

KLA TENCOR CORP
Form S-3ASR
April 28, 2008
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As filed with the Securities and Exchange Commission on April 28, 2008

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

KLA-Tencor Corporation

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

04-2564110
(I.R.S. Employer

Identification Number)

One Technology Drive

Milpitas, California 95035

(408) 875-3000

(Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices)

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Brian M. Martin

Senior Vice President, General Counsel and Corporate Secretary

KLA-Tencor Corporation

One Technology Drive

Milpitas, California 95035

(408) 875-3000

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

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Approximate date of commencement of proposed sale to the public: From time to time after the effective date of this Registration Statement.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of large accelerated filer, accelerated filer and smaller reporting company in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer (Do not check if a smaller reporting company)

Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of each class of Securities to be Registered	Amount to be Registered (1)	Offering Price Per Unit (1)	Proposed Maximum Aggregate Offering Price (1)	Proposed Maximum Registration Fee (1)
Senior Notes due				

- (1) An indeterminate amount of securities to be offered at indeterminate prices is being registered pursuant to this registration statement. The registrant is deferring payment of the registration fee pursuant to Rule 456(b) and is omitting this information in reliance on Rule 456(b) and Rule 457(r).

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The information in this prospectus is not complete and may be changed. This preliminary prospectus is not an offer to sell these securities and it is not soliciting an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to Completion

Preliminary Prospectus dated April 28, 2008

PROSPECTUS

\$

KLA-Tencor Corporation

% Senior Notes due

We will issue \$ _____ in aggregate principal amount of % senior notes due _____ (the notes) in this offering. We will pay interest on the notes on _____ and _____ of each year. Interest will accrue on the notes from _____, 2008, and the first interest payment date will be _____, 2008. The notes will mature on _____. We may redeem some or all of the notes at any time at 100% of their principal amount plus a make-whole premium. We will be required to make an offer to purchase the notes at a price equal to 101% of their principal amount, plus accrued and unpaid interest to the date of repurchase, upon the occurrence of a Change of Control Triggering Event (as defined herein). See the section of this prospectus entitled Description of the Notes Redemption for more information.

The notes will be our unsecured senior obligations and will rank equally in right of payment with all of our future unsecured and unsubordinated indebtedness. The notes will not be guaranteed by any of our subsidiaries. The notes will be effectively subordinated to any of our future secured indebtedness and to all future indebtedness and other liabilities of our subsidiaries.

Investing in the notes involves risks that are described in the Risk Factors section beginning on page 10 of this prospectus.

	Per Note	Total
Public offering price ⁽¹⁾	%	\$
Underwriting discount	%	\$
Proceeds, before expenses, to KLA-Tencor Corporation	%	\$

⁽¹⁾ Plus accrued interest from _____, 2008, if settlement occurs after that date

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Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The notes will be ready for delivery in book-entry form only through the facilities of The Depository Trust Company and its direct and indirect participants, including Clearstream Banking, S.A. Luxembourg (Clearstream) and Euroclear Bank S.A./N.V., as operator of the Euroclear System (Euroclear), on or about , 2008.

Merrill Lynch & Co.

The date of this prospectus is , 2008.

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ABOUT THIS PROSPECTUS

This prospectus incorporates important business and financial information about us that is not included in or delivered with this prospectus. Information incorporated by reference is available without charge to prospective investors upon written request to us at Investor Relations, KLA-Tencor Corporation, One Technology Drive, Milpitas, California 95035, or by telephone at (408) 875-6219.

You should rely only on the information contained or incorporated by reference in this prospectus or in any related free writing prospectus. Neither we nor any of the underwriters has authorized any other person to provide you with different or additional information. If anyone provides you with different or additional information, you should not rely on it. We are not, and the underwriters are not, making an offer or sale of securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information in this prospectus is accurate as of the date appearing on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

We have not taken any action to permit a public offering of the notes outside the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about and observe any restrictions relating to the offering of the notes and the distribution of this prospectus outside of the United States.

You must comply with all applicable laws and regulations in force in any applicable jurisdiction and you must obtain any consent, approval or permission required by you for the purchase, offer or sale of the notes under the laws and regulations in force in the jurisdiction to which you are subject or in which you make your purchase, offer or sale, and neither we nor the underwriters will have any responsibility therefor.

We are not making any representation to any purchaser of the notes regarding the legality of an investment in the notes by the purchaser under any legal investment or similar laws or regulations. You should not consider any information in this prospectus to be legal, business or tax advice. You should consult your own attorney, accountant, business advisor and tax advisor for legal, financial, business and tax advice regarding an investment in the notes.

We reserve the right to withdraw this offering of notes at any time. We and the underwriters also reserve the right to reject any offer to purchase, in whole or in part, for any reason, or to sell less than the amount of notes offered hereby.

Certain persons participating in this offering may engage in transactions that stabilize, maintain or otherwise affect the price of the notes or our common stock. Such transactions may include stabilization and the purchase of notes to cover short positions. For a description of these activities, see Underwriting.

Unless otherwise specified, references in this prospectus to KLA-Tencor, we, us or our refer to KLA-Tencor Corporation and its direct and indirect subsidiaries.

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CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and documents that are incorporated by reference into this prospectus contain certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 (the Securities Act) and Section 21E of the Securities Exchange Act of 1934 (the Exchange Act). All statements other than statements of historical fact may be forward-looking statements. You can identify these and other forward-looking statements by the use of words such as may, will, could, would, should, expects, plans, anticipates, relies, believe, predicts, intends, potential, continue, thinks, seeks or the negative of such terms, or other comparable terminology. Forward-looking statements also include the assumptions underlying or relating to any of the foregoing statements. Such forward-looking statements include, among others, forecasts of the future results of our operations; the percentage of spending that our customers allocate to process control; orders for our products and capital equipment generally; sales of semiconductors; the allocation of capital spending by our customers; growth of revenue in the semiconductor industry, the semiconductor capital equipment industry and our business; technological trends in the semiconductor industry; the future impact of the restatement of our historical financial statements, shareholder litigation and related matters arising from the discovery that we had retroactively priced stock options (primarily from July 1, 1997 to June 30, 2002) and had not accounted for them correctly; our future product offerings and product features; the success and market acceptance of new products; timing of shipment of backlog; the future of our product shipments and our product and service revenues; our future gross margins; our future selling, general and administrative expenses; international sales and operations; maintenance of our competitive advantage; success of our product offerings; creation and funding of programs for research and development; attraction and retention of employees; results of our investment in leading edge technologies; the effects of hedging transactions; the effect of the sale of trade receivables and promissory notes from customers; our future income tax rate; dividends; the completion of any acquisitions of third parties, including the anticipated timing of the completion of our proposed acquisition of ICOS Vision Systems Corporation NV and the anticipated benefits realizable to us from such acquisition, or the technology or assets thereof; benefits received from any acquisitions and development of acquired technologies; sufficiency of our existing cash balance, investments and cash generated from operations to meet our operating and working capital requirements; and the adoption of new accounting pronouncements.

Our actual results may differ significantly from those projected in the forward-looking statements in this prospectus. Factors that might cause or contribute to such differences include, but are not limited to, those discussed in the section entitled Risk Factors in KLA-Tencor's Annual Report on Form 10-K and Quarterly Reports on Form 10-Q incorporated by reference herein. In addition, the following factors could affect our future results and cause them to differ materially from those expressed or implied in forward-looking statements:

- the cyclical nature of the semiconductor equipment industry;
- global economic uncertainty;
- competitive pressures;
- our ability to develop and implement new technologies and introduce new products;
- our ability to maintain supply of key components;
- our ability to manage our manufacturing requirements;
- our reliance on services provided by third parties;
- our customers' acceptance and adoption of our new products and technologies;

our ability to protect our intellectual property;

litigation regarding intellectual property and other business matters;

our ability to attract, retain and replace key employees;

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our ability to consummate and realize the anticipated benefits related to our proposed acquisition of ICOS Vision Systems Corporation NV;

our ability to manage risks associated with acquisitions and alliances;

the amount of resources we are required to devote to compliance with securities laws and listing requirements;

worldwide political instability;

earthquake and other uninsured risks;

future changes in accounting and tax standards or practices;

changes in our effective tax rate;

changing legal and regulatory environment;

our exposure to fluctuations in foreign currency exchange rates;

our exposure to fluctuations in the market values of our portfolio investments and in interest rates;

our ability to successfully modify new systems and guard against computer viruses;

our ability to successfully implement our new customer relationship management system or existing enterprise resource planning system and other IT systems; and

our ability to continue to successfully address and resolve all issues arising from the discovery that we had retroactively priced stock options (primarily from July 1, 1997 to June 30, 2002) and had not accounted for them correctly.

Given these uncertainties, you are cautioned not to place undue reliance on these forward-looking statements. We disclaim any obligation to update or revise any forward-looking statement based on the occurrence of future events, the receipt of new information, or otherwise.

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SUMMARY

This summary highlights information contained elsewhere or incorporated by reference in this prospectus and does not contain all the information that is important to you. You should carefully read the entire prospectus, including the Risk Factors included elsewhere herein and the financial statements and related notes in the documents incorporated herein by reference, before making an investment decision. Unless otherwise specified, references in this prospectus to KLA-Tencor, we, us or our refer to KLA-Tencor Corporation and its direct and indirect subsidiaries.

KLA-Tencor

We are the world's leading supplier of process control and yield management solutions for the semiconductor and related microelectronics industries. Our products are also used in a number of other industries, including wafer manufacturing and data storage.

Within our primary area of focus, our comprehensive portfolio of products, services, software and expertise helps integrated circuit manufacturers manage yield throughout the entire wafer fabrication process—from research and development to final volume production. These products and solutions are designed to help customers accelerate their development cycles, bring their fabs to production more quickly and achieve higher and more stable yields.

Our products and services are used by virtually every major wafer, integrated circuit (IC or chip) and photomask manufacturer in the world. These customers turn to us for inline wafer defect monitoring; reticle and photomask defect inspection; critical dimension metrology; wafer overlay metrology; film and surface measurement; and overall yield and fab-wide data analysis. Our advanced products, coupled with our unique yield technology services, allow us to deliver the yield management solutions our customers need to accelerate their yield learning rates, reduce their yield excursion risks and adopt industry-leading yield management practices.

Industry

General Background

The semiconductor or IC industry is our core focus. The semiconductor fabrication process begins with a bare silicon wafer—a round disk that is six, eight or twelve inches in diameter, about as thick as a credit card and gray in color. The process of manufacturing wafers is itself highly sophisticated, involving the creation of large ingots of silicon by pulling them out of a vat of molten silicon. The ingots are then sliced into wafers and polished to a mirror finish.

The manufacturing cycle of an IC is grouped into three phases: design, fabrication and testing. IC design involves the architectural layout of the circuit, as well as design verification and photomask or reticle generation.

The fabrication of a chip is accomplished by depositing a series of film layers that act as conductors, semiconductors or insulators. The deposition of these film layers is interspersed with numerous other process steps that create circuit patterns, remove portions of the film layers, and perform other functions such as heat treatment, measurement and inspection. Most advanced chip designs require hundreds of individual steps, many of which are performed multiple times. Most chips consist of two main structures: the lower structure, typically consisting of transistors or capacitors, which performs the smart functions of the chip; and the upper interconnect structure, typically consisting of circuitry which connects the components in the lower structure. When all of the layers on the wafer have been completed, each die on the wafer is then tested for functionality.

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Current Trends

Companies that anticipate future market demands by developing and refining new technologies and manufacturing processes are better positioned to lead in the semiconductor market. During past industry cycles, semiconductor manufacturers generally contended with one key new technology or market trend, such as a specific design rule shrink. In today's market, the leading semiconductor manufacturers are investing in bringing a multitude of new technologies into production at the same time, including new substrate and film materials and advanced lithography techniques.

While many of these technologies have been adopted at the development and pilot production stages, significant challenges and risks associated with each technology have affected their adoption into full-volume production. For example, as design rules decrease, yields become more sensitive to the size and density of defects, while device performance characteristics (namely speed or capacity) become more sensitive to such parameters as linewidth and film thickness variation. New process materials, such as high-k dielectrics, silicon-on-insulator wafers and immersion lithography-capable photoresists require extensive characterization before they can be used in the manufacturing process. Moving several of these advanced technologies into production at once only adds to the risks that chipmakers face.

The continuing evolution of semiconductor devices to smaller geometries and more complex multi-level circuitry has significantly increased the cost and performance requirements of the capital equipment used to manufacture these devices. Construction of an advanced wafer fabrication facility today can cost over \$3 billion, substantially more than previous generation facilities. As a result, chipmakers are demanding increased productivity and higher returns from their manufacturing equipment.

By developing new process control and yield management tools that help chipmakers accelerate the adoption of these new technologies into volume production, we enable our customers to better leverage these increasingly expensive facilities, reduce their production costs and significantly improve their return on investment. Once customers' production lines are operating at high volume, our tools help ensure that yields are stable and process excursions are identified and quickly resolved. Historically, the move to each new generation's smaller design rules has increased in-process variability and thus has often required increased inspection and metrology sampling.

With our broad portfolio of application-focused technologies and our dedicated yield technology expertise, we are in position to be a key supplier of comprehensive yield management solutions for customers' next-generation products, including those required for the ramping up of 65 nanometer (nm) design nodes, the increasing adoption of the 45nm generation of semiconductor fabrication technology and beyond.

Our Process Control and Yield Acceleration Solutions

Accelerating the yield ramp and maximizing production yields of high-performance devices are key goals of modern semiconductor manufacturing. Ramping to high-volume production ahead of competitors can dramatically increase the revenue an IC manufacturer realizes for a given product. KLA-Tencor systems not only analyze defectivity and metrology issues at critical points in the wafer, photomask and IC manufacturing processes, but also provide information to our customers so that they can identify and address the underlying process problems. The ability to locate the source of defects and characterize process issues enables our customers to improve control over their manufacturing processes, so they can increase their yield of high-performance parts thus maximizing their profit.

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Products

We operate primarily in one segment for the design, manufacture and marketing of process control and yield management systems for the semiconductor and related microelectronics industries. We also currently offer products that serve the wafer manufacturing, data storage and other industries. We design, market, manufacture and sell our equipment consisting of patterned and unpatterned wafer inspection, optical overlay metrology, electron beam review, reticle and photomask inspection and film and surface measurement tools as well as our advanced yield analysis and defect classification software to provide fab-wide yield management solutions. These solutions are optimized for the manufacturing process cells used in IC production, including lithography, deposition, etch and chemical mechanical planarization. Our offerings can be broadly categorized into four groups: Defect Inspection; Metrology; product related services; and Software. For our customers manufacturing larger design-rule devices, we provide refurbished KLA-Tencor certified tools along with warranty and support.

Defect Inspection

Our defect inspection tools allow our customers to detect, count, classify and characterize yield failures caused by particles, pattern defects, surface anomalies and electrical issues during all stages of the IC manufacturing process. Our portfolio of tools enables our customers to ramp their production lines faster by finding new defect types during development and ramp, and to maintain high and stable yields by monitoring defect count by type during production.

Defect inspection is especially critical as our customers move to production of 65nm design-rule devices, and begin development of the 45nm node. The number of yield-relevant defects increases as semiconductor process tolerances become tighter a result of smaller, more densely packed semiconductor circuit patterns. Also, new defect types and yield issues arise from the necessary introduction of innovative materials, device structures and lithography techniques. As a result, chip manufacturers need to inspect more wafers per lot, more process layers and more area on the wafer, at higher sensitivities. We supply a wide portfolio of high performance inspection, classification and analysis systems that enable our customers to solve their toughest yield issues.

Our defect inspection tools include systems for:

High-sensitivity broadband brightfield inspection;

High-performance darkfield inspection;

High-resolution electron beam review and classification;

Wafer and film surface inspection;

Electron beam inspection;

Macro defect inspection for wafer dispositioning;

Wafer edge inspection;

Reticle inspection;

Process window qualification; and

Transparent film and opaque substrate inspection.

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Metrology

Metrology is a critical discipline in the production of high performance, reliable devices. Whether verifying that a design will be manufacturable, characterizing a new process or monitoring high-volume manufacturing, our comprehensive set of metrology, analysis and process window optimization products gives IC manufacturers the ability to maintain tight control of their processes.

Our metrology tools include systems for:

Optical overlay metrology;

Critical dimension metrology;

Film measurement;

Contamination monitoring;

Implant metrology;

Substrate and surface metrology; and

Process metrology systems.

Services

We enable customers to maximize the performance and productivity of their metrology and inspection systems over the entire life cycle of a tool. We deliver yield management expertise spanning all technology nodes, and collaborate with customers to determine the best products and services to meet technology requirements and optimize cost of ownership. We help customers meet their production goals by maximizing tool uptime and performance with a menu of support services, unique expertise from local service engineers, worldwide spares and consumables depots, and round-the-clock tech support experts in our Online Support Centers accessed through our iSupport secure network. Our Technology Engagement Services collaborate with customers to use effective recipes to improve baseline performance and avoid costly process errors, as well as extend the life of their installed base and determine when new tools and upgrades would be beneficial.

Software and Other

Our productivity and analysis solutions translate inspection and metrology data into consolidated information that can reveal process problems and help semiconductor manufacturers develop long-term yield improvement strategies. Our yield management and analysis solutions provide a broad suite of data management systems and analysis modules and tools to help customers develop processes and provide customers with real-time production information. Our LithoWare lithography optimization tool is designed to reduce the time and cost required to develop reticle enhancement techniques and optical proximity correction processes by analyzing design layout constraints and the manufacturing process variability of focus and exposure during lithography.

Company Information

KLA-Tencor Corporation was formed in April 1997 through the merger of KLA Instruments Corporation and Tencor Instruments, two long-time leaders in the semiconductor equipment industry, each with over 20 years of experience. KLA Instruments Corporation was incorporated in Delaware in 1975; Tencor Instruments was incorporated in California in 1976. Our common stock is listed and traded on the NASDAQ Global Select Market under the symbol KLAC. Our principal executive offices are located at One Technology Drive, Milpitas,

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California 95035 and our telephone number is (408) 875-3000. Our web site is located at <http://www.kla-tencor.com>. The information on our web site is not part of this prospectus.

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Control Triggering Event

Upon the occurrence of a Change of Control Triggering Event (as defined in this prospectus), we will be required to make an offer to purchase the notes at a price equal to 101% of their principal amount plus accrued and unpaid interest to the date of repurchase. See

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Description of the Notes Repurchase Upon Change of Control Triggering Event.

Listing	The notes will not be listed on any securities exchange or automated quotation system.
No prior market	The notes will be new securities for which there is currently no market. Although the underwriters have informed us that they intend to make a market in the notes, they are not obligated to do so, and they may discontinue market making activities at any time without notice. Accordingly, we cannot assure you that a liquid market for the notes will develop or be maintained.
Use of proceeds	We intend to use the net proceeds from this offering for general corporate purposes, which may include strategic acquisitions and stock repurchases. See Use of Proceeds.
Securities identification numbers	CUSIP:
Governing Law	New York.
Trustee	Wells Fargo Bank, N.A.
Risk factors	You should carefully consider all of the information in this prospectus. In particular, you should evaluate the information set forth under Cautionary Statement Regarding Forward-Looking Statements and Risk Factors before deciding whether to invest in the notes.

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Our summary consolidated financial data presented below as of and for each of the fiscal years ended June 30, 2007, 2006 and 2005 has been derived from our audited consolidated financial statements. The summary financial data presented below as of and for the nine months ended March 31, 2008 and 2007 has been derived from our unaudited consolidated financial statements. Historical financial information includes, in management's opinion, all adjustments, consisting only of normal recurring adjustments, necessary to present fairly our results of operations and financial position for the periods and dates presented. Historical results are not necessarily indicative of future results. This information is only a summary and should be read in conjunction with the financial statements and related notes and the sections entitled "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in our annual and quarterly reports and in conjunction with other information that we have filed with the Securities and Exchange Commission, or the SEC, and incorporated by reference in this prospectus. See "Where You Can Find More Information" beginning on page 47 of this prospectus.

(in millions, except per share data)	As of and for the Nine Months Ended March 31, 2008		As of and for the Year Ended June 30, 2007		
	2008	2007	2007	2006	2005
Consolidated Statement of Operations Data:					
Revenues:					
Product	\$ 1,568	\$ 1,683	\$ 2,309	\$ 1,713	\$ 1,768
Service	363	312	422	357	314
Total revenues	1,931	1,995	2,731	2,071	2,082
Income from operations	396	415	590	310	545
Net income	\$ 283	\$ 381	\$ 528	\$ 380	\$ 445
Basic net income per common share	\$ 1.55	\$ 1.91	\$ 2.68	\$ 1.92	\$ 2.27
Diluted net income per common share	\$ 1.52	\$ 1.87	\$ 2.61	\$ 1.86	\$ 2.21
Dividends per common share	\$ 0.45	\$ 0.36	\$ 0.48	\$ 0.48	\$ 0.12
Consolidated Balance Sheet Data:					
Cash, cash equivalents and marketable securities ⁽¹⁾	\$ 695	\$ 1,585	\$ 1,711	\$ 2,326	\$ 2,195
Restricted cash ⁽²⁾	620				
Working capital ⁽³⁾	1,793	1,973	2,247	2,643	2,318
Total assets	4,111	4,341	4,623	4,576	4,041
Total non-current liabilities ⁽³⁾	138	56	68	49	53
Total stockholders' equity	2,989	3,311	3,550	3,568	3,097

⁽¹⁾ Marketable securities as of March 31, 2008 include \$46.8 million of auction rate securities, the market for which is currently illiquid. See the risk factor entitled "We are exposed to fluctuations in the market values of our portfolio investments and in interest rates; impairment of our investments could harm our earnings" on page 17 of this prospectus and note 3 to the unaudited condensed consolidated financial statements included in our quarterly report on Form 10-Q for the quarter ended March 31, 2008, which are incorporated by reference in this prospectus.

⁽²⁾ As required by applicable Belgian regulations, we funded a restricted cash account in connection with our proposed acquisition of ICOS Vision Systems Corporation NV ("ICOS") containing the aggregate cash consideration of \$392.3 million that may be payable for all securities of ICOS upon successful completion of the offer. The transaction is expected to close in the three months ending June 30, 2008. Please refer to note 2 to the unaudited condensed consolidated financial statements included in our quarterly report on Form 10-Q for the quarter ended

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March 31, 2008, which are incorporated by reference in this prospectus.

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- ⁽³⁾ Effective July 1, 2007, we adopted the provisions of FASB Interpretation No. 48, *Accounting for Uncertainty in Income Taxes - an interpretation of FASB Statement No. 109* (FIN 48), which required the reclassification of certain tax liabilities from current to non-current liabilities. Accordingly, included within non-current liabilities as of March 31, 2008 are tax liabilities in the amount of \$58.9 million. As required by FIN 48, non-current tax liabilities for periods prior to the adoption of FIN 48 have not been reclassified as non-current liabilities and are presented as components of current liabilities or working capital in the table above. For periods prior to the adoption of FIN 48, unearned revenue and other liabilities were reclassified as non-current liabilities to conform to current period presentation.

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RATIO OF EARNINGS TO FIXED CHARGES

Our ratio of earnings to fixed charges was as follows for the respective periods indicated.

Nine Months Ended March 31,		Year Ended June 30,			
2008	2007	2006	2005	2004	2003
101.9	113.4	77.1	104.4	59.0	20.9

For purposes of calculating the ratio of earnings to fixed charges, earnings is the amount resulting from adding (a) the earnings from continuing operations before income taxes and minority interest, and (b) fixed charges. Fixed charges for these purposes include (a) interest expense, (b) amortization of bond issuance costs, and (c) one-third of rental expense, which we consider to be a reasonable approximation of the interest factor included in rental expense.

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RISK FACTORS

*Any investment in the notes involves a high degree of risk. You should consider the risks described below carefully and all of the information included or incorporated by reference in this prospectus before deciding whether to purchase the notes. The risks and uncertainties described below are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also impair our business operations. If any of the events or circumstances described in the following risk factors actually occur, our business, financial condition and results of operations would suffer. In that event, the price of the notes could decline, and you may lose all or part of your investment. The risks discussed below also include forward-looking statements and our actual results may differ substantially from those discussed in these forward-looking statements. See *Cautionary Statement Regarding Forward-Looking Statements*.*

Risks Relating to the Notes

The notes are structurally subordinated to any future indebtedness and to the other liabilities of our subsidiaries.

The notes are our obligations exclusively and not of any of our subsidiaries. A significant portion of our operations is conducted through our subsidiaries. For the year ended June 30, 2007, our subsidiaries accounted for approximately 35% of our total assets, 37% of our total revenue and 60% of our total net income. Our subsidiaries are separate legal entities that have no obligation to pay any amounts due under the notes or to make any funds available therefor, whether by dividends, loans or other payments. Except to the extent we are a creditor with recognized claims against our subsidiaries, all claims of creditors, including trade creditors, and holders of preferred stock, if any, of our subsidiaries will have priority with respect to the assets of such subsidiaries over our claims (and therefore the claims of our creditors, including holders of the notes), and our subsidiaries may enter into future borrowing arrangements that limit their ability to transfer funds to us. Consequently, the notes will be structurally subordinated to all liabilities, including trade payables, of any of our subsidiaries and any subsidiaries that we may in the future acquire or establish. As of March 31, 2008, our subsidiaries had \$304 million of liabilities. In addition, the indenture governing the notes permits our subsidiaries to incur additional indebtedness, and does not contain any limitation on the amount of other liabilities, such as trade payables, that may be incurred by our subsidiaries.

The notes will be subject to the prior claims of any future secured creditors.

The notes are unsecured obligations, ranking effectively junior to any secured indebtedness we may incur. As of March 31, 2008, we did not have any outstanding secured indebtedness, although the indenture governing the notes does not limit the amount of additional debt that we and our subsidiaries may incur and permits us to incur secured debt under specified circumstances. If we incur secured debt, our assets securing any such indebtedness will be subject to prior claims by our secured creditors. In the event of our bankruptcy, insolvency, liquidation, reorganization, dissolution or other winding up, or upon any acceleration of the notes, our assets that secure debt will be available to pay obligations on the notes only after all debt secured by those assets has been repaid in full. Holders of the notes will participate in any remaining assets ratably with all of our other unsecured and unsubordinated creditors, including trade creditors. If there are not sufficient assets remaining to pay all these creditors, then all or a portion of the notes then outstanding would remain unpaid.

The negative covenants in the indenture that governs the notes provide limited protection to holders of the notes.

The indenture governing the notes contains covenants limiting our ability and our subsidiaries' ability to create certain liens, enter into certain sale and lease-back transactions, and consolidate or merge with, or convey, transfer or lease all or substantially all our assets to, another person. The limitation on liens and limitation on sale

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and lease-back covenants contain exceptions that will allow us and our subsidiaries to incur liens with respect to material assets. See Description of the Notes Certain Covenants. In light of these exceptions, holders of the notes may be structurally or contractually subordinated to new lenders.

We may repurchase our stock and reduce cash reserves and stockholders' equity that is available for repayment of the notes.

We have repurchased significant amounts of our common stock in the open market and in privately negotiated transactions. We expect to continue these repurchases in the future using either cash or other of our assets. The amount of our future repurchases may be significant, and the indenture governing the notes does not limit our ability to conduct future repurchases in any way. Any future repurchases by us would reduce the cash and stockholders' equity that is available to repay the notes.

The provisions of the notes will not necessarily protect you in the event of certain highly leveraged transactions.

Upon the occurrence of a Change of Control Triggering Event (as defined under Description of the Notes Repurchase Upon Change of Control Triggering Event), you will have the right to require us to repurchase the notes. However, the Change of Control Triggering Event provisions will not afford you protection in the event of certain highly leveraged transactions that may adversely affect you. For example, any leveraged recapitalization, refinancing, restructuring or acquisition initiated by us will generally not constitute a Change of Control (as defined herein) that would potentially lead to a Change of Control Triggering Event. As a result, we could enter into any such transaction even though the transaction could increase the total amount of our outstanding indebtedness, adversely affect our capital structure or credit rating or otherwise adversely affect the holders of the notes. These transactions may not involve a change in voting power or beneficial ownership or result in a downgrade in the ratings of the notes, or, even if they do, may not necessarily constitute a Change of Control Triggering Event that affords you the protections described in this prospectus. If any such transaction were to occur, the value of your notes could decline.

We may not be able to repurchase all of the notes upon a Change of Control Triggering Event, which would result in a default under the notes.

We will be required to offer to repurchase the notes upon the occurrence of a Change of Control Triggering Event as provided in the indenture governing the notes. However, we may not have sufficient funds to repurchase the notes in cash at that time. In addition, our ability to repurchase the notes for cash may be limited by law or the terms of other agreements relating to our indebtedness outstanding at the time, which agreements may provide that a Change of Control Triggering Event constitutes an event of default or prepayment under such indebtedness. Our failure to make such a repurchase would result in a default under the notes.

Changes in our credit ratings may adversely affect the value of the notes.

Any ratings of the notes are limited in scope, and do not address all material risks relating to an investment in the notes, but rather reflect only the view of each rating agency at the time the rating is issued. An explanation of the significance of such rating may be obtained from such rating agency. There can be no assurance that such credit ratings will remain in effect for any given period of time or that such ratings will not be lowered, suspended or withdrawn entirely by the rating agencies, if, in each rating agency's judgment, circumstances so warrant. Actual or anticipated changes or downgrades in our credit ratings, including any announcement that our ratings are under further review for a downgrade, could affect the market value of the notes and increase our corporate borrowing costs.

There may not be an active trading market for the notes.

There is no existing market for the notes, and we do not intend to apply for listing of the notes on any securities exchange or any automated quotation system. Accordingly, there can be no assurance that a trading market for the notes will ever develop or will be maintained. Further, there can be no assurance as to the liquidity of

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any market that may develop for the notes, your ability to sell your notes or the price at which you will be able to sell your notes. Future trading prices of the notes will depend on many factors, including, but not limited to, prevailing interest rates, our financial condition and results of operations, prospects for companies in our industry generally, the then-current ratings assigned to the notes and the market for similar securities. Any trading market that develops would be affected by many factors independent of and in addition to the foregoing, including:

time remaining to the maturity of the notes;

outstanding amount of the notes;

the terms related to the optional redemption of the notes; and

level, direction and volatility of market interest rates generally.

Risks Associated with Our Industry and Market Conditions

The semiconductor equipment industry is highly cyclical. The purchasing decisions of our customers are highly dependent on the economies of both the local markets in which they are located and the semiconductor industry worldwide. If we fail to respond to industry cycles, our business could be seriously harmed.

The timing, length and severity of the up-and-down cycles in the semiconductor equipment industry are difficult to predict. This cyclical nature of the industry in which we operate affects our ability to accurately predict future revenue and, thus, future expense levels. In the current environment, our ability to accurately predict future revenue and expense levels is particularly low. When cyclical fluctuations result in lower than expected revenue levels, operating results may be adversely affected and cost reduction measures may be necessary in order for us to remain competitive and financially sound. During a down cycle, we must be in a position to adjust our cost and expense structure to prevailing market conditions and to continue to motivate and retain our key employees. In addition, during periods of rapid growth, we must be able to increase manufacturing capacity and personnel to meet customer demand. We can provide no assurance that these objectives can be met in a timely manner in response to industry cycles.

Our business is ultimately driven by the global demand for electronic devices by consumers and businesses. A majority of our annual revenue is derived from outside the United States, and we expect that international revenue will continue to represent a substantial percentage of our revenue. A protracted global economic slowdown may adversely affect our business and results of operations.

A majority of our annual revenue is derived from outside the United States, and we expect that international revenue will continue to represent a substantial percentage of our revenue. Our international revenue and operations are affected by economic conditions specific to each country and region. Because of our significant dependence on international revenue, a decline in the economies of any of the countries or regions in which we do business could negatively affect our operating results. Managing global operations and sites located throughout the world presents challenges associated with, among other things, cultural diversity and organizational alignment. Moreover, each region in the global semiconductor equipment market exhibits unique characteristics that can cause capital equipment investment patterns to vary significantly from period to period. Periodic local or international economic downturns, trade balance issues, political instability, legal or regulatory changes or terrorism in regions where we have operations along with fluctuations in interest and currency exchange rates could negatively affect our business and results of operations. Although we attempt to manage near-term currency risks through the use of hedging instruments, there can be no assurance that such efforts will be adequate.

Our future performance depends, in part, upon our ability to continue to compete successfully worldwide.

Our industry includes large manufacturers with substantial resources to support customers worldwide. Some of our competitors are diversified companies with greater financial resources and more extensive research, engineering, manufacturing, marketing and customer service and support capabilities than we possess. We face competition from companies whose strategy is to provide a broad array of products and services, some of which compete with the products and services that we offer. These competitors may bundle their products in a manner

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that may discourage customers from purchasing our products, including pricing such competitive tools significantly below our product offerings. In addition, we face competition from smaller emerging semiconductor equipment companies whose strategy is to provide a portion of the products and services that we offer, using innovative technology to sell products into specialized markets. Loss of competitive position could negatively affect our prices, customer orders, revenue, gross margins, and market share, any of which would negatively affect our operating results and financial condition.

Risks Related to Our Business

If we do not develop and introduce new products and technologies in a timely manner in response to changing market conditions or customer requirements, our business could be seriously harmed.

Success in the semiconductor equipment industry depends, in part, on continual improvement of existing technologies and rapid innovation of new solutions. For example, the size of semiconductor devices continues to shrink and the industry is currently transitioning to the use of new materials and innovative fab processes. While we expect these trends will increase our customers' reliance on our diagnostic products, we cannot be sure that they will directly improve our business. These and other evolving customer needs require us to respond with continued development programs and to cut back or discontinue older programs, which may no longer have industry-wide support. Technical innovations are inherently complex and require long development cycles and appropriate staffing of highly qualified employees. Our competitive advantage and future business success depend on our ability to accurately predict evolving industry standards, to develop and introduce new products that successfully address changing customer needs, to win market acceptance of these new products and to manufacture these new products in a timely and cost-effective manner.

In this environment, we must continue to make significant investments in research and development in order to enhance the performance and functionality of our products, to keep pace with competitive products and to satisfy customer demands for improved performance, features and functionality. Substantial research and development costs typically are incurred before we confirm the technical feasibility and commercial viability of a new product, and not all development activities result in commercially viable products. There can be no assurance that revenue from future products or product enhancements will be sufficient to recover the development costs associated with such products or enhancements. In addition, we cannot be sure that these products or enhancements will receive market acceptance or that we will be able to sell these products at prices that are favorable to us. Our business will be seriously harmed if we are unable to sell our products at favorable prices or if the market in which we operate does not accept our products.

Our business would be harmed if we do not receive sufficient parts to meet our production requirements in a timely and cost-effective manner.

We use a wide range of materials in the production of our products, including custom electronic and mechanical components, and we use numerous suppliers to supply these materials. We generally do not have guaranteed supply arrangements with our suppliers. Because of the variability and uniqueness of customers' orders, we do not maintain an extensive inventory of materials for manufacturing. We seek to minimize the risk of production and service interruptions and/or shortages of key parts by selecting and qualifying alternative suppliers for key parts, monitoring the financial stability of key suppliers and maintaining appropriate inventories of key parts. Although we make reasonable efforts to ensure that parts are available from multiple suppliers, key parts may be available only from a single supplier or a limited group of suppliers. Our operating results and business may be adversely impacted if we are unable to obtain parts to meet our production requirements, or if we are only able to do so on unfavorable terms.

Disruption of our manufacturing facilities due to earthquake, flood, other natural catastrophic events or terrorism could result in cancellation of orders or loss of customers and could seriously harm our business.

Most of our manufacturing facilities are located in the United States, with additional operations located in Israel and Singapore. Operations at our manufacturing facilities and our assembly subcontractors are subject to

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disruption for a variety of reasons, including work stoppages, acts of war, terrorism, fire, earthquake, energy shortages, flooding or other natural disasters. Such disruption could cause delays in shipments of products to our customers. We cannot ensure that alternate production capacity would be available if a major disruption were to occur or that, if it were available, it could be obtained on favorable terms.

We outsource a number of services to third-party service providers, which decreases our control over the performance of these functions. Disruptions or delays at our third-party service providers could adversely impact our operations.

We outsource a number of services, including our transportation and logistics management of spare parts, to domestic and overseas third-party service providers. While outsourcing arrangements may lower our cost of operations, they also reduce our direct control over the services rendered. It is uncertain what effect such diminished control will have on the quality or quantity of products delivered or services rendered, or our ability to quickly respond to changing market conditions. Disruptions or delays at our third-party service providers due to events such as regional economic, business, environmental or political events, information technology system failures or military actions could adversely impact our operations and our ability to ship products, manage our product inventory or record and report financial and management information on a timely and accurate basis.

Our success is dependent in part on our technology and other proprietary rights. If we are unable to maintain our lead or protect our proprietary technology, we may lose valuable assets and market share.

Our success is dependent in part on our technology and other proprietary rights. We own various United States and international patents and have additional pending patent applications relating to some of our products and technologies. The process of seeking patent protection is lengthy and expensive, and we cannot be certain that pending or future applications will actually result in issued patents or that issued patents will be of sufficient scope or strength to provide meaningful protection or commercial advantage to us. Other companies and individuals, including our larger competitors, may develop technologies and obtain patents relating to our business that are similar or superior to our technology or may design around the patents we own, adversely affecting our business.

We also maintain trademarks on certain of our products and services and claim copyright protection for certain proprietary software and documentation. However, we can give no assurance that our trademarks and copyrights will be upheld or successfully deter infringement by third parties.

While patent, copyright and trademark protection for our intellectual property is important, we believe our future success in highly dynamic markets is most dependent upon the technical competence and creative skills of our personnel. We attempt to protect our trade secrets and other proprietary information through confidentiality and other agreements with our customers, suppliers, employees and consultants and through other security measures. We also maintain exclusive and non-exclusive licenses with third parties for strategic technology used in certain products. However, these employees, consultants and third parties may breach these agreements, and we may not have adequate remedies for wrongdoing. In addition, the laws of certain territories in which we develop, manufacture or sell our products may not protect our intellectual property rights to the same extent as do the laws of the United States. In any event, the extent to which we can protect our trade secrets through the use of confidentiality agreements is limited, and our success will depend to a significant extent on our ability to innovate ahead of our competitors.

We might be involved in intellectual property disputes or other intellectual property infringement claims that may be costly to resolve, prevent us from selling or using the challenged technology and seriously harm our operating results and financial condition.

As is typical in the semiconductor equipment industry, from time to time we have received communications from other parties asserting the existence of patent rights, copyrights, trademark rights or other intellectual property rights which they believe cover certain of our products, processes, technologies or information. Litigation tends to be expensive and requires significant management time and attention and could

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have a negative effect on our results of operations or business if we lose or have to settle a case on significantly adverse terms. Our customary practice is to evaluate such infringement assertions and to consider whether to seek licenses where appropriate. However, we cannot ensure that licenses can be obtained or, if obtained, will be on acceptable terms or that costly litigation or other administrative proceedings will not occur. The inability to obtain necessary licenses or other rights on reasonable terms, or the instigation of litigation or other administrative proceedings, could seriously harm our operating results and financial condition.

We depend on key personnel to manage our business effectively, and if we are unable to attract, retain and motivate our key employees, our sales and product development could be harmed.

Our employees are vital to our success, and our key management, engineering and other employees are difficult to replace. We generally do not have employment contracts with our key employees. Further, we do not maintain key person life insurance on any of our employees. The expansion of high technology companies worldwide has increased demand and competition for qualified personnel. If we are unable to retain key personnel, or if we are not able to attract, assimilate or retain additional highly qualified employees to meet our needs in the future, our business and operations could be harmed.

There are significant risks associated with our proposed acquisition of ICOS Vision Systems Corporation NV.

We recently announced that we have entered into an agreement to launch a friendly voluntary takeover bid for all of the outstanding capital stock of ICOS Vision Systems Corporation NV (ICOS) at \$36.50 per share. Upon successful completion of the offer, we will pay cash consideration of up to \$392.3 million for all securities of ICOS.

The transaction is currently expected to close during the quarter ending June 30, 2008. However, completion of our proposed acquisition of ICOS is subject to a number of conditions, including our holding (directly or indirectly) at least 85% of ICOS's outstanding shares as of the completion of the bid, the receipt of applicable regulatory approvals and the absence of any material adverse change with respect to ICOS. There is no assurance that these conditions (including without limitation receipt of the necessary regulatory approvals) will be satisfied within the anticipated timeframe, or that they will ever be satisfied. Failure to complete the proposed acquisition (or significant delays in such completion) would prevent us from realizing the anticipated benefits of the acquisition. In addition, even if the proposed transaction is not completed, we would nevertheless remain liable for significant transaction costs, including legal, accounting and other fees.

Furthermore, the transaction, if successful, will involve the combination of the businesses of two companies with substantial business operations. The difficulties of combining the companies' businesses include:

the necessity of coordinating geographically separated organizations, systems and facilities;

the need to harmonize our current business practices with the legal, regulatory and cultural practices of several different countries, including Belgium, which is where ICOS's headquarters are located and is a country in which we do not currently have operations;

the challenge of entering into new market segments for which we have not previously manufactured and sold products;

identifying and realizing opportunities for the two companies, which currently serve different market segments, to mutually benefit from exchanges of technology, business and market expertise, and personnel; and

integrating personnel with diverse business backgrounds.

There is no assurance that the benefits that we anticipate realizing from the combination of the two companies will ever be realized. In addition, the process of combining the businesses of KLA-Tencor and ICOS

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could cause an interruption of, or loss of momentum in, the activities of either or both companies and the loss of key personnel. The diversion of our management's attention and any delays or difficulties encountered in connection with the acquisition and the combination of the two companies' businesses could result in the disruption of our ongoing business. For example, if we complete the acquisition but fail to acquire at least 95% of ICOS's outstanding shares through the bid or otherwise, we may be required to maintain ICOS as a publicly traded company for some period following the completion, which would require compliance with applicable legal, regulatory and listing requirements and thus could divert management's attention from our ongoing business. In addition, ICOS's customers, suppliers, employees and others with whom it has business dealings may have a potentially adverse reaction to the acquisition, which could in turn harm our operating results.

Acquisitions are an important element of our strategy but, because of the uncertainties involved, we may not find suitable acquisition candidates and we may not be able to successfully integrate and manage acquired businesses.

In addition to our efforts to develop new technologies from internal sources, part of our growth strategy is to pursue acquisitions and acquire new technologies from external sources. As part of this effort, we may make acquisitions of, or significant investments in, businesses with complementary products, services and/or technologies. There can be no assurance that we will find suitable acquisition candidates or that acquisitions we complete will be successful. In addition, we may use equity to finance future acquisitions, which would increase our number of shares outstanding and be dilutive to current shareholders.

If we are unable to successfully integrate and manage acquired businesses or if acquired businesses perform poorly, then our business and financial results may suffer. It is possible that the businesses we have acquired, as well as businesses that we may acquire in the future, may perform worse than expected or prove to be more difficult to integrate and manage than expected. In addition, we may lose key employees of the acquired companies. As a result, risks associated with acquisition transactions may give rise to a material adverse effect on our business and financial results for a number of reasons, including:

we may have to devote unanticipated financial and management resources to acquired businesses;

we may not be able to realize expected operating efficiencies or product integration benefits from our acquisitions;

we may have to write-off goodwill or other intangible assets; and

we may incur unforeseen obligations or liabilities in connection with acquisitions.

Compliance with federal securities laws, rules and regulations, as well as Nasdaq requirements, is becoming increasingly complex, and the significant attention and expense we must devote to those areas may have an adverse impact on our business.

Federal securities laws, rules and regulations, as well as Nasdaq rules and regulations, require companies to maintain extensive corporate governance measures, impose comprehensive reporting and disclosure requirements, set strict independence and financial expertise standards for audit and other committee members and impose civil and criminal penalties for companies and their chief executive officers, chief financial officers and directors for securities law violations. These laws, rules and regulations have increased and will continue to increase the scope, complexity and cost of our corporate governance, reporting and disclosure practices, which could harm our results of operations and divert management's attention from business operations.

We are predominantly uninsured for losses and interruptions caused by terrorist acts and acts of war. If international political instability continues or increases, our business and results of operation could be harmed.

The threat of terrorism targeted at the regions of the world in which we do business increases the uncertainty in our markets. Any act of terrorism which affects the economy or the semiconductor industry could

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adversely affect our business. Increased international political instability, disruption in air transportation and further enhanced security measures as a result of terrorist attacks, and the continuing instability in the Middle East, may hinder our ability to do business and may increase our costs of operations. Such continuing instability could cause us to incur increased costs in transportation, make such transportation unreliable, increase our insurance costs, and cause international currency markets to fluctuate. This same instability could have the same effects on our suppliers and their ability to timely deliver their products. If this international political instability continues or increases, our business and results of operations could be harmed. We are predominantly uninsured for losses and interruptions caused by terrorist acts and acts of war.

We self insure certain risks including earthquake risk. If one or more of the uninsured events occurs, we could suffer major financial loss.

We purchase insurance to help mitigate the economic impact of certain insurable risks; however, certain other risks are uninsurable or are insurable only at significant cost and cannot be mitigated with insurance. An earthquake could significantly disrupt our manufacturing operations, most of which are conducted in California. It could also significantly delay our research and engineering effort on new products, most of which is also conducted in California. We take steps to minimize the damage that would be caused by an earthquake, but there is no certainty that our efforts will prove successful in the event of an earthquake. We self insure earthquake risks because we believe this is a prudent financial decision based on our large cash reserves and the high cost and limited coverage available in the earthquake insurance market. Certain other risks are also self insured either based on a similar cost benefit analysis, or based on the unavailability of insurance. If one or more of the uninsured events occurs, we could suffer major financial loss.

A change in accounting standards or practices or a change in existing taxation rules or practices can have a significant effect on our reported results and may even affect reporting of transactions completed before the change is effective.

New accounting pronouncements and taxation rules and varying interpretations of accounting pronouncements and taxation rules have occurred and may occur in the future. Changes to existing rules or the questioning of current practices may adversely affect our reported financial results or the way we conduct our business.

For example, the adoption of Statement of Financial Accounting Standards No. 123(R), Share-Based Payment which required us to measure all employee stock-based compensation awards using a fair value method beginning in fiscal year 2006 and record such expense in our consolidated financial statements, has had a material impact on our consolidated financial statements, as reported under accounting principles generally accepted in the United States.

A change in the effective tax rate can have a significant adverse impact on our business.

A number of factors may harm our future effective tax rates such as the jurisdictions in which profits are determined to be earned and taxed, the resolution of issues arising from tax audits with various tax authorities, changes in the valuation of our deferred tax assets and liabilities, adjustments to estimated taxes upon finalization of various tax returns, increases in expenses not deductible for tax purposes, including write-offs of acquired in-process research and development and impairment of goodwill in connection with acquisitions, changes in available tax credits, changes in share-based compensation expense, changes in tax laws or the interpretation of such tax laws and changes in generally accepted accounting principles and the repatriation of non-U.S. earnings for which we have not previously provided for U.S. taxes. A change in the effective tax rate can adversely impact our results from operations.

We are exposed to various risks related to the regulatory environments where we perform our operations and conduct our business.

We are subject to various risks related to new, different, inconsistent or even conflicting laws, rules and regulations that may be enacted by legislative bodies and/or regulatory agencies in the countries in which we operate

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and with which we must comply, including environmental and safety regulations. Changes to existing laws, rules or regulations, including changes that result in inconsistent or conflicting laws, rules or regulations, in the countries in which we operate may adversely affect our reported financial results or the way we conduct our business.

We are exposed to foreign currency exchange rate fluctuations; although we hedge certain currency risks, we may still be adversely affected by changes in foreign currency exchange rates or declining economic conditions in these countries.

We have some exposure to fluctuations in foreign currency exchange rates, primarily the Japanese Yen. We have international subsidiaries that operate and sell our products globally. We routinely hedge these exposures in an effort to minimize the impact of currency rate fluctuations, but these hedges may be inadequate to protect us from currency rate fluctuations. To the extent that these hedges are inadequate, our reported financial results or the way we conduct our business could be adversely affected.

We are exposed to fluctuations in the market values of our portfolio investments and in interest rates; impairment of our investments could harm our earnings.

Our investment portfolio consists of both corporate and government securities that have a maximum effective maturity of 10 years. The longer the duration of these securities, the more susceptible they are to changes in market interest rates and bond yields. As yields increase, those securities with a lower yield-at-cost show a mark-to-market unrealized loss. We have the ability to realize the full value of all these investments upon maturity. Unrealized losses are due to changes in interest rates and bond yields.

Auction rate securities backed by student loans which are collateralized, insured and guaranteed by the United States Federal Department of Education are also included in our investment portfolio. Due to the current illiquidity in the auction rate security market, the funds associated with these failed auctions may not be accessible until the issuer calls the security, a successful auction occurs, a buyer is found outside of the auction process or the security matures. Although we believe our auction rate securities continue to represent sound investments due to the AAA/Aaa credit ratings of the underlying investments, we may be forced to sell some of our auction rate securities portfolio under illiquid market conditions, which could result in our recognizing a loss on such sales.

We rely upon certain critical information systems for our daily business operation. Our inability to use or access these information systems at critical points in time could unfavorably impact the timeliness and efficiency of our business operation.

Our global operations are linked by information systems, including telecommunications, the internet, our corporate intranet, network communications, email and various computer hardware and software applications. Despite our implementation of network security measures, our tools and servers are vulnerable to computer viruses, break-ins and similar disruptions from unauthorized tampering with our computer systems and tools located at customer sites. Any such event could have an adverse effect on our business, operating results and financial condition.

We may experience difficulties with our new customer relationship management (CRM) system or existing enterprise resource planning (ERP) system and other IT systems. System failure or malfunctioning may result in a disruption of operations or the inability to process transactions, and this could adversely affect our financial results.

We may experience difficulties with our new CRM system implemented in fiscal year 2008 that could disrupt our ability to timely and accurately process and report key components of the results of our consolidated operations, our financial position and cash flows. System failure or malfunctioning could disrupt our ability to timely and accurately process and report key components of our results of operations, financial position and cash flows. Any disruptions or difficulties that may occur in connection with our ERP system or other systems could

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also adversely affect our ability to complete important business processes such as the evaluation of our internal controls and attestation activities pursuant to Section 404 of the Sarbanes-Oxley Act of 2002. If we encounter unforeseen problems with regard to our ERP system or other systems, our business could be adversely affected.

Risks Related to the Restatement of Our Prior Financial Results

Our efforts to correct past material weaknesses in our internal controls may not have been sufficient, and we may discover additional material weaknesses in our internal controls.

As previously disclosed, we have undergone an investigation of our historical stock option practices by the Special Committee of our board of directors (for more information regarding the Special Committee investigation and its findings, please refer to Item 3, "Legal Proceedings" in our Annual Report on Form 10-K for the fiscal year ended June 30, 2007, which was filed with the SEC on August 20, 2007 and is incorporated herein by reference). As a result of that Special Committee investigation and our management's internal review of our historical stock option practices and related matters, we identified past material weaknesses in our internal controls and procedures (see Item 9A, "Controls and Procedures" in our Annual Report on Form 10-K for the fiscal year ended June 30, 2007). A material weakness is a control deficiency, or combination of them, that results in more than a remote likelihood that a material misstatement in our financial statements will not be prevented or detected. We believe that we have remedied the past material weaknesses in our internal controls and procedures, but there can be no assurance that our corrections were sufficient or fully effective, or that we will not discover additional material weaknesses in our internal controls and procedures in the future.

The Special Committee investigation of our historical stock option practices and the resulting restatements have been time consuming and expensive, and have had a material adverse effect on us.

The Special Committee investigation and the resulting restatement activities have required us to expend significant management time and incur significant accounting, legal and other expenses. In addition, we have established a Special Litigation Committee to oversee the litigation matters that have arisen out of the investigation and the restatements, and we cannot predict what additional actions may be required by these committees. The period of time that will be necessary to resolve these matters is uncertain, and these matters could require significant additional attention and resources.

The ongoing government inquiries relating to our historical stock option practices is time consuming and expensive and could result in injunctions, fines and penalties that may have a material adverse effect on our financial condition, results of operations and cash flow.

On July 25, 2007, we announced that we had reached a settlement with the SEC by consenting to the entry of a permanent injunction against future violations of the reporting, books and records, and internal controls provisions of the federal securities laws. The settlement resolves completely the SEC investigation into our historical stock option granting practices. KLA-Tencor was not charged by the SEC with fraud, nor were we required to pay any civil penalty, fine or money damages as part of the settlement. While the SEC has completed its investigation, the inquiry by the United States Attorney's Office for the Northern District of California ("USAO") into our historical stock option practices is ongoing. We have fully cooperated with the USAO and intend to continue to do so. The period of time necessary to resolve this inquiry is uncertain, and we cannot predict the outcome of this inquiry or whether we will face additional government inquiries, investigations or other actions related to our historical stock option practices. We have also responded to inquiries from the U.S. Department of Labor, which is conducting an examination of our 401(k) Savings Plan prompted by our stock option issues. We are cooperating fully with this examination and intends to continue to do so. Further, the Internal Revenue Service is conducting an audit covering calendar year 2006 related to our historical stock option practices. These inquiries may require us to continue to expend significant management time and incur significant legal and other expenses, and could result in criminal actions seeking, among other things, injunctions against us and the payment of significant fines and penalties by us, which may have a material adverse effect on our financial condition, results of operations and cash flow.

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We have been named as a party to a number of shareholder derivative and class action lawsuits relating to our historical stock option practices, and we may be named in additional lawsuits in the future. This litigation could become time consuming and expensive and could result in the payment of significant judgments and settlements, which could have a material adverse effect on our financial condition and results of operations.

In connection with our historical stock option practices and resulting restatements, a number of derivative actions were filed against certain of our current and former directors and officers purporting to assert claims on our behalf. In addition, a number of securities class action complaints were filed against us and certain of our current and former directors and officers seeking damages related to our historical stock option practices and the resulting investigation, inquiries and restatements. There may be additional lawsuits of this nature filed in the future. We cannot predict the outcome of these lawsuits, other than the shareholder class action for which we have agreed in principle on a settlement and for which an amount of \$65.0 million has been accrued by a charge to selling, general and administrative expenses during the three months ended December 31, 2007, nor can we predict the amount of time and expense that will be required to resolve these lawsuits. If these lawsuits become time consuming and expensive, or if there are unfavorable outcomes in any of these cases, there could be a material adverse effect on our business, financial condition and results of operations.

Our insurance coverage will not cover our total liabilities and expenses in these lawsuits, in part because we have a significant deductible on certain aspects of the coverage. In addition, subject to certain limitations, we are obligated to indemnify our current and former directors, officers and employees in connection with the investigation of our historical stock option practices and the related litigation and ongoing government inquiry. We currently hold insurance policies for the benefit of our directors and officers, although our insurance coverage may not be sufficient in some or all of these matters. Furthermore, the insurers may seek to deny or limit coverage in some or all of these matters, in which case we may have to self-fund all or a substantial portion of our indemnification obligations.

We are subject to the risks of additional government actions, shareholder lawsuits and other legal proceedings related to our historical stock option practices, the resulting restatements, and the remedial measures we have taken.

It is possible that there may be additional governmental actions, shareholder lawsuits and other legal proceedings brought against us in connection with our historical stock option practices. In addition, we may be sued or taken to arbitration by former officers and employees in connection with their stock options, employment terminations and other matters. These proceedings may require us to expend significant management time and incur significant accounting, legal and other expenses, and may divert attention and resources from the operation of our business. These expenditures and diversions, as well as the adverse resolution of any specific lawsuit, could have a material adverse effect on our business, financial condition and results of operations.

Failure to maintain effective internal controls may cause us to delay filing our periodic reports with the SEC, affect our Nasdaq listing, and adversely affect our stock price.

The SEC, as directed by Section 404 of the Sarbanes-Oxley Act of 2002, adopted rules requiring public companies to include a report of management on internal control over financial reporting in their annual reports on Form 10-K that contain an assessment by management of the effectiveness of our internal control over financial reporting. In addition, our independent registered public accounting firm must attest to and report on the effectiveness of the internal control over financial reporting. We have in prior periods identified certain material weaknesses in its internal control over financial reporting. However, we believe we have remediated those past material weaknesses, and we have not identified any material weaknesses in our internal control over financial reporting for the fiscal year ended June 30, 2007. Although we review our internal control over financial reporting in order to ensure compliance with the Section 404 requirements, if our independent registered public accounting firm is not satisfied with our internal control over financial reporting or the level at which these controls are documented, designed, operated or reviewed, or if our independent registered public accounting firm interprets the requirements, rules and/or regulations differently from our interpretation, then they may issue a

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report that is qualified. This could result in an adverse reaction in the financial marketplace due to a loss of investor confidence in the reliability of our financial statements, which ultimately could negatively impact our stock price.

It may be difficult or costly to obtain director and officer insurance coverage as a result of the issues arising out of our historical stock option practices.

We expect that the issues arising from our previous retroactive pricing of stock options will make it more difficult to obtain director and officer insurance coverage in the future. If we are able to obtain this coverage, it could be significantly more costly than in the past, which would have an adverse effect on our financial results and cash flow. Alternatively, if we are unable to obtain director and officer insurance coverage, or if we are only able to obtain such policies subject to material restrictions or limitations, our directors and officers could face increased risks of personal liability in connection with the performance of their duties. As a result, we may have difficulty attracting and retaining qualified directors and officers, which could adversely affect our business.

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USE OF PROCEEDS

We estimate that we will receive net proceeds from the offering of the notes of approximately \$ million after deducting underwriting discounts and commissions and other estimated offering expenses payable by us. We intend to use the net proceeds from this offering for general corporate purposes, which may include strategic acquisitions and stock repurchases.

Table of Contents**CAPITALIZATION**

The following table sets forth a summary of our cash, cash equivalents and marketable securities, restricted cash and consolidated capitalization as of March 31, 2008, and as adjusted to reflect the issuance of the notes offered hereby, but not the use of proceeds therefrom. This table should be read in conjunction with our consolidated financial statements and the notes thereto included or incorporated by reference herein.

(in thousands)	As of	
	March 31, 2008 (unaudited) Actual	As adjusted
Cash, cash equivalents and marketable securities ⁽¹⁾	\$ 694,677	\$
Restricted cash ⁽²⁾	619,895	
Long-term debt:		
Notes offered hereby		
Total long-term debt		
Stockholders' equity:		
Common stock and capital in excess of par value	\$ 700,028	\$ 700,028
Retained earnings	2,257,049	2,257,049
Accumulated other comprehensive income	32,013	32,013
Total stockholders' equity	2,989,090	2,989,090
Total capitalization	2,989,090	

(1) Marketable securities as of March 31, 2008 include \$46.8 million of auction rate securities, the market for which is currently illiquid. See the risk factor entitled "We are exposed to fluctuations in the market values of our portfolio investments and in interest rates; impairment of our investments could harm our earnings" on page 17 of this prospectus and note 3 to the unaudited condensed consolidated financial statements included in our quarterly report on Form 10-Q for the quarter ended March 31, 2008, which are incorporated by reference in this prospectus.

(2) As required by applicable Belgian regulations, we funded a restricted cash account in connection with our proposed acquisition of ICOS containing the aggregate cash consideration of \$392.3 million that may be payable for all securities of ICOS upon successful completion of the offer. The transaction is expected to close in the three months ending June 30, 2008. Please refer to note 2 to the unaudited condensed consolidated financial statements included in our quarterly report on Form 10-Q for the quarter ended March 31, 2008, which are incorporated by reference in this prospectus.

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DESCRIPTION OF THE NOTES

General

For purposes of this section, references to KLA-Tencor, we, us and our are references to KLA-Tencor Corporation only and not to any of its subsidiaries. We will issue the notes under an indenture to be dated as of _____, 2008 (the Indenture) between us and Wells Fargo Bank, N.A., as trustee (the Trustee).

The following is a summary of the material provisions of the Indenture. It does not include all of the provisions of the Indenture. We urge you to read the Indenture because it defines your rights. The terms of the notes include those stated in the Indenture and those made part of the Indenture by reference to the Trust Indenture Act of 1939, as amended, or the TIA. A copy of the Indenture may be obtained from us. You can find definitions of certain capitalized terms used in this description under Certain Definitions.

We will issue the notes in fully registered form in denominations of \$2,000 and integral multiples of \$1,000 in excess thereof. The Trustee will initially act as Paying Agent and Registrar for the notes. The notes may be presented for registration of transfer and exchange at the offices of the Registrar. We may change any Paying Agent and Registrar without notice to holders of the notes (the Holders). We will pay principal (and premium, if any) on the notes at the Trustee's corporate office in Minneapolis, Minnesota. At our option, interest may be paid at the Trustee's corporate trust office or by check mailed to the registered address of Holders.

Principal, Maturity and Interest

We will issue \$ _____ in aggregate principal amount of the notes in this offering. The notes will mature on _____. Interest on the notes will accrue at the rate of _____ % per annum. Interest on the notes will be payable semiannually in arrears on each _____ and _____, commencing on _____, 2008, to the persons who are registered Holders at the close of business on the _____ and _____, whether or not a Business Day, immediately preceding the applicable interest payment date.

Interest on the notes will accrue from the most recent date to which interest has been paid or, if no interest has been paid, from and including the issue date. If any interest payment date, Redemption Date (as defined below), repurchase date or maturity date falls on a day which is not a Business Day, payment of interest, principal and premium, if any, with respect to such notes will be made on the next Business Day with the same force and effect as if made on the due date and no interest on such payment will accrue from and after such due date. Interest will be computed on the basis of a 360-day year composed of twelve 30-day months.

We may from time to time without notice to, or the consent of, any Holder, create and issue additional series of notes under the Indenture. To the extent we do so, the separate series of notes will not vote together as a single series on any matters. We may also from time to time without notice to, or the consent of, any Holder, create and issue additional notes under the Indenture equal in rank to the notes offered hereby in all respects (or in all respects except for the payment of interest accruing prior to the issue date of such additional notes, or except for the first payment of interest following the issue date of such additional notes) so that the additional notes may be consolidated and form a single series with the notes of the series offered hereby, and have the same terms as to status, redemption and otherwise as the notes of the series offered hereby.

The notes will not be guaranteed by any of our subsidiaries. The notes will not be entitled to the benefit of any mandatory sinking fund.

We will pay interest (including post-petition interest in any proceeding under any bankruptcy law) on overdue payments of the principal, purchase price and redemption price of the notes from time to time on demand at the rate then borne by the notes of the series offered hereby; and will pay interest (including post-petition interest in any proceeding under any bankruptcy law) on overdue installments of interest, if any (without

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regard to any applicable grace periods), on the notes of the series offered hereby from time to time on demand at the same rate to the extent lawful.

Ranking

The notes will be our unsecured senior obligations and will:

rank senior in right of payment to all of our future subordinated indebtedness;

rank equally in right of payment with all of our future unsecured senior indebtedness;

be effectively subordinated in right of payment to all of our future secured indebtedness to the extent of the collateral securing such indebtedness; and

be effectively subordinated in right of payment to all future indebtedness and other liabilities of our subsidiaries.

As of March 31, 2008, on a pro forma basis after giving effect to this offering and the use of proceeds therefrom as described under "Use of Proceeds," the notes would have been effectively subordinated to approximately \$304 million of obligations of our subsidiaries. For the year ended June 30, 2007, our subsidiaries accounted for approximately 35% of our total assets, 37% of our total revenue and 60% of our total net income.

Redemption

Optional Redemption

The notes will be redeemable, in whole or in part, at our option, at any time prior to maturity on at least 30 but not more than 60 days prior notice mailed to the registered address of each Holder of the notes (the "Redemption Date"). The redemption price will be equal to the greater of (1) 100% of the principal amount of the notes to be redeemed or (2) the sum of the present values of the Remaining Scheduled Payments (as defined below) discounted to the Redemption Date on a semiannual basis (assuming a 360-day year consisting of twelve 30-day months), at a rate equal to the sum of the Treasury Rate (as defined below) plus _____ basis points, plus, in the case of each of clauses (1) and (2), accrued and unpaid interest to, but not including, the Redemption Date.

Treasury Rate means, with respect to any Redemption Date, the rate per annum equal to the semiannual equivalent yield to maturity or interpolation (on a day count basis) of the interpolated Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for such Redemption Date.

Comparable Treasury Issue means the United States Treasury security or securities selected by an Independent Investment Banker as having an actual or interpolated maturity comparable to the remaining term of the notes to be redeemed that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of a comparable maturity to the remaining term of such notes.

Independent Investment Banker means one of the Reference Treasury Dealers, appointed by the Trustee after consultation with KLA-Tencor.

Comparable Treasury Price means, with respect to any Redemption Date, (1) the average of the Reference Treasury Dealer Quotations for such Redemption Date after excluding the highest and lowest of such Reference Treasury Dealer Quotations, or (2) if the Trustee obtains fewer than four such Reference Treasury Dealer Quotations, the average of all such quotations.

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Reference Treasury Dealer means Merrill Lynch, Pierce, Fenner & Smith Incorporated and _____, and their respective affiliates, all of which are primary U.S. government securities dealers, and their respective successors and three other nationally recognized investment banking firms that are primary U.S. government securities dealers as selected by KLA-Tencor. If any of the foregoing or their affiliates shall cease to be a primary U.S. government securities dealer in The City of New York (a Primary Treasury Dealer), we will substitute therefor another Primary Treasury Dealer.

Reference Treasury Dealer Quotations means, with respect to each Reference Treasury Dealer and any Redemption Date, the average, as determined by the Trustee, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Trustee by such Reference Treasury Dealer at 3:30 p.m., New York City time, on the third business day preceding such Redemption Date.

Remaining Scheduled Payments means, with respect to each note to be redeemed, the remaining scheduled payments of principal of and interest on the note that would be due after the related Redemption Date but for the redemption. If that Redemption Date is not an interest payment date with respect to a note, the amount of the next succeeding scheduled interest payment on the note will be reduced by the amount of interest accrued on the note to the Redemption Date.

On and after the Redemption Date, interest will cease to accrue on the notes or any portion of the notes called for redemption, unless we default in the payment of the redemption price and accrued interest. On or before the Redemption Date, we will deposit with a paying agent or the Trustee money sufficient to pay the redemption price of, and accrued interest on, the notes to be redeemed on that date.

Selection and Notice of Redemption

In the event that we choose to redeem less than all of a series of notes, selection of the notes for redemption will be made by the Trustee in compliance with the requirements of the principal national securities exchange, if any, on which the notes of that series are listed; or, if the notes of that series are not so listed, on a *pro rata* basis, by lot or by such method as the Trustee shall deem fair and appropriate.

No notes of a principal amount of \$2,000 or less shall be redeemed in part. Notice of redemption will be mailed by first-class mail at least 30 but not more than 60 days before the Redemption Date to each Holder of notes to be redeemed at its registered address. If any note is to be redeemed in part only, the notice of redemption that relates to such note shall state the portion of the principal amount thereof to be redeemed. A new note in principal amount equal to the unredeemed portion thereof will be issued in the name of the Holder thereof upon cancellation of the original note. On and after the Redemption Date, interest will cease to accrue on notes or portions thereof called for redemption as long as we have deposited with the Paying Agent funds in satisfaction of the applicable redemption price.

Repurchase Upon Change of Control Triggering Event

If a Change of Control Triggering Event (as defined below) occurs with respect to a series of notes, unless we have exercised our right to redeem the notes as described above, we will be required to make an offer to repurchase all or, at the Holder's option, any part (equal to \$2,000 or any integral multiple of \$1,000 in excess thereof), of each Holder's notes of that series pursuant to the offer described below (the Change of Control Offer) on the terms set forth in the notes. In the Change of Control Offer, we will be required to offer payment in cash equal to 101% of the aggregate principal amount of notes repurchased plus accrued and unpaid interest, if any, on the notes repurchased, to, but not including, the date of purchase (the Change of Control Payment).

Within 30 days following any Change of Control Triggering Event with respect to a series of notes, we will be required to mail a notice to Holders of notes of that series, with a copy to the Trustee for the notes,

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describing the transaction or transactions that constitute the Change of Control Triggering Event and offering to repurchase the notes on the date specified in the notice, which date will be no earlier than 30 and no later than 60 days from the date such notice is mailed (the Change of Control Payment Date), pursuant to the procedures required by the notes and described in such notice. We must comply with the requirements of applicable securities laws and regulations in connection with the repurchase of the notes as a result of a Change of Control Triggering Event.

On the Change of Control Payment Date, we will be required, to the extent lawful, to:

accept for payment all notes or portions of notes properly tendered pursuant to the Change of Control Offer;

deposit with the Paying Agent an amount equal to the Change of Control Payment in respect of all notes or portions of notes properly tendered; and

deliver or cause to be delivered to the Trustee the notes properly accepted together with an officer's certificate stating the aggregate principal amount of notes or portions of notes being purchased by us.

The Paying Agent will be required to promptly mail, to each Holder who properly tendered notes, the purchase price for such notes, and the Trustee will be required to promptly authenticate and mail (or cause to be transferred by book entry) to each such Holder a new note equal in principal amount to any unpurchased portion of the notes surrendered, if any; provided that each new note will be in a principal amount of \$2,000 or an integral multiple of \$1,000 in excess thereof.

We will not be required to make a Change of Control Offer upon a Change of Control Triggering Event if a third party makes such an offer in the manner, at the times and otherwise in compliance with the requirements for an offer made by us and such third party purchases all notes properly tendered and not withdrawn under its offer. In the event that such third party terminates or defaults its offer, we will be required to make a Change of Control Offer treating the date of such termination or default as though it were the date of the Change of Control Triggering Event.

We will comply with the requirements of Rule 14e-1 under the Exchange Act, and any other securities laws and regulations thereunder to the extent those laws and regulations are applicable in connection with the repurchase of the notes as a result of a Change of Control Triggering Event. To the extent that the provision of any such securities laws or regulations conflicts with the Change of Control Offer provisions of the notes, we will comply with those securities laws and regulations and will not be deemed to have breached our obligations under the Change of Control Offer provisions of the notes by virtue of any such conflict. For purposes of the repurchase provisions of the notes, the following terms will be applicable:

Change of Control means the occurrence of any one of the following: (1) the direct or indirect sale, lease, transfer, conveyance or other disposition (other than by way of merger, amalgamation, arrangement or consolidation), in one or a series of related transactions, of all or substantially all of our properties or assets and those of our subsidiaries, taken as a whole, to one or more persons, other than to us or one of our subsidiaries; (2) the first day on which a majority of the members of our board of directors is not composed of Continuing Directors (as defined below); (3) the consummation of any transaction including, without limitation, any merger, amalgamation, arrangement or consolidation the result of which is that any person becomes the beneficial owner, directly or indirectly, of more than 50% of our Voting Stock; (4) we consolidate with, or merge with or into, any person, or any person consolidates with, or merges with or into, us, in any such event pursuant to a transaction in which any of the outstanding Voting Stock of us or of such other person is converted into or exchanged for cash, securities or other property, other than any such transaction where the shares of our Voting Stock outstanding immediately prior to such transaction constitute, or are converted into or exchanged for, a majority of the Voting Stock of the surviving person immediately after giving effect to such transaction; or (5) the adoption of a plan relating to our liquidation or dissolution. For the purposes of this definition, person and beneficial owner have the meanings used in Section 13(d) of the Exchange Act.

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Change of Control Triggering Event with respect to a series of notes means the notes of that series cease to be rated Investment Grade by at least two of the three Rating Agencies on any date during the period (the Trigger Period) commencing on the date of the first public notice of the occurrence of a Change of Control or our intention to effect a Change of Control and ending 60 days following consummation of such Change of Control (which Trigger Period will be extended following consummation of a Change of Control for so long as any of the Rating Agencies has publicly announced that it is considering a possible ratings change). Unless at least two of the three Rating Agencies are providing a rating for the notes of a series at the commencement of any Trigger Period, the notes of that series will be deemed to have ceased to be rated Investment Grade by at least two of the three Rating Agencies during that Trigger Period. Notwithstanding the foregoing, no Change of Control Triggering Event will be deemed to have occurred in connection with any particular Change of Control unless and until such Change of Control has actually been consummated.

Continuing Directors means, as of any date of determination, any member of our Board of Directors who (1) was a member of our Board of Directors on the Issue Date; or (2) was nominated for election, elected or appointed to our Board of Directors with the approval of a majority of the Continuing Directors who were members of our Board of Directors at the time of such nomination, election or appointment (either by a specific vote or by approval by such directors of our proxy statement in which such member was named as a nominee for election as a director).

Fitch means Fitch Inc., a subsidiary of Fimalac, S.A., and its successors.

Investment Grade means a rating equal to or higher than Baa3 (or the equivalent) by Moody's, BBB- (or the equivalent) by S&P or BBB- (or the equivalent) by Fitch, and the equivalent investment grade credit rating from any replacement Rating Agency or Rating Agencies selected by us.

Moody's means Moody's Investors Service, Inc., a subsidiary of Moody's Corporation, and its successors.

Rating Agencies means (a) each of Moody's, S&P and Fitch to the extent Fitch makes its rating available; and (b) if any of the Rating Agencies ceases to rate the notes or fails to make a rating of the notes publicly available for reasons outside of our control, a nationally recognized statistical rating organization within the meaning of Rule 15c3-1(c)(2)(vi)(F) under the Exchange Act that is selected by us (as certified by a resolution of our Board of Directors) as a replacement for Moody's, S&P or Fitch, or some or all of them, as the case may be, and that is reasonably acceptable to the Trustee.

S&P means Standard & Poor's Rating Services, a division of The McGraw-Hill Companies, Inc., and its successors.

Voting Stock of any specified person as of any date means the capital stock of such person that is at the time entitled to vote generally in the election of the Board of Directors of such person.

Certain Covenants

The Indenture will contain, among others, the following covenants:

Limitations on Liens

We will not (nor will we permit any of our Subsidiaries to) issue, incur, create, assume or guarantee any Indebtedness secured by a Lien upon any Principal Property or upon any of the Capital Stock or Indebtedness of any of our Subsidiaries (whether such Principal Property, or Capital Stock or Indebtedness is now existing or owed or hereafter created or acquired) without in any such case effectively providing, concurrently with the

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issuance, incurrence, creation, assumption or guaranty of any such secured Indebtedness, or the grant of such Lien, that the notes (together with, if we shall so determine, any other Indebtedness of or guarantee by us or such Subsidiary ranking equally with the notes) shall be secured equally and ratably with (or, at our option, prior to) such secured Indebtedness. The foregoing restriction, however, will not apply to any of the following:

Liens existing on the Issue Date;

Liens on assets or property of a person at the time it becomes a Subsidiary, securing Indebtedness of only such person, provided such Indebtedness was not incurred in connection with such person or entity becoming a Subsidiary and such liens do not extend to any assets other than those of the person becoming a Subsidiary;

Liens on property or assets of a person existing at the time such person is merged into or consolidated with us or any of our Subsidiaries, or at the time of a sale, lease or other disposition of all or substantially all of the properties or assets of a person to us or any of our Subsidiaries, provided that such lien was not incurred in anticipation of the merger, consolidation, or sale, lease, other disposition or other such transaction by which such person was merged into or consolidated with us or any of our Subsidiaries;

Liens existing on assets created at the time of, or within the 12 months following, the acquisition, purchase, lease, improvement or development of such assets to secure all or a portion of the purchase price or lease for, or the costs of improvement or development of (in each case including related costs and expenses) such assets;

Liens to secure any extension, renewal, refinancing or refunding (or successive extensions, renewals, refinancings or refundings), in whole or in part, of any Indebtedness secured by liens referred to above, so long as such lien is limited to all or part of substantially the same property which secured the lien extended, renewed or replaced, and the amount of Indebtedness secured is not increased (other than by the amount equal to any costs and expenses (including any premiums, fees or penalties) incurred in connection with any extension, renewal, refinancing or refunding);

Liens in favor of only us or one or more of our Subsidiaries;

Liens in favor of the Trustee securing Indebtedness owed under the Indenture to the Trustee and granted in accordance with the Indenture;

Liens to secure Hedging Obligations; and

Liens otherwise prohibited by this covenant, securing Indebtedness which, together with the value of Attributable Debt incurred in sale and lease-back transactions permitted under Limitation on Sale and Lease-Back Transactions below, do not exceed 20% of Consolidated Net Tangible Assets measured at the date of incurrence of the Lien.

Limitation on Sale and Lease-Back Transactions

We will not, nor will we permit any of our Subsidiaries to, enter into any Sale and Lease-Back Transaction with respect to any Principal Property, other than any such Sale and Lease-Back Transaction involving a lease for a term of not more than three years or any such Sale and Lease-Back Transaction between us and one of our Subsidiaries or between our Subsidiaries, unless: (a) we or such Subsidiary would be entitled to incur Indebtedness secured by a lien on the Principal Property involved in such Sale and Lease-Back Transaction at least equal in amount to the Attributable Debt with respect to such Sale and Lease-Back Transaction, without equally and ratably securing the notes, pursuant to the

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covenant described above under the caption "Limitations on Liens"; or (b) the proceeds of such Sale and Lease-Back Transaction are at least equal to the fair market value of the affected Principal Property (as determined in good faith by our Board of Directors) and we apply an amount equal to the net proceeds of such Sale and Lease-Back Transaction within 365 days of such Sale and Lease-Back Transaction to any (or a combination) of (i) the prepayment or retirement of the notes, (ii) the prepayment or retirement (other than any mandatory retirement, mandatory prepayment or sinking fund

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payment or by payment at maturity) of other Indebtedness of us or of one of our Subsidiaries (other than Indebtedness that is subordinated to the notes or Indebtedness owed to us or one of our Subsidiaries) that matures more than 12 months after its creation or (iii) the purchase, construction, development, expansion or improvement of other comparable property.

Limitation on Mergers and Other Transactions

We may not merge or consolidate with any other person or persons (whether or not affiliated with us), and we may not sell, convey, transfer, lease or otherwise dispose of all or substantially all of our property or assets to any other person or persons (whether or not affiliated with us), unless the following conditions are satisfied:

- (1) either (a) the transaction is a merger or consolidation, and we are the surviving entity; or (b) the successor person (or the person which acquires by sale, conveyance, transfer or lease all or substantially all of our property or assets) is a corporation organized under the laws of the United States, any state thereof or the District of Columbia and expressly assumes, by a supplemental indenture satisfactory to the Trustee, all of our obligations under the notes and the Indenture;
- (2) immediately after giving effect to the transaction and treating our obligations in connection with or as a result of such transaction as having been incurred as of the time of such transaction, no Default or Event of Default shall have occurred and be continuing under the Indenture; and
- (3) an officer's certificate is delivered to the Trustee to the effect that both of the conditions set forth above have been satisfied and an opinion of counsel has been delivered to the Trustee to the effect that condition (1) set forth above has been satisfied.

In the case of any such consolidation, merger, sale, transfer or other conveyance, but not a lease, in a transaction in which there is a successor entity, the successor entity will succeed to, and be substituted for, us under the Indenture and, subject to the terms of the Indenture, we will be released from the obligation to pay principal and interest on the notes and all obligations under the Indenture.

Reports to Holders

The Indenture provides that any document or report that we are required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act will be filed with the trustee within 30 days after such document or report is required to be filed with the SEC.

Events of Default

The following events will be defined in the Indenture as Events of Default with respect to the notes of a series:

- (1) the failure to pay interest on any note of such series when the same becomes due and payable and the default continues for a period of 30 days;
- (2) the failure to pay the principal (or premium, if any) of any note of such series, when such principal becomes due and payable, at maturity, upon acceleration, upon redemption or otherwise (including the failure to make a payment to purchase notes of such series tendered pursuant to a Change of Control Offer);

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(3) a default in the performance, or breach, of our obligations under the Certain Covenants Limitation on Mergers and Other Transactions covenant described above;

(4) a Default in the observance or performance of any other covenant or agreement contained in the Indenture which Default continues for a period of 60 days after we receive written notice specifying the Default (and demanding that such Default be remedied) from the Trustee or the Holders of at least 25% of the outstanding principal amount of the notes of such series;

(5) (a) a failure to make any payment at maturity on any of our Indebtedness (other than Indebtedness owing to any of our Subsidiaries) outstanding in an amount in excess of \$75 million or its foreign currency equivalent at the time and continuance of this failure to pay after any applicable grace period or (b) a Default on any of our Indebtedness (other than Indebtedness owing to any of our Subsidiaries), which Default results in the acceleration of such Indebtedness in an amount in excess of \$75 million or its foreign currency equivalent at the time without such Indebtedness having been discharged or the acceleration having been cured, waived, rescinded or annulled, in the case of clause (a) or (b) above; provided, however, that if any failure, default or acceleration referred to in clauses 5(a) or (b) ceases or is cured, waived, rescinded or annulled, then the Event of Default under the Indenture will be deemed cured; or

(6) certain events of bankruptcy or insolvency affecting us or any of our Significant Subsidiaries.

If an Event of Default (other than an Event of Default specified in clause (6) above) shall occur and be continuing, the Trustee or the Holders of at least 25% of the principal amount of the series of notes may declare the principal of and accrued interest on all notes of the series to be due and payable by notice in writing to us and the Trustee specifying the respective Event of Default and that it is a notice of acceleration, and the same shall become immediately due and payable.

Notwithstanding the foregoing, if an Event of Default specified in clause (6) above occurs and is continuing, then all unpaid principal of and premium, if any, and accrued and unpaid interest on all notes shall automatically become and be immediately due and payable without any declaration or other act on the part of the Trustee or any Holder.

The Indenture will provide that, at any time after a declaration of acceleration with respect to a series of notes as described in the preceding paragraph, the Holders of a majority in principal amount of such series of notes (including additional notes, if any) may rescind and cancel such declaration and its consequences if:

(1) the rescission would not conflict with any judgment or decree;

(2) all existing Events of Default have been cured or waived except nonpayment of principal or interest that has become due solely because of the acceleration;

(3) to the extent the payment of such interest is lawful, interest on overdue installments of interest and overdue principal, which has become due otherwise than by such declaration of acceleration, has been paid;

(4) we have paid the Trustee its reasonable compensation and reimbursed the Trustee for its expenses, disbursements and advances; and

(5) in the event of the cure or waiver of an Event of Default of the type described in clause (6) of the description above of Events of Default, the Trustee shall have received an officer's certificate and an opinion of counsel that such Event of Default has been cured or waived.

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No such rescission shall affect any subsequent Event of Default or impair any right consequent thereto.

The Holders of a majority in principal amount of the notes of a series (including additional notes, if any) may waive any existing Default or Event of Default under the Indenture, and its consequences, except a default in the payment of the principal of or interest on any notes of such series, as applicable.

The Holders may not enforce the Indenture or the notes of a series except as provided in the Indenture and under the TIA. Subject to the provisions of the Indenture relating to the duties of the Trustee, the Trustee is under no obligation to exercise any of its rights or powers under the Indenture at the request, order or direction of any of the Holders, unless such Holders have offered to the Trustee reasonable indemnity. Subject to all provisions of the Indenture and applicable law, the Holders of a majority in aggregate principal amount of a series of notes then outstanding will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee. Nothing herein shall impair the right of a Holder to institute suit for the enforcement of any payment on or with respect to the notes.

We will be required to provide an officer's certificate to the Trustee promptly upon any such officer obtaining knowledge of any Default or Event of Default (provided that such officers shall provide such certification at least annually whether or not they know of any Default or Event of Default) that has occurred and, if applicable, describe such Default or Event of Default and the status thereof.

No Personal Liability of Directors, Officers, Employees, Incorporator and Stockholders

No director, officer, employee, incorporator, agent, stockholder or affiliate of us or any of our Subsidiaries, as such, shall have any liability for any obligations of us or any of our Subsidiaries under the notes or the Indenture or for any claim based on, in respect of, or by reason of, such obligations or their creation. Each Holder of notes by accepting a note waives and releases all such liability. This waiver and release are part of the consideration for issuance of the notes.

Legal Defeasance and Covenant Defeasance

We may, at our option and at any time, elect to have our obligations discharged with respect to the outstanding notes of a series (Legal Defeasance). Such Legal Defeasance means that we shall be deemed to have paid and discharged the entire indebtedness represented by the outstanding notes of a series, except for:

- (1) the rights of Holders to receive payments in respect of the principal of, premium, if any, and interest on the notes when such payments are due;
- (2) our obligations with respect to the notes concerning issuing temporary notes, registration of notes, mutilated, destroyed, lost or stolen notes and the maintenance of an office or agency for payments;
- (3) the rights, powers, trust, duties and immunities of the Trustee and our obligations in connection therewith; and
- (4) the Legal Defeasance provisions of the Indenture.

In addition, we may, at our option and at any time, elect to have our obligations released with respect to certain covenants that are described in the Indenture (Covenant Defeasance) and thereafter any omission to comply with such obligations shall not constitute a Default or Event of Default with respect to the notes of a series. In the event Covenant Defeasance occurs, certain events (not including non-payment, bankruptcy,

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receivership, reorganization and insolvency events) described under Events of Default will no longer constitute an Event of Default with respect to the notes.

In order to exercise either Legal Defeasance or Covenant Defeasance with respect to the notes of a series:

(1) we must irrevocably deposit with the Trustee, in trust, for the benefit of the Holders cash in U.S. dollars, non-callable U.S. government obligations or a combination thereof, in such amounts as will be sufficient, in the opinion of a nationally recognized firm of independent public accountants, to pay the principal of, premium, if any, and interest on the notes on the stated date for payment thereof or on the applicable Redemption Date, as the case may be;

(2) in the case of Legal Defeasance, we must deliver to the Trustee an opinion of counsel in the United States reasonably acceptable to the Trustee confirming that:

(a) we have received from, or there has been published by, the Internal Revenue Service a ruling; or

(b) since the date of the Indenture, there has been a change in the applicable federal income tax law,

in either case to the effect that, and based thereon such opinion of counsel shall confirm that, the Holders will not recognize income, gain or loss for federal income tax purposes as a result of such Legal Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Legal Defeasance had not occurred;

(3) in the case of Covenant Defeasance, we must deliver to the Trustee an opinion of counsel in the United States reasonably acceptable to the Trustee confirming that the Holders will not recognize income, gain or loss for federal income tax purposes as a result of such Covenant Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred;

(4) no Default or Event of Default shall have occurred and be continuing on the date of such deposit (other than a Default or an Event of Default resulting from the borrowing of funds to be applied to such deposit and the grant of any Lien securing such borrowings);

(5) such Legal Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under the Indenture (other than a Default or an Event of Default resulting from the borrowing of funds to be applied to such deposit and the grant of any Lien securing such borrowings) or any other material agreement or instrument to which we or any of our Subsidiaries is a party or by which we or any of our Subsidiaries is bound;

(6) we must deliver to the Trustee an officer's certificate and an opinion of counsel, each stating that all conditions precedent provided for or relating to the Legal Defeasance or the Covenant Defeasance have been complied with;

(7) we must deliver to the Trustee an opinion of counsel to the effect that assuming no intervening bankruptcy of us between the date of deposit and the 91st day following the date of deposit and that no Holder is an insider of us, after the 91st day following the date of deposit, the trust funds will not be subject to the effect of any applicable bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally; and

(8) certain other customary conditions precedent are satisfied.

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Satisfaction and Discharge

The Indenture will be discharged and will cease to be of further effect (except as to surviving rights or registration of transfer or exchange of the notes, as expressly provided for in the Indenture) as to all outstanding notes of a series, when:

(1) either:

(A) all notes of that series theretofore authenticated and delivered (except lost, stolen or destroyed notes which have been replaced or paid and notes for whose payment money has theretofore been deposited in trust or segregated and held in trust by us and thereafter repaid to us or discharged from such trust) have been delivered to the Trustee for cancellation; or

(B) all notes of that series not theretofore delivered to the Trustee for cancellation (1) have become due and payable or (2) will become due and payable within one year, or are to be called for redemption within one year, under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of us, and we have irrevocably deposited or caused to be deposited with the Trustee funds in an amount sufficient to pay and discharge the entire Indebtedness on the notes of that series not theretofore delivered to the Trustee for cancellation, for principal of, premium, if any, and interest on the notes of that series to the date of deposit together with irrevocable instructions from us directing the Trustee to apply such funds to the payment thereof at maturity or redemption, as the case may be;

(2) we have paid all other sums payable under the Indenture by us; and

(3) we have delivered to the Trustee an officer's certificate and an opinion of counsel stating that all conditions precedent under the Indenture relating to the satisfaction and discharge of the Indenture have been complied with.

Modification of the Indenture

From time to time, we and the Trustee, without the consent of the Holders, may amend the Indenture and the notes of a series for certain specified purposes, including:

(1) to cure any ambiguity, defect or inconsistency;

(2) to provide for uncertificated notes in addition to or in place of certificated notes;

(3) to comply with the provisions described under **Certain Covenants Limitations on Mergers and Other Transactions** ;

(4) to comply with the requirements of the SEC in order to effect or maintain the qualification of the Indenture under the Trust Indenture Act;

(5) to evidence and provide for the acceptance of appointment by a successor Trustee;

(6) to conform the text of the Indenture or the notes to any corresponding provision of this **Description of the Notes** ;

(7) to establish the form or terms of notes of any series as permitted by the terms of the Indenture;

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(8) to provide for the assumption by a successor corporation, partnership, trust or limited liability company of our obligations under the Indenture, in each case in compliance with the provisions thereof; or

(9) to make any change that would provide any additional rights or benefits to the Holders of the notes (including to secure the notes, add guarantees with respect thereto, to add to our covenants for the benefit of the Holders or to surrender any right or power conferred upon us) or that does not adversely affect the legal rights hereunder of any Holder of the notes in any material respect.

In formulating its opinion on such matters, the Trustee will be entitled to rely on such evidence as it deems appropriate, including, without limitation, solely on an opinion of counsel. Other modifications and amendments of the Indenture may be made with the consent of the Holders of a majority in principal amount of the then outstanding notes of each series affected (including additional notes, if any), except that, without the consent of each Holder affected thereby, no amendment may:

(1) reduce the principal amount of notes at maturity whose Holders must consent to an amendment;

(2) reduce the rate of, change or have the effect of changing the time for payment of interest, including defaulted interest, on any notes;

(3) reduce the principal of, change or have the effect of changing the fixed maturity of any notes, change the date on which any notes may be subject to redemption or repurchase or reduce the redemption price or repurchase price therefor;

(4) make any notes payable in currency other than that stated in the notes or change the place of payment of the notes from that stated in the notes or in the Indenture;

(5) make any change in provisions of the Indenture protecting the right of each Holder to receive payment of principal of and interest on such note on or after the due date thereof or to bring suit to enforce such payment, or permitting Holders of a majority in principal amount of notes (including additional notes, if any) to waive Defaults or Events of Default;

(6) make any change in these amendment and waiver provisions; or

(7) make any change to or modify the ranking of the notes that would adversely affect the Holders.

Governing Law

The Indenture will provide that it and the notes will be governed by, and construed in accordance with, the laws of the State of New York.

The Trustee

The Indenture will provide that, except during the continuance of an Event of Default, the Trustee will perform only such duties as are specifically set forth in the Indenture. During the existence of an Event of Default, the Trustee will exercise such rights and powers vested in it by the Indenture, and use the same degree of care and skill in its exercise as a prudent person would exercise or use under the circumstances in the conduct of its own affairs.

The Indenture and the provisions of the TIA contain certain limitations on the rights of the Trustee, should it become a creditor of us, to obtain payments of claims in certain cases or to realize on certain property

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received in respect of any such claim as security or otherwise. Subject to the TIA, the Trustee will be permitted to engage in other transactions; provided that if the Trustee acquires any conflicting interest as described in the TIA, it must eliminate such conflict or resign.

Certain Definitions

Set forth below is a summary of certain of the defined terms used in the Indenture. Reference is made to the Indenture for the definition of all terms used herein for which no definition is provided.

Attributable Debt with regard to a Sale and Lease-Back Transaction with respect to any Principal Property means, at the time of determination, the present value of the total net amount of rent required to be paid under such lease during the remaining term thereof (including any period for which such lease has been extended), discounted at the rate of interest set forth or implicit in the terms of such lease (or, if not practicable to determine such rate, the weighted average interest rate per annum borne by the securities then outstanding under the Indenture) compounded semi-annually. In the case of any lease which is terminable by the lessee upon the payment of a penalty, such net amount shall be the lesser of (x) the net amount determined assuming termination upon the first date such lease may be terminated (in which case the net amount shall also include the amount of the penalty, but shall not include any rent that would be required to be paid under such lease subsequent to the first date upon which it may be so terminated) or (y) the net amount determined assuming no such termination.

Board of Directors means, as to any person, the board of directors (or similar governing body) of such person or any duly authorized committee thereof.

Capital Stock means:

(1) with respect to any person that is a corporation, any and all shares, interests, participations or other equivalents (however designated and whether or not voting) of corporate stock, including each class of Common Stock and Preferred Stock of such person, and all options, warrants or other rights to purchase or acquire any of the foregoing; and

(2) with respect to any person that is not a corporation, any and all partnership, membership or other equity interests of such person, and all options, warrants or other rights to purchase or acquire any of the foregoing.

Common Stock of any person means any and all shares, interests or other participations in, and other equivalents (however designated and whether voting or non-voting) of, such person's common stock, whether outstanding on the Issue Date or issued after the Issue Date, and includes, without limitation, all series and classes of such common stock.

Consolidated Net Tangible Assets means, as of any date on which we effect a transaction requiring such Consolidated Net Tangible Assets to be measured hereunder, the aggregate amount of assets (less applicable reserves) after deducting therefrom: (a) all current liabilities, except for current maturities of long-term debt and obligations under capital leases; and (b) intangible assets (including goodwill), to the extent included in said aggregate amount of assets, all as set forth on our most recent consolidated balance sheet and computed in accordance with generally accepted accounting principles in the United States of America applied on a consistent basis.

Default means an event or condition the occurrence of which is, or with the lapse of time or the giving of notice or both would be, an Event of Default.

Hedging Obligations means:

(1) interest rate swap agreements (whether from fixed to floating or from floating to fixed), interest rate cap agreements and interest rate collar agreements;

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- (2) other agreements or arrangements designed to manage interest rates or interest rate risk;
- (3) other agreements or arrangements designed to protect against fluctuations in currency exchange rates or commodity prices; and
- (4) other agreements or arrangements designed to protect against fluctuations in equity prices.

Indebtedness means with respect to any person, without duplication:

- (1) all obligations of such person for borrowed money; and
- (2) all obligations of such person evidenced by bonds, debentures, notes or other similar instruments.

Issue Date means the date of original issuance of the notes but not any additional notes.

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

Preferred Stock of any person means any Capital Stock of such person that has preferential rights to any other Capital Stock of such person with respect to dividends or redemptions or upon liquidation.

Principal Property means the land, improvements, buildings, fixtures and equipment (including any leasehold interest therein) constituting the principal corporate office, any manufacturing, assembly or test plant, or any manufacturing, assembly, test, distribution or research facility (in each case, whether now owned or hereafter acquired) which is owned or leased by us or any of our Subsidiaries unless our Board of Directors has determined in good faith that such office, plant or facility is not of material importance to the total business conducted by us and our Subsidiaries taken as a whole. With respect to any Sale and Lease-Back Transaction or series of related Sale and Lease-Back Transactions, the determination of whether any property is a Principal Property shall be determined by reference to all properties affected by such transaction or series of transactions.

Sale and Lease-Back Transaction means any arrangement with any person providing for the leasing by us or any of our Subsidiaries of any Principal Property, whether now owned or hereafter acquired, which Principal Property has been or is to be sold or transferred by us or such Subsidiary to such person.

Significant Subsidiary, with respect to any person, means any Subsidiary of such person that satisfies the criteria for a significant subsidiary set forth in Rule 1-02(w) of Regulation S-X under the Exchange Act.

Subsidiary means any corporation, limited liability company or other similar type of business entity in which we and/or one or more of our Subsidiaries together own more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency) to vote in the election of the board of directors or similar governing body of such corporation, limited liability company or other similar type of business entity, directly or indirectly.

Book-Entry Settlement

We will issue the notes in the form of one or more permanent global notes in definitive, fully registered, book-entry form. The global notes will be deposited with or on behalf of The Depository Trust Company (the Depository or DTC) and registered in the name of Cede & Co., as nominee of DTC, or will remain in the custody of the Trustee in accordance with arrangements between DTC and the Trustee.

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If you wish to hold notes through the DTC system, you must either be a direct participant in DTC or hold through a direct participant in DTC. Direct participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations that have accounts with DTC. For those holders of notes outside the United States, Euroclear and Clearstream (both described below) participate in DTC through their New York depositories (each, a U.S. Depository). Indirect participants are securities brokers and dealers, banks and trust companies that do not have an account with DTC, but that clear through or maintain a custodial relationship with a direct participant. Thus, indirect participants have access to the DTC system through direct participants or through other indirect participants that have access through direct participants.

DTC may grant proxies or authorize its participants (or persons holding beneficial interests in the global notes through these participants) to exercise any rights of a holder or take any other actions that a holder is entitled to take under the Indenture or the notes. The ability of Euroclear or Clearstream to take actions as a holder of the notes under the Indenture will be limited by the ability of their respective depositories to carry out such actions for them through DTC. Euroclear and Clearstream will take such actions only in accordance with their respective rules and procedures.

The information in this section concerning DTC, Euroclear and Clearstream and their book-entry systems has been obtained from sources we believe to be reliable, but we make no representation or warranty with respect to this information. DTC, Euroclear and Clearstream are under no obligation to perform or continue to perform the procedures described below, and they may modify or discontinue them at any time. We and the Trustee will not be responsible for DTC's, Euroclear's or Clearstream's performance of their obligations under their rules and procedures, or for the performance by direct or indirect participants of their obligations under the rules and procedures of the clearance systems.

Transfers within DTC, Euroclear and Clearstream will be in accordance with the usual rules and operating procedures of the relevant system. Cross-market transfers between investors who hold or who will hold any notes through DTC and investors who hold or will hold any notes through Euroclear or Clearstream will be effected in DTC through the respective depositories of Euroclear and Clearstream.

So long as DTC or its nominee is the registered owner of a global note, DTC or that nominee will be considered the sole owner or holder of the notes represented by that global note for all purposes under the Indenture and under the notes. Except as provided below, owners of beneficial interests in a global note will not be entitled to have notes represented by that global note registered in their names, will not receive or be entitled to receive physical delivery of certificated notes and will not be considered the owners or holders thereof under the Indenture or under the notes for any purpose, including with respect to the giving of any direction, instruction or approval to the Trustee. Accordingly, each holder owning a beneficial interest in a global note must rely on the procedures of DTC and, if that holder is not a direct or indirect participant, on the procedures of the participant through which that holder owns its interest, to exercise any rights of a holder of notes under the Indenture or the global note.

Neither we nor the Trustee will have any responsibility or liability for any aspect of the records relating to or payments made on account of the notes by DTC, or for maintaining, supervising or reviewing any records of DTC relating to the notes.

Payments on the notes represented by the global notes will be made to DTC or its nominee, as the case may be, as the registered owner thereof. We expect that DTC or its nominee, upon receipt of any payment on the notes represented by a global note, will credit participants' accounts with payments in amounts proportionate to their respective beneficial interests in the global note as shown in the records of DTC or its nominee. We also expect that payments by participants to owners of beneficial interests in the global note held through such participants will be governed by standing instructions and customary practice as is now the case with notes held for the accounts of customers registered in the names of nominees for such customers. The participants will be responsible for those payments.

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The laws of some states require certain purchasers of notes to take physical delivery of the notes in definitive form. These laws may impair your ability to transfer beneficial interests in the global note or notes to such purchasers. DTC can act only on behalf of its direct participants, who in turn act on behalf of indirect participants and certain banks. Thus, your ability to pledge a beneficial interest in the global note or notes to persons that do not participate in the DTC system, and to take other actions, may be limited because you will not possess a physical certificate that represents your interest.

The Depository Trust Company

DTC has advised us as follows:

DTC is a limited-purpose trust company organized under the New York Banking Law, a banking organization within the meaning of the New York Banking Law, a member of the Federal Reserve System, a clearing corporation within the meaning of the New York Uniform Commercial Code and a clearing agency registered under Section 17A of the Exchange Act;

DTC holds securities that its participants deposit with DTC and facilitates the settlement among participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in participants' accounts, thereby eliminating the need for physical movement of securities certificates;

direct participants include securities brokers and dealers (including the underwriters), banks, trust companies, clearing corporations and other organizations;

DTC is owned by a number of its direct participants and by the New York Stock Exchange, Inc., the American Stock Exchange, Inc. and the Financial Industry Regulatory Authority;

access to the DTC system is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a direct participant, either directly or indirectly; and

the rules applicable to DTC and its participants are on file with the SEC.

Transfers between participants in DTC will be effected in accordance with DTC's procedures, and will be settled in same-day funds. Transfers between participants in Euroclear and Clearstream will be effected in accordance with their respective rules and operating procedures. Subject to compliance with the transfer restrictions applicable to the notes described herein, cross-market transfers between the participants in DTC, on the one hand, and Euroclear and Clearstream participants, on the other hand, will be effected through DTC in accordance with DTC's rules on behalf of Euroclear or Clearstream, as the case may be, by its respective depository; however, such cross-market transactions will require delivery of instructions to Euroclear or Clearstream, as the case may be, by the counterparty in such system in accordance with the rules and procedures and within the established deadlines (Brussels time) of such system. Euroclear or Clearstream, as the case may be, will, if the transaction meets its settlement requirements, deliver instructions to its respective depository to take action to effect final settlement on its behalf by delivering or receiving interests in the relevant global note in DTC, and making or receiving payment in accordance with normal procedures for same-day funds settlement applicable to DTC. Euroclear participants and Clearstream participants may not deliver instructions directly to the depositories for Euroclear or Clearstream.

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Certificated Notes

We will issue certificated notes to each person that DTC identifies as the beneficial owner of the notes represented by the global notes upon surrender by DTC of the global notes only if:

DTC notifies us that it is no longer willing or able to act as a depository for the global notes, and we have not appointed a successor depository within 90 days of that notice;

we determine not to have the notes represented by global notes; or

an Event of Default has occurred and is continuing and a holder of notes requests the issuance of certificated notes. Neither we nor the Trustee will be liable for any delay by DTC, its nominee or any direct or indirect participant in identifying the beneficial owners of the related notes. We and the Trustee may conclusively rely on, and will be protected in relying on, instructions from DTC or its nominee for all purposes, including with respect to the registration and delivery, and the respective principal amounts, of the notes to be issued.

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CERTAIN U.S. FEDERAL INCOME TAX CONSIDERATIONS

The following is a summary of the material U.S. federal tax consequences of ownership and disposition of the notes. This discussion only applies to notes that meet both of the following conditions:

they are purchased by those initial holders who purchase notes on original issuance for the issue price for the notes, which will equal the first price to the public (not including bond houses, brokers or similar persons or organizations acting in the capacity of underwriters, placement agents or wholesalers) at which a substantial amount of the notes is sold for money; and

they are held as capital assets.

This discussion does not describe all of the tax consequences that may be relevant to holders in light of their particular circumstances or to holders subject to special rules, such as:

certain financial institutions;

insurance companies;

dealers in securities or foreign currencies;

persons holding notes as part of a hedge or other integrated transaction;

U.S. Holders (as defined below) whose functional currency is not the U.S. dollar;

partnerships or other entities classified as partnerships for U.S. federal income tax purposes; or

persons subject to the alternative minimum tax.

This summary is based on the Internal Revenue Code of 1986, as amended to the date hereof, administrative pronouncements, judicial decisions and final, temporary and proposed Treasury Regulations, changes to any of which subsequent to the date of this prospectus may be retroactive and may affect the tax consequences described herein. Persons considering the purchase of notes are urged to consult their tax advisers with regard to the application of the U.S. federal income tax laws to their particular situations as well as any tax consequences arising under the laws of any state, local or foreign taxing jurisdiction.

Tax Consequences to U.S. Holders

As used herein, the term "U.S. Holder" means a beneficial owner of a note that is for U.S. federal income tax purposes:

a citizen or resident of the United States;

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a corporation or other entity taxable as a corporation for U.S. federal income tax purposes, created or organized in or under the laws of the United States or of any political subdivision thereof; or

an estate or trust the income of which is subject to U.S. federal income taxation regardless of its source.

If a partnership (including for this purpose any entity treated as a partnership for U.S. federal income tax purposes) is a beneficial owner of a note, the treatment of a partner in the partnership generally will depend on the status of the partner and the activities of the partnership. Partnerships and partners in such partnerships should consult their tax advisors about the U.S. federal income tax consequences of owning and disposing of a note.

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Payments of Interest

The notes will be issued without original issue discount for U.S. federal income tax purposes. Accordingly, interest paid on a note will be taxable to a U.S. Holder as ordinary income at the time it accrues or is received in accordance with the holder's method of accounting for U.S. federal income tax purposes.

Potential Contingent Payment Debt Treatment

Upon the occurrence of a Change of Control Triggering Event, KLA-Tencor would generally be required to repurchase the notes at 101% of their principal amount plus accrued and unpaid interest. Although the issue is not free from doubt, KLA-Tencor believes that the possibility of such repurchase does not result in the notes being treated as contingent payment debt instruments under the applicable Treasury regulations. KLA-Tencor's position is not binding on the Internal Revenue Service (the "IRS"). If the IRS takes a contrary position, U.S. Holders may be required to treat any gain recognized on the sale or other disposition of the notes as ordinary income rather than as capital gain. Furthermore, U.S. Holders would be required to accrue interest income on a constant yield basis at an assumed yield determined at the time of issuance of the notes (which is not expected to differ significantly from the interest rate on the notes), with adjustments to such accruals when any contingent payments are made that differ from the payments calculated based on the assumed yield. U.S. Holders should consult their tax advisors regarding the tax consequences of the notes being treated as contingent payment debt instruments. The remainder of this discussion assumes that the notes are not treated as contingent payment debt instruments.

Sale, Exchange or Other Taxable Disposition of the Notes

Upon the sale, exchange or retirement of a note, a U.S. Holder will recognize taxable gain or loss equal to the difference between the amount realized on the sale, exchange or retirement and the holder's adjusted tax basis in the note. A U.S. Holder's adjusted tax basis in a note is generally equal to the cost of the note to such holder. For these purposes, the amount realized does not include any amount attributable to accrued interest. Amounts attributable to accrued interest are treated as interest as described under "Payments of Interest" above.

Gain or loss realized on the sale, exchange or retirement of a note will generally be capital gain or loss and will be long-term capital gain or loss if at the time of sale, exchange or retirement the note has been held for more than one year. The deductibility of capital losses is subject to limitations.

Backup Withholding and Information Reporting

Information returns will be filed with the IRS in connection with payments on the notes and the proceeds from a sale or other disposition of the notes. A U.S. Holder will be subject to U.S. backup withholding on these payments if the U.S. Holder fails to provide its taxpayer identification number to the paying agent and comply with certain certification procedures or otherwise establish an exemption from backup withholding. The amount of any backup withholding from a payment to a U.S. Holder will be allowed as a credit against the U.S. Holder's U.S. federal income tax liability and may entitle the U.S. Holder to a refund, provided that the required information is timely furnished to the IRS.

Tax Consequences to Non-U.S. Holders

As used herein, the term "Non-U.S. Holder" means a beneficial owner of a note that is, for U.S. federal income tax purposes:

an individual who is classified as a nonresident for U.S. federal income tax purposes;

a foreign corporation; or

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a foreign estate or trust.

Non-U.S. Holder does not include a holder who is an individual present in the United States for 183 days or more in the taxable year of disposition and who is not otherwise a resident of the United States for U.S. federal income tax purposes. Such a holder is urged to consult his or her own tax advisor regarding the U.S. federal income tax consequences of the sale, exchange or other disposition of a note.

Payments on the Notes

Subject to the discussion below concerning backup withholding, payments of principal and interest on the notes by KLA-Tencor or any paying agent to any Non-U.S. Holder will not be subject to U.S. federal withholding tax, provided that, in the case of interest,

the holder does not own, actually or constructively, 10 percent or more of the total combined voting power of all classes of stock of KLA-Tencor entitled to vote and is not a controlled foreign corporation related, directly or indirectly, to KLA-Tencor through stock ownership;

the certification requirement described below has been fulfilled with respect to the beneficial owner, as discussed below; and

the holder is not a bank whose receipt of interest on a note is described in Section 881(c)(3)(A) of the Code.

Interest will not be exempt from withholding tax unless the beneficial owner of that note certifies on IRS Form W-8BEN (or any successor form), under penalties of perjury, that it is not a United States person.

If a Non-U.S. Holder of a note is engaged in a trade or business in the United States, and if interest on the note is effectively connected with the conduct of this trade or business, the Non-U.S. Holder, although exempt from the withholding tax discussed in the preceding paragraph, will generally be taxed in the same manner as a U.S. Holder (see Tax Consequences to U.S. Holders above), subject to an applicable income tax treaty providing otherwise. Such a Non-U.S. Holder will be required to provide to KLA-Tencor a properly executed IRS Form W-8ECI (or any successor form) in order to claim an exemption from withholding tax. These holders should consult their own tax advisors with respect to other U.S. tax consequences of the ownership and disposition of notes, including the possible imposition of a 30% branch profits tax.

Sale, Exchange or Other Disposition of the Notes

Subject to the discussion below concerning backup withholding, a Non-U.S. Holder generally will not be subject to U.S. federal income tax on gain recognized on a sale or other disposition of notes or common stock, unless the gain is effectively connected with a trade or business of the Non-U.S. Holder in the United States, subject to an applicable income tax treaty providing otherwise.

Backup Withholding and Information Reporting

Information returns will be filed with the IRS in connection with payments on the notes. Unless the Non-U.S. Holder complies with certification procedures to establish that it is not a United States person, information returns may be filed with the IRS in connection with the proceeds from a sale or other disposition of the notes and the Non-U.S. Holder may be subject to U.S. backup withholding tax on payments on the notes or on the proceeds from a sale or other disposition of the notes. The certification procedures required to claim the exemption from withholding tax on interest described above will satisfy the certification requirements necessary to avoid backup withholding as well. The amount of any backup withholding from a payment to a Non-U.S. Holder will be allowed as a credit against the Non-U.S. Holder's U.S. federal income tax liability and may entitle the Non-U.S. Holder to a refund, provided that the required information is timely furnished to the IRS.

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UNDERWRITING

We intend to offer the notes through the underwriters named below. Subject to the terms and conditions contained in a underwriting agreement between us and the underwriters, we have agreed to sell to the underwriters, and the underwriters severally have agreed to purchase from us, the principal amount of the notes listed opposite their names below.

<u>Underwriter</u>	Principal Amount
Merrill Lynch, Pierce, Fenner & Smith Incorporated	\$
Total	\$

The underwriters have agreed to purchase all of the notes being sold pursuant to the underwriting agreement if any of these notes are purchased. If an underwriter defaults, the underwriting agreement provides that the purchase commitments of the nondefaulting underwriters may be increased or the underwriting agreement may be terminated. The underwriters have advised us that they propose initially to offer the notes to the public at the price listed on the cover page of this prospectus.

We have agreed to indemnify the underwriters against certain liabilities, including liabilities under the Securities Act, or to contribute to payments the underwriters may be required to make in respect of those liabilities.

The underwriters are offering the notes, subject to prior sale, when, as and if issued to and accepted by them, subject to approval of legal matters by their counsel, including the validity of the notes, and other conditions contained in the underwriting agreement, such as the receipt by the underwriters of officers' certificates and legal opinions. The underwriters reserve the right to withdraw, cancel or modify offers to investors and to reject orders in whole or in part.

Commissions and Discounts

The underwriters have advised us that they propose initially to offer the notes to the public at the public offering price on the cover page of this prospectus and some of the notes to dealers at the public offering price less a concession not to exceed % of the principal amount of the notes. The underwriters may allow, and dealers may reallow a concession not to exceed % of the principal amount of the notes on sale to other dealers. After the initial public offering, the public offering prices, concessions and discounts may be changed.

The expenses of the offering, not including the underwriters' discount, are estimated to be \$ and are payable by us.

We expect delivery of the notes will be made against payment therefor on or about , 2008, which is the third business day following the date of pricing of the notes.

Selling Restrictions

In relation to each Member State of the European Economic Area (each, a Relevant Member State) which has implemented the Prospectus Directive (as defined below), each underwriter has represented and agreed that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the Relevant Implementation Date), it has not made and will not make an offer of the notes to the public in that Relevant Member State prior to the publication of a prospectus in relation to the notes which

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has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, all in accordance with the Prospectus Directive, except that it may, with effect from and including the Relevant Implementation Date, make an offer of the notes to the public in that Relevant Member State at any time:

(a) to legal entities which are authorized or regulated to operate in the financial markets or, if not so authorized or regulated, whose corporate purpose is solely to invest in securities;

(b) to any legal entity which has two or more of (1) an average of at least 250 employees during the last financial year; (2) a total balance sheet of more than 43,000,000; and (3) an annual net turnover of more than 50,000,000, as shown in its last annual or consolidated accounts; or

(c) in any other circumstances which do not require the publication by the issuer of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an offer of notes to the public in relation to any notes in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and the notes to be offered so as to enable an investor to decide to purchase or subscribe the notes, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression Prospectus Directive means Directive 2003/71/EC and includes any relevant implementing measure in each Relevant Member State.

Each of the underwriters has represented and agreed that:

it has only communicated or caused to be communicated and will only communicate or cause to be communicated any invitation or inducement to engage in investment activity (within the meaning of section 21 of the Financial Services and Markets Act 2000 (the FSMA)) received by it in connection with the issue or sale of the notes in circumstances in which section 21(1) of the FSMA does not apply to us;

it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to the notes in, from or otherwise involving the United Kingdom;

the offering of the notes has not been cleared by CONSOB (the Italian Securities Exchange Commission) pursuant to Italian securities legislation, and accordingly, no notes will be offered, sold or delivered, nor will copies of this prospectus or of any other document relating to the notes be distributed, in the Republic of Italy, except to professional investors (*operatori qualificati*), as defined in Article 31, second paragraph, of CONSOB Regulation No. 11522 of July 1, 1998, as amended; and

it has not, directly or indirectly, offered or sold and will not, directly or indirectly, offer or sell in or outside The Netherlands any notes other than to persons who trade or invest in securities in the conduct of a profession or business (which includes banks, stockbrokers, insurance companies, investment undertakings, pension funds, other institutional investors and finance companies and treasury departments of large enterprises).

New Issue of Notes

The notes are a new issue of securities with no established trading market. We do not intend to apply for listing of the notes on any national securities exchange or for quotation of the notes on any automated dealer quotation system. The underwriters have advised us that they presently intend to make a market in the notes after completion of this offering. However, they are under no obligation to do so and may discontinue any market-making activities at any time without any notice.

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We cannot assure the liquidity of the trading market for the notes or that an active public market for the notes will develop. If an active trading market for the notes does not develop, the market price and liquidity of the notes may be adversely affected. If the notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, our performance and other factors.

Price Stabilization and Short Positions

In connection with the offering, the underwriters may engage in transactions that stabilize the market price of the notes. Such transactions consist of bids or purchases to peg, fix or maintain the price of the notes. If the underwriters create a short position in the notes in connection with the offering, i.e., if they sell more notes than are listed on the cover page of this prospectus, the underwriters may reduce that short position by purchasing notes in the open market. Purchases of a security to stabilize the price or to reduce a short position may cause the price of the security to be higher than it might be in the absence of such purchases.

Neither we nor any of the underwriters makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of the notes. In addition, neither we nor any of the underwriters makes any representation that the underwriters will engage in these transactions or that these transactions, once commenced, will not be discontinued without notice.

Other Relationships

In the ordinary course of business, the underwriters and/or their respective affiliates have provided in the past and may provide in the future investment banking, commercial lending, financial advisory and other commercial dealings in the ordinary course of business to us and our affiliates. They have received customary fees and commissions for these transactions. Specifically, an affiliate of Merrill Lynch, Pierce, Fenner & Smith Incorporated served as agent in connection with our \$750 million accelerated share repurchase program in February 2007.

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LEGAL MATTERS

Certain legal matters in connection with our offering of the notes will be passed upon for us by Davis Polk & Wardwell, Menlo Park, California and for the underwriters by Shearman & Sterling LLP, New York, New York.

EXPERTS

The financial statements, financial statement schedule and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated herein by reference to the Annual Report on Form 10-K for the year ended June 30, 2007 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

This prospectus is part of a registration statement on Form S-3 that we have filed with the SEC. Certain information in the registration statement has been omitted from this prospectus in accordance with the rules of the SEC.

We file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy any document that we file at the Public Reference Room of the SEC at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. Our SEC filings are also available to the public at the SEC's website at www.sec.gov.

INCORPORATION BY REFERENCE

The SEC allows us to incorporate by reference the information we file with it, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below (except the information contained in such documents to the extent furnished and not filed) and any future filings pursuant to Section 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of the preliminary prospectus and prior to the termination of the offering under this prospectus:

- (1) Annual Report on Form 10-K for the year ended June 30, 2007;
- (2) Quarterly Reports on Form 10-Q for the quarters ended September 30, 2007, December 31, 2007 and March 31, 2008; and
- (3) Current Reports on Form 8-K filed on July 25, 2007, August 9, 2007, August 14, 2007, September 25, 2007, November 13, 2007, January 24, 2008 (Item 8.01 only), February 19, 2008, February 21, 2008, March 3, 2008 and April 8, 2008.

You may request a copy of these filings at no cost by contacting KLA-Tencor's Investor Relations department by calling (408) 875-6219 or by writing to Investor Relations, KLA-Tencor Corporation, One Technology Drive, Milpitas, California 95035.

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\$

KLA-Tencor Corporation

% Senior Notes due

PROSPECTUS

Sole Book-Running Manager

Merrill Lynch & Co.

, 2008

Table of Contents**PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****Item 14. Other Expenses of Issuance and Distribution.**

The following table sets forth all expenses, other than the underwriting discounts and commissions, payable by the Registrant in connection with the sale of the securities being registered. All the amounts shown are estimates except for the registration fee.

Securities and Exchange Commission Registration Fee	\$	*
Legal Fees and Expenses	\$	400,000
Accounting Fees and Expenses	\$	115,000
Trustee Fees	\$	10,000
Printing and Engraving Expenses	\$	15,000
Miscellaneous	\$	
Total	\$	*

* Omitted because the registration fee is being deferred pursuant to Rule 456(b).

Item 15. Indemnification of Officers and Directors.

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify its directors and officers as well as other employees and individuals against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any threatened, pending or completed actions, suits or proceedings in which such person is made a party by reason of such person being or having been a director, officer, employee or agent to the Registrant. The Delaware General Corporation Law provides that Section 145 is not exclusive of other rights to which those seeking indemnification may be entitled under any bylaw, agreement, vote of stockholders or disinterested directors or otherwise. Registrant's amended and restated certificate of incorporation and Article VIII of the Registrant's amended and restated bylaws provide for indemnification by the Registrant of its directors, officers and employees to the fullest extent permitted by the Delaware General Corporation Law.

Section 102(b)(7) of the Delaware General Corporation Law permits a corporation to provide in its certificate of incorporation that a director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) for unlawful payments of dividends or unlawful stock repurchases, redemptions or other distributions, or (iv) for any transaction from which the director derived an improper personal benefit. The Registrant's certificate of incorporation provides for such limitation of liability.

The Registrant maintains standard policies of insurance under which coverage is provided (a) to its directors and officers against loss arising from claims made by reason of breach of duty or other wrongful act, and (b) to the Registrant with respect to payments which may be made by the Registrant to such officers and directors pursuant to the above indemnification provision or otherwise as a matter of law.

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Item 16. Exhibits.

The following exhibits are filed as part of this Registration Statement:

Exhibit

Number	Exhibit Description
1.1	Form of Underwriting Agreement
4.1	Form of Indenture
4.2	Form of Senior Note (included in Exhibit 4.1)
5.1	Opinion of Davis Polk & Wardwell
12.1	Computation of Ratio of Earnings to Fixed Charges
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm
23.2	Consent of Davis Polk & Wardwell (included in Exhibit 5.1)
24.1	Power of Attorney (included on the signature page of the Registration Statement)
25.1	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as amended, of Wells Fargo Bank, N.A., as Trustee under the Indenture for the Senior Notes

Item 17. Undertakings.

The undersigned Registrant hereby undertakes:

1. To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20% change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement;

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.

Provided however, that: paragraphs (1)(i), (1)(ii) and (1)(iii) of this section do not apply if the registration statement is on Form S-3 or Form F-3 and the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to section 13 or section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

2. That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities

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offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

3. To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

4. That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date.

5. That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities:

The undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and

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(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

6. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to section 13(a) or section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

7. Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

Table of Contents**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Milpitas, State of California, on April 28, 2008.

KLA-TENCOR CORPORATION

By: /s/ RICHARD P. WALLACE
Richard P. Wallace
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Richard P. Wallace and John H. Kispert, and each of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto each said attorney-in-fact and agent full power and authority to do and perform each and every act in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or either of them or their or his or her substitute or substitutes may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ EDWARD W. BARNHOLT Edward W. Barnholt	Chairman of the Board	April 25, 2008
/s/ RICHARD P. WALLACE Richard P. Wallace	Chief Executive Officer and Director	April 28, 2008
/s/ JOHN H. KISPERT John H. Kispert	President, Chief Operating Officer and Chief Financial Officer	April 28, 2008
/s/ VIRENDRA A. KIRLOSKAR Virendra A. Kirloskar	Chief Accounting Officer	April 28, 2008
/s/ STEPHEN P. KAUFMAN Stephen P. Kaufman	Director	April 28, 2008
/s/ ROBERT M. CALDERONI Robert M. Calderoni	Director	April 28, 2008

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/s/ JOHN T. DICKSON

Director

April 24, 2008

John T. Dickson

/s/ KEVIN J. KENNEDY

Director

April 28, 2008

Kevin J. Kennedy

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Signature	Title	Date
/s/ LIDA URBANEK Lida Urbanek	Director	April 23, 2008
/s/ H. RAYMOND BINGHAM H. Raymond Bingham	Director	April 28, 2008
/s/ ROBERT T. BOND Robert T. Bond	Director	April 28, 2008
/s/ DAVID C. WANG David C. Wang	Director	April 28, 2008

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INDEX TO EXHIBITS

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