subsidiaries in addition to that otherwise permitted above, provided that both immediately before incurring and after giving effect to such unsecured Senior Indebtedness, Guarantor shall be in compliance with the financial covenants set forth in Subparagraph 5(l) hereof and no other Default or Event of Default shall have occurred and be continuing.

(b) Liens. Neither Guarantor nor any of its Subsidiaries shall create, incur, assume or permit to exist any Lien on or with respect to any of its assets or property of any character, whether now owned or hereafter acquired, except for the following ("Permitted Liens"):

(i) Liens securing the obligations of Guarantor under the Guarantor Credit Documents;

(ii) Liens listed in Schedule 5(b) hereof and existing on the date of this Guaranty;

(iii) Liens for taxes or other Governmental Charges not at the time delinquent or thereafter payable without penalty or being contested in good faith, provided that adequate reserves for the payment thereof have been established in accordance with GAAP;

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(iv) Liens of carriers, warehousemen, mechanics, materialmen, vendors, and landlords and other similar Liens imposed by law incurred in the ordinary course of business for sums not overdue or being contested in good faith, provided that adequate reserves for the payment thereof have been established in accordance with GAAP;

(v) Deposits under workers' compensation, unemployment insurance and social security laws or to secure the performance of bids, tenders, contracts (other than for the repayment of borrowed money) or leases, or to secure statutory obligations of surety or appeal bonds or to secure indemnity, performance or other similar bonds in the ordinary course of business;

(vi) Zoning restrictions, easements, rights-of-way, title irregularities and other similar encumbrances, which alone or in the aggregate are not substantial in amount and do not materially detract from the value of the property subject thereto or interfere with the ordinary conduct of the business of Guarantor or any of its Subsidiaries;

(vii) Banker's Liens and similar Liens (including set-off rights) in respect of bank deposits;

(viii) Liens on property or assets of any corporation which becomes a Subsidiary of Guarantor after the date of this Guaranty, provided that (A) such Liens exist at the time the stock of such corporation is acquired by Guarantor and (B) such Liens were not created in contemplation of such acquisition by Guarantor;

(ix) Judgement Liens, provided that such Liens do not have a value in excess of \$5,000,000 or such Liens are released, stayed, vacated or otherwise dismissed within sixty (60) days after issue or levy and, if so stayed, such stay is not thereafter removed;

(x) Rights of vendors or lessors under conditional sale agreements, Capital Leases or other title retention agreements (including synthetic leases), provided that, in each case, (A) such rights secure or otherwise relate to Permitted Indebtedness, (B) such rights do not extend to any property other than property acquired with the proceeds of such Permitted Indebtedness (other than cash pledged to secure obligations under synthetic leases in an amount not to exceed, together with any amounts pledged under clause (xiii), \$53,000,000 in the aggregate during the term of this Guaranty, provided that both immediately before and after giving effect to any such cash collateralization, Guarantor shall be in compliance with the financial covenants set forth in Subparagraph 5(1) hereof and no other Default or Event of Default shall have occurred and be continuing) and (C) such rights do not secure any Indebtedness other than such Permitted Indebtedness;

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(xi) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of customs duties and in connection with the importation of goods in the ordinary course of Guarantor's and its Subsidiaries' businesses;

(xii) Liens securing Indebtedness which constitutes

Permitted Indebtedness under clause (vi) of Subparagraph 5(a) provided that, in each case, such Lien (A) covers only those assets, the acquisition of which was financed by such Permitted Indebtedness, and (B) secures only such Permitted Indebtedness;

(xiii) Liens securing Indebtedness which constitutes Permitted Indebtedness under clause (xii) of Subparagraph 5(a) hereof provided that, in each case, such Lien (A) secures only such Permitted Indebtedness, and (B) such Liens do not extend to any assets or property other than the assets or property sold (other than cash pledged under certain circumstances to secure such Permitted Indebtedness in an aggregate amount not to exceed, together with any amounts pledged under clause (x), \$53,000,000 in the aggregate during the term of this Guaranty, provided that both immediately before and after giving effect to any such cash collateralization, Guarantor shall be in compliance with the financial covenants set forth in Subparagraph 5(1) hereof and no other Default or Event of Default shall have occurred and be continuing);

(xiv) Liens on the property or assets of any Subsidiary of Guarantor in favor of Guarantor or any other Subsidiary of Guarantor;

(xv) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by the Liens described in clause (ii) or (xii) above, provided that any extension, renewal or replacement Lien (A) is limited to the property covered by the existing Lien and (B) secures Indebtedness which is no greater in amount and has material terms no less favorable to the Lenders than the Indebtedness secured by the existing Lien; and

(xvi) Liens on insurance proceeds in favor of insurance companies with respect to the financing of insurance premiums.

(c) Asset Dispositions. Neither Guarantor nor any of its Subsidiaries shall sell, lease, transfer or otherwise dispose of any of its assets or property, whether now owned or hereafter acquired, except for the following:

(i) Sales of inventory by Guarantor and its Subsidiaries in the ordinary course of their businesses;

(ii) Sales of surplus, damaged, worn or obsolete equipment or inventory for not less than fair market value;

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(iii) Sales or other dispositions of Investments permitted by clause (i) of Subparagraph 5(e) hereof for not less than fair market value;

(iv) Sales or assignments of defaulted receivables to a collection agency in the ordinary course of business;

(v) Licenses by Guarantor or its Subsidiaries of its patents, copyrights, trademarks, trade names and service marks in the ordinary course of its business;

(vi) Sales or other dispositions of assets and property by Guarantor to any of Guarantor's Subsidiaries or by any of Guarantor's Subsidiaries to Guarantor or any of its other Subsidiaries, provided that the terms of any such sales or other dispositions by or to Guarantor are terms which are no less favorable to Guarantor than would prevail in the market for similar transactions between unaffiliated parties dealing at arm's length;

(vii) Sales, for cash, in the ordinary course of business of (A) accounts receivable of Guarantor's foreign Subsidiaries and certain rights and property of Guarantor's

foreign Subsidiaries related to the collection of or constituting proceeds of such accounts receivable, and (B) accounts receivable of Guarantor and certain rights and property of Guarantor related to the collection of or constituting proceeds of such accounts receivable in an aggregate amount not to exceed at any time twenty percent (20%) of Guarantor's aggregate accounts receivable, as measured at the end of each fiscal quarter of Guarantor, and in each case with respect to the foregoing (A) and (B), with or without recourse, at a discount rate not to exceed twenty percent (20%); and

(viii) Other sales, leases, transfers and disposals of assets and property (other than sales, leases, transfers and disposals of accounts receivable and related rights and property which shall be permitted only as expressly set forth in clause (vii) above), provided that the aggregate value of all such assets and property (based upon the greater of the fair market or book value of such assets and property) so sold, leased, transferred or otherwise disposed of in any fiscal year on a rolling aggregate basis does not exceed ten percent (10%) of Guarantor's Tangible Net Worth as measured at the end of each fiscal quarter of Guarantor.

(d) Mergers, Acquisitions, Etc. Neither Guarantor nor any of its Subsidiaries shall consolidate with or merge into any other Person or permit any other Person to merge into it, acquire or establish any Subsidiary or acquire all or substantially all of the assets of any other Person, except for the following:

(i) Any wholly-owned Subsidiary of Guarantor may merge into Guarantor or any other wholly-owned Subsidiary of Guarantor; and

(ii) Guarantor or any wholly-owned Subsidiary of Guarantor may (A) acquire all or substantially all of the assets of any Person, (B) any Person may

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merge into Guarantor or any other wholly-owned Subsidiary of Guarantor, and (C) Guarantor or any wholly-owned Subsidiary of Guarantor may establish or acquire Subsidiaries, provided that:

(1) in the event of any merger by any Person into Guarantor or any wholly-owned Subsidiary of Guarantor, Guarantor or such wholly-owned Subsidiary is the surviving entity; and

(2) both immediately prior to and after giving effect to such merger, acquisition or establishment of a Subsidiary (y) the aggregate cost of any such merger, acquisition or establishment of a Subsidiary shall not exceed the amounts permitted under clause (ii) of Subparagraph 5(e) hereof and (z) no Default or Event of Default shall have occurred and be continuing.

(e) Investments. Neither Guarantor nor any of its Subsidiaries shall make any Investment except for Investments in the following:

(i) Investments in accordance with the terms of Guarantor's Cash Investment Guidelines as in effect on the date of this Guaranty; and

(ii) Other Investments, provided that the aggregate amount of such other Investments plus the aggregate cost of assets acquired, mergers consummated and Subsidiaries established or acquired by Guarantor and its Subsidiaries pursuant to Subparagraph 5(d) hereof does not exceed in any fiscal year \$150,000,000 for any amounts paid in cash.

(f) Dividends, Redemptions, Etc. Neither Guarantor nor any of its Subsidiaries shall pay any dividends or make any distributions on its Equity Securities; return any capital to any holder of its Equity

Securities as such; make any distribution of assets, Equity Securities, obligations or securities to any holder of its Equity Securities as such; or set apart any sum for any such purpose. Notwithstanding the foregoing, Guarantor may purchase, redeem, retire, defease or otherwise acquire for value any of its Equity Securities so long as both immediately before and after such purchase, redemption or acquisition, no Default or Event of Default shall have occurred and be continuing and Guarantor is in compliance with each of the financial covenants set forth in Subparagraph 5(1) hereof.

(g) Change in Business. Neither Guarantor nor any of its Subsidiaries shall engage, either directly or indirectly through Affiliates, in any business substantially different from its present business; provided, however, that Subsidiaries which are not Material Subsidiaries may operate as holding companies or special tax purpose entities as may be necessary for the overall operation of the business of Guarantor and its Subsidiaries, so long as the terms of this Guaranty and the other Borrower Loan Documents would not otherwise be violated.

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(h) Indebtedness Payments, Etc. Neither Guarantor nor any of its Subsidiaries shall amend, modify or otherwise change any of the subordination or other provisions of any document, instrument or agreement evidencing Subordinated Debt in a manner which adversely affects the material rights of the Agent and Lenders. Neither the Guarantor nor any Subsidiary shall purchase, redeem or prepay any Subordinated Debt, now or hereafter outstanding, except for any de minimis redemption required in connection with the conversion of any class of Subordinated Debt into equity.

(i) ERISA. Neither Guarantor nor any ERISA Affiliate shall (i) adopt or institute any Employee Benefit Plan that is an employee pension benefit plan within the meaning of Section 3(2) of ERISA, (ii) take any action which will result in the partial or complete withdrawal, within the meanings of sections 4203 and 4205 of ERISA, from a Multiemployer Plan, (iii) engage or permit any Person to engage in any transaction prohibited by section 406 of ERISA or section 4975 of the Code involving any Employee Benefit Plan or Multiemployer Plan which would subject either Guarantor or any ERISA Affiliate to any tax, penalty or other liability including a liability to indemnify, (iv) incur or allow to exist any accumulated funding deficiency (within the meaning of section 412 of the Code or section 302 of ERISA), (v) fail to make full payment when due of all amounts due as contributions to any Employee Benefit Plan or Multiemployer Plan, (vi) fail to comply with the requirements of section 4980B of the Code or Part 6 of Title I(B) of ERISA, or (vii) adopt any amendment to any Employee Benefit Plan which would require the posting of security pursuant to section 401(a)(29) of the Code, where singly or cumulatively, the above would have a Material Adverse Effect.

(j) Transactions With Affiliates. Neither Guarantor nor any of its Subsidiaries shall enter into any Contractual Obligation with any Affiliate or engage in any other transaction with any Affiliate except upon terms at least as favorable to Guarantor or such Subsidiary as an arms-length transaction with unaffiliated Persons.

(k) Accounting Changes. Neither Guarantor nor any of its Subsidiaries shall change (i) its fiscal year (currently July 1 through June 30) or (ii) its accounting practices except as required by GAAP.

(l) Financial Covenants.

(i) Guarantor shall not permit its Quick Ratio during any period set forth below to be less than the ratio set forth opposite such period below:

March 28, 1998 - June 30, 1999	1.50 to 1.00;
Thereafter	1.35 to 1.00.

(ii) Guarantor shall not permit its Debt Service Coverage Ratio during any period set forth below to be less than the ratio set forth opposite such period below:

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July 1, 1999 - September 26, 1999	1.25 to 1.00;
September 27, 1999 - December 26, 1999	1.50 to 1.00;
December 27, 1999 - March 26, 2000	1.75 to 1.00;
March 27, 2000 - June 30, 2000	2.00 to 1.00;
July 1, 2000 - September 24, 2000	2.75 to 1.00;
Thereafter	3.00 to 1.00.

(iii) Guarantor shall not permit its Senior Indebtedness Ratio during any period to be greater than 0.25 to 1.00.

(iv) Guarantor shall not permit its Tangible Net Worth on any date of determination (such date to be referred to herein as a "determination date") which occurs after March 29, 1998 (such date to be referred to herein as the "base date") to be less than the sum on such determination date of the following:

(A) \$450,000,000;

plus

(B) Seventy-five percent (75%) of the sum of Guarantor's consolidated quarterly net income (ignoring any quarterly losses) for each quarter ending after the base date through and including the quarter ending immediately prior to the determination date;

plus

(C) One hundred percent (100%) of the Net Proceeds of all Equity Securities issued by Guarantor and its Subsidiaries during the period commencing on the base date and ending on the determination date;

plus

(D) One hundred percent (100%) of the aggregate decrease in the total liabilities of Guarantor and its Subsidiaries resulting from conversions of convertible Subordinated Indebtedness or other liabilities of Guarantor and its Subsidiaries into Equity Securities of Guarantor and its Subsidiaries during the period commencing on the base date and ending on the determination date.

(v) Guarantor shall not incur a cumulative net loss (exclusive of net income) greater than \$45,000,000, determined in accordance with GAAP, for the four quarter period commencing on July 1, 1998 and ending on June 30, 1999.

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6. AUTHORIZATIONS, WAIVERS, ETC.

(a) Authorizations. Guarantor authorizes Agent and the Lenders, in their discretion, without notice to Guarantor, irrespective of any change in the financial condition of Borrower, Guarantor or any other guarantor of the Guaranteed Obligations since the date hereof, and without affecting or impairing in any way the liability of Guarantor hereunder, from time to time to:

(i) Create new Guaranteed Obligations and renew, compromise, extend, accelerate or otherwise change the time for payment or performance of, or otherwise amend or modify the Borrower Loan Documents or change the terms of the Guaranteed Obligations or any part thereof, including increase or decrease of the rate of interest thereon;

(ii) Take and hold security for the payment or performance of the Guaranteed Obligations and exchange, enforce, waive or release any such security; apply such security and direct the order or manner of sale thereof; and purchase such security at public or private sale;

(iii) Otherwise exercise any right or remedy they may have against Borrower, Guarantor, any other guarantor of the Guaranteed Obligations or any security, including, without limitation, the right to foreclose upon any such security by judicial or nonjudicial sale;

(iv) Settle, compromise with, release or substitute any one or more makers, endorsers or guarantors of the Guaranteed Obligations; and

(v) Assign the Guaranteed Obligations, this Guaranty or the other Borrower Loan Documents in whole or in part to the extent provided in the Borrower Loan Agreement and the other Borrower Loan Documents.

(b) Waivers. Guarantor hereby waives:

(i) Any right to require Agent or any Lender to (A) proceed against Borrower or any other guarantor of the Guaranteed Obligations, (B) proceed against or exhaust any security received from Borrower, Guarantor or any other guarantor of the Guaranteed Obligations or otherwise marshal the assets of Borrower, Guarantor or any other guarantor of the Guaranteed Obligations or (C) pursue any other remedy in Agent's or any Lender's power whatsoever;

(ii) Any defense arising by reason of the application by Borrower of the proceeds of any borrowing;

(iii) Any defense resulting from the absence, impairment or loss of any right of reimbursement, subrogation, contribution or other right or remedy of

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Guarantor against Borrower, any other guarantor of the Guaranteed Obligations or any security, whether resulting from an election by Agent or any Lender to foreclose upon security by nonjudicial sale, or otherwise;

(iv) Any setoff or counterclaim of Borrower or any defense which results from any disability or other defense of Borrower or the cessation or stay of enforcement from any cause whatsoever of the liability of Borrower (including, without limitation, the lack of validity or enforceability of any of the Borrower Loan Documents);

(v) Any defense based upon any law, rule or regulation which provides that the obligation of a surety must not be greater or more burdensome than the obligation of the principal;

(vi) Until all obligations of Agent or any Lender to

extend credit to Borrower have terminated and all of the Guaranteed Obligations have been fully, finally and indefeasibly paid, any right of subrogation, reimbursement, indemnification or contribution and other similar right to enforce any remedy which Agent, the Lenders or any other Person now has or may hereafter have against Borrower on account of the Guaranteed Obligations, and any benefit of, and any right to participate in, any security now or hereafter received by Agent, any Lender or any other Person on account of the Guaranteed Obligations;

(vii) All presentments, demands for performance, notices of non-performance, notices delivered under the Borrower Loan Documents, protests, notice of dishonor, and notices of acceptance of this Guaranty and of the existence, creation or incurring of new or additional Guaranteed Obligations and notices of any public or private foreclosure sale;

(viii) The benefit of any statute of limitations to the extent permitted by law;

(ix) Any appraisal, valuation, stay, extension, moratorium redemption or similar law or similar rights for marshalling;

(x) Any right to be informed by Agent or any Lender of the financial condition of Borrower or any other guarantor of the Guaranteed Obligations or any change therein or any other circumstances bearing upon the risk of nonpayment or nonperformance of the Guaranteed Obligations;

(xi) Until all obligations of Agent or any Lender to extend credit to Borrower have terminated and all of the Guaranteed Obligations have been fully, finally and indefeasibly paid, any right to revoke this Guaranty;

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(xii) Any defense arising from an election for the application of Section 1111(b)(2) of the United States Bankruptcy Code which applies to the Guaranteed Obligations;

(xiii) Any defense based upon any borrowing or grant of a security interest under Section 364 of the United States Bankruptcy Code; and

(xiv) Any right it may have to a fair value hearing to determine the size of a deficiency judgment following any foreclosure on any security for the Guaranteed Obligations.

Without limiting the scope of any of the foregoing provisions of this Paragraph 6, Guarantor hereby further waives (A) all rights and defenses arising out of an election of remedies by Agent or any Lender, even though that election of remedies, such as a nonjudicial foreclosure with respect to security for a Guaranteed Obligation, has destroyed Guarantor's rights of subrogation and reimbursement against Borrower by the operation of Section 580d of the Code of Civil Procedure or otherwise, (B) all rights and defenses Guarantor may have by reason of protection afforded to Borrower with respect to the Guaranteed Obligations pursuant to the antideficiency or other laws of California limiting or discharging the Guaranteed Obligations, including, without limitation, Section 580a, 580b, 580d, or 726 of the California Code of Civil Procedure, and (C) all other rights and defenses available to Guarantor by reason of Sections 2787 to 2855, inclusive, Section 2899 or Section 3433 of the California Civil Code or Section 3605 of the California Commercial Code.

(c) Financial Condition of Borrower, Etc. Guarantor is fully aware of the financial condition and affairs of Borrower. Guarantor has executed this Guaranty without reliance upon any representation, warranty, statement or information concerning Borrower furnished to Guarantor by Agent or any Lender and has, independently and without reliance on Agent or any Lender, and based on such documents and

information as it has deemed appropriate, made its own appraisal of the financial condition and affairs of Borrower and of other circumstances affecting the risk of nonpayment or nonperformance of the Guaranteed Obligations. Guarantor is in a position to obtain, and assumes full responsibility for obtaining, any additional information about the financial condition and affairs of Borrower and of other circumstances affecting the risk of nonpayment or nonperformance of the Guaranteed Obligations and will, independently and without reliance upon Agent or any Lender, and based on such documents and information as it shall deem appropriate at the time, continue to make its own appraisals and decisions in taking or not taking action in connection with this Guaranty.

7. SUBORDINATION. Guarantor hereby subordinates any and all debts, liabilities and obligations owed to Guarantor by Borrower (the "Subordinated Obligations") to the Guaranteed Obligations as provided in this Paragraph 7.

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(a) Prohibited Payments, Etc. Until the occurrence of a Default or an Event of Default or any default by Guarantor hereunder, Guarantor may receive regularly scheduled payments from Borrower on account of Subordinated Obligations. After the occurrence and during the continuance of any Default or Event of Default or any default by Guarantor hereunder (including the commencement and continuation of any Insolvency Proceeding relating to Borrower), however, unless Agent otherwise agrees, Guarantor shall not demand, accept or take any action to collect any payment on account of the Subordinated Obligations.

(b) Prior Payment of Guaranteed Obligations. In any Insolvency Proceeding relating to Borrower, Guarantor agrees that Agent and the Lenders shall be entitled to receive payment of all Guaranteed Obligations (including any and all Disallowed Post-Commencement Interest and Expenses) before Guarantor receives payment of any Subordinated Obligations.

(c) Turn-Over. After the occurrence and during the continuance of any Default or Event of Default (including the commencement and continuation of any Insolvency Proceeding relating to Borrower), Guarantor shall, if Agent so requests, collect, enforce and receive payments on account of the Subordinated Obligations as trustee for Agent and the Lenders and deliver such payments to Agent on account of the Guaranteed Obligations (including any and all Disallowed Post-Commencement Interest and Expenses), together with any necessary endorsements or other instruments of transfer, but without reducing or affecting in any manner the liability of Guarantor under the other provisions of this Guaranty.

(d) Agent Authorization. After the occurrence and during the continuance of any Default or Event of Default or any default by Guarantor hereunder (including the commencement and continuation of any Insolvency Proceeding relating to Borrower), Agent is authorized and empowered (but without any obligation to so do), in its discretion, (i) in the name of Guarantor, to collect and enforce, and to submit claims in respect of, Subordinated Obligations and to apply any amounts received thereon to the Guaranteed Obligations (including any and all Disallowed Post-Commencement Interest and Expenses), and (ii) to require Guarantor (A) to collect and enforce, and to submit claims in respect of, Subordinated Obligations and (B) to pay any amounts received on such obligations to Agent for application to the Guaranteed Obligations (including any and all Disallowed Post-Commencement Interest and Expenses).

8. MISCELLANEOUS.

(a) Notices. Except as otherwise provided herein, all notices, requests, demands, consents, instructions or other communications to or upon Guarantor or Agent under this Guaranty or the other Borrower Loan Documents shall be in writing and faxed, mailed or delivered to

Guarantor or Agent at its respective facsimile number or address set forth below or (or to such other facsimile number or address for either party as

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indicated in any notice given by that party to the other party). All such notices and communications shall be effective (i) when sent by any overnight courier service of recognized standing, on the second Business Day following the deposit with such service; (ii) when mailed, first class postage prepaid and addressed as aforesaid through the United States Postal Service or registered mail through the Japanese Post Office, upon receipt; (iii) when delivered by hand, upon delivery; and (iv) when faxed, upon confirmation of receipt.

Agent: ABN AMRO Bank N.V.
Tokyo Branch
13F, Shiroyama JT Mori Building
4-3-1, Toranomom, Minato-ku
Tokyo 105
Japan
Attn: Structured Finance
Tel: 81-3-5405-6503
Fax: 81-3-5405-6903/6902

With a copy to:
ABN AMRO Bank N.V.
San Francisco International Branch
101 California Street, Suite 4550
San Francisco, CA 94111-5812
U.S.A.
Attn: Robin S. Yim
Tel: (415) 984-3710
Fax: (415) 362-3524

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Borrower: Lam Research Corporation
4650 Cushing Parkway
Fremont, CA 94538
U.S.A.
Attn: Brian Sereda
Telephone: (510) 572-4888
Fax No: (510) 572-1586

(b) Payments.

(i) Guarantor shall make all payments required hereunder to Agent, or its order, at Agent's office located at the address set forth in Subparagraph 8(a) hereof, or at such other office as Agent may designate, on demand, in lawful money as provided in clause (ii) below and in same day or immediately available funds not later than 11:00 a.m. (Tokyo time) on the date due.

(ii) Guarantor shall make all payments of the Guaranteed Obligations hereunder in the currency in which such Guaranteed Obligations are required to be paid by Borrower pursuant to the Borrower Loan Documents and shall make all other payments hereunder in Yen or Dollars, as Agent may specify; provided, however, that, if Agent shall request Guarantor to pay any amount hereunder which would otherwise be payable in another currency in the lawful currency of the United States, Guarantor shall pay to Agent the Dollar Equivalent of such amount.

(iii) If any sum due from Guarantor under this Guaranty or any other Borrower Loan Document to which Guarantor is a party or any order, judgment or award given or rendered in relation hereto

or thereto has to be converted from the currency (the "first currency") in which the same is payable hereunder or thereunder into another currency (the "second currency") for the purpose of (A) making or filing a claim or proof against Guarantor with any Governmental Authority, (B) obtaining an order or judgment in any court or other tribunal or (C) enforcing any order or judgment given or made in relation hereto, Guarantor shall, to the fullest extent permitted by law, indemnify and hold harmless each of the Persons to whom such sum is due from and against any loss suffered as a result of any discrepancy between (1) the rate of exchange used for such purpose to convert the amounts in question from the first currency into the second currency and (2) the rate or rates of exchange at which such Person may, using reasonable efforts in the ordinary course of business, purchase the first currency with the second currency upon receipt of a sum paid to it in satisfaction, in whole or in part, of any such order, judgment, claim or proof. The foregoing indemnity shall constitute a separate obligation of Guarantor distinct from its other obligations hereunder and

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shall survive the giving or making of any judgment or order in relation to all or any of such obligations.

(iv) If any amounts required to be paid by Guarantor under this Guaranty or any order, judgment or award given or rendered in relation hereto remain unpaid after such amounts are due, Guarantor shall pay interest on the aggregate, outstanding balance of such amounts from the date due until those amounts are paid in full at a per annum rate equal to:

(A) In the case of amounts payable in Yen, the Overnight Rate plus two percent (2.0%), such rate to change from time to time as the Overnight Rate shall change; or

(B) In the case of amounts payable in Dollars, the Base Rate plus two percent (2.00%), such rate to change from time to time as the Base Rate shall change.

(c) Expenses. Guarantor shall pay on demand (i) all reasonable fees and expenses, including reasonable attorneys' fees and expenses, incurred by Agent in connection with the preparation, execution and delivery of, and the exercise of its duties under, this Guaranty and the preparation, execution and delivery of amendments and waivers hereunder and (ii) all reasonable fees and expenses, including reasonable attorneys' fees and expenses, incurred by Agent and the Lenders in connection with the enforcement or attempted enforcement of this Guaranty or any of the Guaranteed Obligations or in preserving any of Agent's or the Lenders' rights and remedies (including, without limitation, all such fees and expenses incurred in connection with any "workout" or restructuring affecting the Borrower Loan Documents or the Guaranteed Obligations or any bankruptcy or similar proceeding involving Guarantor, Borrower or any of their affiliates).

(d) Waivers; Amendments. This Guaranty may not be amended or modified, nor may any of its terms be waived, except by written instruments signed by Guarantor and Agent. Each waiver or consent under any provision hereof shall be effective only in the specific instances for the purpose for which given. No failure or delay on Agent's or any Lender's part in exercising any right hereunder shall operate as a waiver thereof or of any other right nor shall any single or partial exercise of any such right preclude any other further exercise thereof or of any other right.

(e) Assignments. This Guaranty shall be binding upon and inure to the benefit of Agent, the Lenders and Guarantor and their respective successors and assigns; provided, however, that Guarantor may not assign or transfer any of its rights and obligations under this Guaranty without the prior written consent of Agent and the Lenders, and, provided, further, that Agent or any Lender may sell, assign and

delegate their respective rights and obligations hereunder only as permitted by the Borrower Loan Agreement. All references in this Guaranty to any Person shall be deemed to include all permitted successors and assigns of such Person.

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(f) Cumulative Rights, etc. The rights, powers and remedies of Agent and the Lenders under this Guaranty shall be in addition to all rights, powers and remedies given to Agent and the Lenders by virtue of any applicable Governmental Rule, the Borrower Loan Agreement, any other Borrower Loan Document or any other agreement (including any other guaranty), all of which rights, powers, and remedies shall be cumulative and may be exercised successively or concurrently without impairing Agent's or any Lender's rights hereunder.

(g) Payments Free of Taxes, Etc. All payments made by Guarantor under this Guaranty shall be made by Guarantor free and clear of and without deduction for any and all present and future taxes, levies, charges, deductions and withholdings. In addition, Guarantor shall pay upon demand any stamp or other taxes, levies or charges of any jurisdiction with respect to the execution, delivery, registration, performance and enforcement of this Guaranty. If any taxes, levies, charges or other amounts are required to be withheld from any amounts payable to Agent or any Lender hereunder, the amounts so payable to Agent or such Lender shall be increased to the extent necessary to yield to Agent or such Lender (after payment of all such amounts) any such amounts payable hereunder in the amounts specified in this Guaranty. Upon request by Agent or any Lender, Guarantor shall furnish evidence satisfactory to Agent or such Lender that all requisite authorizations and approvals by, and notices to and filings with, governmental authorities and regulatory bodies have been obtained and made and that all requisite taxes, levies and charges have been paid.

(h) Partial Invalidity. If at any time any provision of this Guaranty is or becomes illegal, invalid or unenforceable in any respect under the law or any jurisdiction, neither the legality, validity or enforceability of the remaining provisions of this Guaranty nor the legality, validity or enforceability of such provision under the law of any other jurisdiction shall in any way be affected or impaired thereby.

(i) Governing Law, Consent to Jurisdiction, Etc.

(i) This Guaranty shall be governed by and construed in accordance with the laws of the State of California without reference to conflicts of law rules.

(ii) Guarantor irrevocably submits to the non-exclusive jurisdiction of the courts of the State of California and the courts of the United States of America located in the Northern District of California and agrees that any legal action, suit or proceeding arising out of or relating to this Guaranty may be brought against such party in any such courts. Final judgment against Guarantor in any such action, suit or proceeding shall be conclusive and may be enforced in any other jurisdiction by suit on the judgment, a certified or exemplified copy of which shall be conclusive evidence of the judgment, or in any other manner provided by law. Nothing in this Subparagraph 8(i) shall affect the right of Agent or any Lender to commence legal proceedings or otherwise sue Guarantor in any other appropriate jurisdiction, or concurrently in more than one jurisdiction, or to serve process,

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pleadings and other papers upon Guarantor in any manner authorized by the laws of any such jurisdiction.

(iii) Guarantor irrevocably consents to service of process of summons, complaint and other legal process in any action, suit

or proceeding arising out of or relating to this Guaranty being made out of the courts designated in clause (ii) above by mailing copies of the papers by registered United States air mail, postage prepaid, to Guarantor at its address specified in Subparagraph 8(a). In such a case, any serving party shall also send by telex or facsimile, or have sent by telex or facsimile, a copy of the papers to the served party. Service in the manner provided in this clause (iii) in any such action, suit or proceeding will be deemed personal service, will be accepted by the served party as such and will be valid and binding upon such party for all purposes of any such action, suit or proceeding.

(j) Jury Trial. EACH OF GUARANTOR, THE LENDERS AND AGENT, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY AS TO ANY ISSUE RELATING HERETO IN ANY ACTION, PROCEEDING, OR COUNTERCLAIM ARISING OUT OF OR RELATING TO THIS GUARANTY.

[The signature page follows.]

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IN WITNESS WHEREOF, Guarantor has caused this Guaranty to be executed as of the day and year first above written.

LAM RESEARCH CORPORATION

By:

Name:

Title:

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SCHEDULE 3 (g)

SUBSIDIARIES

3 (g) -1

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SCHEDULE 5 (a)

EXISTING INDEBTEDNESS

5 (a) -1

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SCHEDULE 5 (b)

EXISTING LIENS

5 (b) -1

SECOND ADDENDUM TO EMPLOYMENT AGREEMENT

This Second Addendum to Employment Agreement (the "Second Addendum") is made and effective this 1st day of September, 1998, by and between Roger D. Emerick (the "Executive") and Lam Research Corporation (the "Company").

R E C I T A L S

A. The Executive is currently employed by the Company pursuant to an Employment Agreement entered into by the parties effective as of July 1, 1996, and as amended by Addendum dated June 26, 1997 (the "Employment Agreement"). The Executive currently also serves as Chairman of the Company's Board of Directors.

B. Section 1(a) of the Employment Agreement provides, inter alia, that the Company shall use its best efforts to elect the Executive as a director of the Company and as Chairman of the Board of Directors. Section 3(a) identifies certain Base Compensation payable to the Executive during the Employment Period. Sections 8(d) and (e) identify certain circumstances which may constitute termination, involuntary or otherwise, of the Executive's responsibilities and trigger an acceleration of certain benefits or a change in the Executive's employment status with the Company.

C. The Executive has tendered his voluntary resignation as Chairman of the Board of Directors, effective September 1, 1998, and wishes to release the Company from any further obligation or commitment to use efforts to elect him in the future to the position as Chairman.

D. The Company and the Executive desire to amend further the Employment Agreement to provide for the Executive's continued employment by the Company following his resignation as Chairman of the Board of Directors.

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E. Capitalized terms used in this Second Addendum and not otherwise defined herein shall have the meanings ascribed to them in the Employment Agreement.

In consideration of the mutual covenants herein contained, and for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, the parties agree that the Employment Agreement shall be and is amended as follows:

1. Duties and Scope of Employment.

(a) The Executive shall continue as an employee of the Company with, notwithstanding the provisions of the first sentence of Section 1(a) of the Employment Agreement, such strategic, senior level duties and responsibilities as the Company's Chief Executive Officer may from time to time reasonably assign to the Executive.

(b) The Company shall continue to use its best efforts to elect the Executive as a director of the Company. However, notwithstanding the provisions of the second sentence of Section 1(a) of the Employment Agreement, the Company shall be relieved of any obligation or commitment to use its efforts to elect the Executive as Chairman of the Board of Directors.

2. Compensation and Benefits.

(a) Notwithstanding the provisions of the first sentence of Section 3(a) of the Employment Agreement, during the Employment Period, and commencing as of September 1, 1998, the Company shall pay the Executive as compensation for services a base salary equivalent on an annualized basis to the fee identified in Section 6(a) of the Employment Agreement.

3. Survival. Except as otherwise provided herein, the terms and conditions of the Employment Agreement shall remain in full force and effect. Notwithstanding the provision of Section 8(d) of the Employment Agreement, nothing herein or hereby shall

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be deemed or have the effect of a material breach of the Employment Agreement or otherwise constitute an "Involuntary Termination."

4. Counterparts. This Second Addendum may be executed in counterparts, each of which shall be deemed an original, but both of which together will constitute one and the same instrument.

IN WITNESS WHEREOF, each of the parties has executed this Second Addendum, in the case of the Company, by its duly authorized officer or representative, as of the day and year first above written.

COMPANY: LAM RESEARCH CORPORATION

By: _____

Its:

EXECUTIVE: _____ /S/ _____
Roger D. Emerick

<ARTICLE> 5

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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE CONSOLIDATED STATEMENT OF OPERATIONS, THE CONSOLIDATED BALANCE SHEET AND THE ACCOMPANYING NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS, AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

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