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SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the Quarterly Period Ended March 31, 2003
or

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

For the transition period from _____ to _____

000-31311
(Commission File Number)

PDF SOLUTIONS, INC.

(Exact name of Registrant as specified in its charter)

Delaware	**25-1701361**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
333 West San Carlos Street, Suite 700 San Jose, California	**95110**
(Address of Registrant's principal executive offices)	(Zip Code)

(408) 280-7900
(Registrant's telephone number, including area code)

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes [X] No [ ]

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

The number of shares outstanding of the Registrant's Common Stock as of May 9, 2003 was 23,131,070.

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PART I — FINANCIAL INFORMATION

Item 1. Financial Statements

PDF SOLUTIONS, INC.
CONSOLIDATED BALANCE SHEETS
(Unaudited)
(In thousands, except per share data)

	March 31, 2003	December 31, 2002
ASSETS		
Current assets:		
Cash and cash equivalents	$ 71,866	$ 71,490
Accounts receivable, net of allowance of $504 in 2003 and 2002	7,461	7,924
Prepaid expenses and other current assets	4,463	4,406
Total current assets	83,790	83,820
Property and equipment, net	3,321	3,533
Goodwill	662	662
Intangible assets, net	179	220
Other assets	1,776	1,564
Total assets	$ 89,728	$ 89,799
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 441	$ 499
Accrued compensation and related benefits	2,007	1,143
Other accrued liabilities	1,802	1,652
Taxes payable	971	1,838
Deferred revenues	4,403	4,496
Billings in excess of recognized revenue	1,102	606
Current portion of long-term debt	17	17
Total current liabilities	10,743	10,251
Long-term debt	10	15
Deferred tax liabilities	722	752
Deferred rent	20	39
Stockholders' equity:		
Preferred stock, $0.00015 par value, 5,000 shares authorized; no shares issued and outstanding; in 2003 and 2002	—	—
Common stock, $0.00015 par value, 75,000 shares authorized; shares issued and outstanding: 23,128 in 2003 and 23,130 in 2002	3	3
Additional paid-in-capital	100,080	99,884
Deferred stock-based compensation	(893)	(1,340)
Notes receivable from stockholders	(4,830)	(4,998)
Accumulated deficit	(16,179)	(14,845)
Cumulative other comprehensive income	52	38
Total stockholders' equity	78,233	78,742
Total liabilities and stockholders' equity	$ 89,728	$ 89,799

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF OPERATIONS
(UNAUDITED)
(In thousands, except per share data)

	Three Months Ended	
	March 31, 2003	March 31, 2002
Revenue:		
Design-to-silicon yield solutions	$ 8,108	$ 8,380
Gain share	959	3,077
Total revenue	$ 9,067	$11,457
Cost and expenses:		
Cost of design-to-silicon yield solutions	3,444	3,864
Research and development	4,332	3,190
Selling, general and administrative	2,703	2,554
Stock-based compensation	649	788
Total costs and expenses	11,128	10,396
Income (loss) from operations	(2,061)	1,061
Interest and other income, net	375	359
Income (loss) before taxes	(1,686)	1,420
Tax (benefit) provision	(352)	840
Net income (loss)	$ (1,334)	$ 580
Net income (loss) per share:		
Basic	$ (0.06)	$ 0.03
Diluted	$ (0.06)	$ 0.02
Weighted average common shares:		
Basic	22,488	21,638
Diluted	22,488	23,441
* Stock-based compensation:		
Cost of design-to-silicon yield solutions	$ 130	$ 263
Research and development	408	438
Selling, general and administrative	111	87
	$ 649	$ 788

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)
(In thousands)

	Three Months Ended	
	March 31, 2003	March 31, 2002
Operating activities:		
Net income (loss)	$ (1,334)	$ 580
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		
Depreciation and amortization	525	330
Stock-based compensation	649	788
Deferred taxes	(97)	(1,177)
Deferred revenues	(93)	37
Changes in assets and liabilities:		
Accounts receivable	463	(4,607)
Prepaid expenses and other assets	(202)	(84)
Accounts payable	(58)	(33)
Accrued compensation and related benefits	864	756
Billings in excess of recognized revenue	496	535
Other accrued liabilities	131	(168)
Taxes payable	(867)	1,975
Net cash provided by (used by) operating activities	477	(1,068)
Investing activities:		
Purchases of property and equipment	(272)	(356)
Net cash used in investing activities	(272)	(356)
Financing activities:		
Exercise of stock options	—	136
Collection of notes receivable from shareholders	162	350
Principal payments on long-term debt and capital lease obligations	(5)	(11)
Net cash provided by financing activities	157	475
Effect of exchange rate changes on cash	14	(8)
Net increase (decrease) in cash and cash equivalents	376	(957)
Cash and cash equivalents, beginning of period	71,490	70,835
Cash and cash equivalents, end of period	$71,866	$69,878
Noncash financing activity:		
Repurchase of common stock through cancellation of notes receivable	$ 6	$ 59
Supplemental disclosure of cash flow information —		
Cash paid during the period for:		
Taxes	$ 600	$ 100
Interest	$ 1	$ 1

See notes to consolidated financial statements.

PDF SOLUTIONS, INC.
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. BASIS OF PRESENTATION

The interim unaudited consolidated financial statements included herein have been prepared by PDF Solutions, Inc., (the "Company"), without audit, pursuant to the rules and regulations of the Securities and Exchange Commission (SEC). Certain information and footnote disclosures normally included in annual financial statements prepared in accordance with accounting principles generally accepted in the United States of America have been condensed or omitted. The unaudited interim consolidated financial statements reflect, in the opinion of management, all adjustments necessary, (consisting only of normal recurring adjustments) to present a fair statement of results for the interim periods presented. The operating results for any interim period are not necessarily indicative of the results that may be expected for the entire fiscal year ending December 31, 2003. The accompanying unaudited consolidated financial statements should be read in conjunction with the audited consolidated financial statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2002.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues and expenses. A significant portion of the Company's revenues require estimates in regards to total costs which may be incurred and revenues earned. Actual results could differ from these estimates. See "Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations-Critical Accounting Policies" for additional information regarding the estimates and assumptions the Company makes that affect its financial statements.

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries after the elimination of all significant intercompany balances and transactions. Certain amounts from prior years have been reclassified to conform to current-year presentation. These reclassifications did not change previously reported total assets, liabilities, stockholders' equity or net income.

2. RECENT ACCOUNTING PRONOUNCEMENTS

In July 2002, the Financial Accounting Standards Board ("FASB") issued Statements of Financial Accounting Standards ("SFAS") No. 146, "Accounting for Costs Associated with Exit or Disposal Activities." SFAS 146 addresses financial accounting and reporting for costs associated with exit or disposal activities and nullifies Emerging Issues Task Force ("EITF") Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (Including Certain Costs Incurred in a Restructuring)" and must be applied beginning January 1, 2003. SFAS 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred rather than when the exit or disposal plan is approved. The Company adopted SFAS 146 on January 1, 2003. The adoption of this statement did not have an effect on the financial position and operating results of the Company.

In November 2002, the FASB issued FASB Interpretation ("FIN") No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others". FIN 45 requires companies to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. Guarantees in existence at December 31, 2002 are grandfathered for the purposes of recognition and would only need to be disclosed. The Company adopted FIN 45 on January 1, 2003. The adoption of this statement did not have an effect on the Company's financial position and operating results.

In December 2002, the EITF reached a consensus on EITF 00-21, "Revenue Arrangements with Multiple Deliverables". This issue addresses certain aspects of the accounting by a vendor for arrangements under which it will perform multiple revenue-generating activities. In some arrangements, the different revenue-generating activities (deliverables) are sufficiently separable and there exists sufficient evidence of their fair values to separately account for some or all of the deliverables (that is, there are separate units of accounting). In other arrangements, some or all of the deliverables are not independently functional, or there is not sufficient evidence of their fair values to account for them separately. This issue addresses when and, if so, how an arrangement involving multiple deliverables should be divided into separate units of accounting. This issue does not change otherwise applicable revenue recognition criteria. The guidance in this issue is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. The Company does not expect that the adoption of EITF 00-21 will have a material effect on the Company's consolidated financial statements.

In December 2002, the FASB issued SFAS 148, "Accounting for Stock-Based Compensation — Transition and Disclosure, an amendment to FASB Statement 123". SFAS 148 provides alternative methods of transition for a voluntary change to the fair value based method of accounting of stock-based employee compensation. In addition, SFAS 148 amends the disclosure requirements of SFAS 123, "Accounting for Stock-Based Compensation", to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. The Company adopted the disclosure provisions of SFAS 148 effective December 31, 2002.

3. ACCOUNTS RECEIVABLE

Accounts receivable include amounts that are unbilled at the end of the period. Unbilled accounts receivable are determined on an individual contract basis and were approximately $495,000 and $1.0 million at March 31, 2003 and December 31, 2002, respectively.

4. STOCK BASED COMPENSATION

The Company accounts for stock-based compensation in accordance with the provisions of Accounting Principles Board Opinion No. 25 ("APB No. 25"), *Accounting for Stock Issued to Employees*, and complies with the disclosure provisions of Statement of Financial Accounting Standards No. 123 ("SFAS No. 123") as amended by SFAS 148, *Accounting for Stock-Based Compensation — Transition and Disclosures*. Deferred compensation recognized under APB No. 25 is amortized to expense using the graded vesting method. The Company accounts for stock options and warrants issued to non-employees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force No. 96-18 under the fair value based method.

The Company adopted the disclosure-only provisions of SFAS 123, and accordingly, no expense has been recognized for options granted to employees under the various stock plans. The Company amortizes deferred stock-based compensation on the graded vesting method over the

vesting periods of the applicable stock purchase rights and stock options, generally four years. The graded vesting method provides for vesting of portions of the overall awards at interim dates and results in greater vesting in earlier years than the straight-line method. Had compensation expense been determined based on the fair value at the grant date for award, consistent with the provisions of SFAS 123, the Company's pro forma net income (loss) and net income (loss) per share would be as follows (in thousands, except per share data):

	Three Months Ended	
	March 31, 2003	March 31, 2002
Net income (loss) as reported:	$ (1,334)	$ 580
Add: stock-based employee compensation expense included in reported net income (loss) under APB 25	422	788
Deduct: total employee stock-based compensation determined under fair value based method for all awards, net of related tax effects	1,928	1,936
Pro forma net loss	$ (2,840)	$ (568)
Basic and diluted net income (loss) per share:		
As reported:		
Basic	$ (0.06)	$ 0.03
Diluted	$ (0.06)	$ 0.02
Pro forma		
Basic	$ (0.13)	$ (0.03)
Diluted	$ (0.13)	$ (0.02)

During the first quarter of 2003, the Company recorded $227,000 in compensation expense for the fair value of options granted to two non-employees. The 45,000 common shares under the 2001 Stock Plan were granted at an exercise price of $7.59 per share, the fair market value per share on the grant date, were fully vested at the date of grant and contained restrictions on when shares could be sold.

5. NET INCOME (LOSS) PER SHARE

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted-average common shares outstanding for the period (excluding shares subject to repurchase). Diluted net income (loss) per share reflects the weighted-average common shares outstanding plus the potential effect of dilutive securities which are convertible into common shares (using the treasury stock method), except in cases where the effect would be anti-dilutive.

	Three Months Ended March 31,	
	2003	2002
	In thousands, (Unaudited)	
Net income (loss)	$ (1,334)	$ 580
Shares:		
Weighted average common shares outstanding	23,129	22,948
Weighted average common shares outstanding subject to repurchase	(641)	(1,310)
Shares used in computation — basic	22,488	21,638
Dilutive common equivalent shares:		
Weighted average common shares outstanding subject to repurchase	—	1,310
Stock options	—	493
Shares used in computation — diluted	22,488	23,441
Net income (loss) per share — basic	$ (0.06)	$ 0.03
Net income (loss) per share - diluted	$ (0.06)	$ 0.02

For the three month period ended March 31, 2002, the calculation of diluted net income per share does not include, respectively, $1.1 million outstanding common stock options as the effect would be anti-dilutive for the periods presented.

6. COMPREHENSIVE INCOME (LOSS)

The components of comprehensive income (loss) are as follows:

	Three Months Ended March 31,	
	2003	2002
	In thousands, (Unaudited)	
Net income (loss)	$ (1,334)	$ 580
Foreign currency translation adjustments	14	(8)
Comprehensive income (loss)	$ (1,320)	$ 572

7. GOODWILL AND PURCHASED INTANGIBLE ASSETS

On January 1, 2002, the Company adopted SFAS No. 142, *Goodwill and Other Intangible Assets*. SFAS No. 142 requires goodwill to be tested for impairment under certain circumstances, written down when impaired, and requires purchased intangible assets other than goodwill to be amortized over their useful lives unless these lives are determined to be indefinite.

On January 1, 2002, the Company ceased amortization of goodwill with a net book value totaling $662,000, which includes $192,000 of acquired workforce intangibles, net of related deferred tax liabilities which were reclassified to goodwill pursuant to the requirements of SFAS No. 142.

Purchased intangible assets are carried at cost less accumulated amortization. Intangible assets at March 31, 2003 consisted entirely of acquired technology with a cost of $660,000 and accumulated amortization of $482,000. Amortization is computed over the estimated useful life of four years. The amortization expense on acquired technology is expected to be $165,000 for fiscal 2003 and $55,000 in fiscal 2004, at which time it will be fully amortized.

The Company has performed its transition impairment test of goodwill as of January 1, 2002 which did not indicate any impairment. SFAS No. 142 also requires that goodwill be tested for impairment on an annual basis and more frequently in certain circumstances. The required annual goodwill impairment test was performed as of December 31, 2002. The Company did not recognize any goodwill impairment as a result of performing the annual test.

8. CUSTOMER AND GEOGRAPHIC INFORMATION

The Company operates in one segment. The Company had revenues from individual customers in excess of 10% of total revenues as follows:

	Three Months Ended March 31,	
Customer	2003	2002
	(Unaudited)	
A	22%	27%
C	14%	8%
G	15%	24%
H	17%	5%
I	10%	1%

The Company had accounts receivable from individual customers in excess of 10% of gross accounts receivable as follows:

Customer	March 31, 2003	December 31, 2002
	(Unaudited)	
A	38%	31%
C	12%	11%
F	12%	19%
K	11%	11%

Revenues from customers by geographic area are as follows (in thousands):

	Three Months Ended March 31,	
	2003	2002
	(Unaudited)	
Asia	$ 5,759	$ 7,923
United States	1,954	2,108
Europe	1,354	1,426

As of March 31, 2003 and December 31, 2002, long-lived assets related to PDF Solutions GmbH (formerly AISS), located in Germany, totaled $1.1 million in each year, of which $841,000 and $882,000 million, respectively, relates to acquired intangibles (see Note 7). The majority of the Company's remaining long-lived assets are in the United States.

9. LITIGATION

In May 2001 the Company was named as a defendant in a lawsuit claiming, among other things, that it misappropriated trade secrets in connection with hiring an employee. This litigation was settled by all parties in the second quarter of 2002. All expenses related to the lawsuit have been reflected in the consolidated financial statements in 2002.

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

Forward-Looking Statements

The following discussion of our financial condition and results of operations contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These statements relate to future events or our future financial performance. In some cases, you can identify forward-looking statements by terminology such as may, will, should, expect, plan, anticipate, believe, estimate, predict, potential or continue, the negative effect of terms like these or other comparable terminology. These statements are only predictions. These statements involve known and unknown risks and uncertainties and other factors that may cause actual events or results to differ materially. All forward-looking statements included in this document are based on information available to us on the date of filing, and we assume no obligation to update any such forward-looking statements. In evaluating these statements, you should specifically consider various factors,

including the risks outlined under the caption "Factors that May Affect Future Results" set forth at the end of this Item 2 and the Risk Factors set forth in our Annual Report on Form 10-K for the year ended December 31, 2002. We caution investors that our business and financial performance are subject to substantial risks and uncertainties.

Overview

Our technologies and services enable semiconductor companies to improve yield and performance of integrated circuits, or ICs, by integrating the design and manufacturing processes. We believe that our solutions improve a semiconductor company's time to market, the rate at which yield improves and product profitability. Our solutions combine proprietary manufacturing process simulation software, yield and performance modeling software, test chips, a proprietary electrical wafer test system, yield and performance enhancement methodologies, and professional services. The result of implementing our solutions is the creation of value that can be measured based on improvements to our customers' actual yield. We align our financial interests with the yield and performance improvement realized by our customers and receive revenue based on this value. To date, we have sold our technologies and services to semiconductor companies including leading integrated device manufacturers, fabless semiconductor companies and foundries.

Critical Accounting Policies

Financial Reporting Release No. 60 requires that all companies include a discussion of critical accounting policies or methods used in the preparation of financial statements. Note 1 of the notes to our consolidated financial statements included in our annual report on Form 10-K for the year ended December 31, 2002 includes a summary of the significant accounting policies and methods used in the preparation of our consolidated financial statements. The following is a brief discussion of the more significant accounting policies and methods that we use.

We account for stock-based compensation in accordance with the provisions of Accounting Principles Board Opinion No. 25 ("APB No. 25"), *Accounting for Stock Issued to Employees*, and complies with the disclosure provisions of Statement of Financial Accounting Standards No. 123 ("SFAS No. 123") as amended by SFAS 148, *Accounting for Stock-Based Compensation — Transition and Disclosures*. Deferred compensation recognized under APB No. 25 is amortized to expense using the graded vesting method. We account for stock options and warrants issued to non-employees in accordance with the provisions of SFAS No. 123 and Emerging Issues Task Force No. 96-18 under the fair value based method.

We adopted the disclosure-only provisions of SFAS 123, and accordingly, no expense has been recognized for options granted to employees under the various stock plans. We amortize deferred stock-based compensation on the graded vesting method over the vesting periods of the applicable stock purchase rights and stock options, generally four years. The graded vesting method provides for vesting of portions of the overall awards at interim dates and results in greater vesting in earlier years than the straight-line method. Had compensation expense been determined based on the fair value at the grant date for award, consistent with the provisions of SFAS 123, our pro forma net income (loss) and net income (loss) per share would be as follows (in thousands, except per share data):

	March 31,	
	2003	2002
Net income (loss) as reported:	$ (1,334)	$ 580
Add: stock-based employee compensation expense included in reported net income (loss) under APB 25	422	788
Deduct: total stock-based compensation determined under fair value based method for all awards, net of related tax effects	1,928	1,936
Pro forma net loss	$ (2,840)	$ (568)
Basic and diluted net income (loss) per share:		
As reported	$ (0.06)	$ 0.03
Pro forma	$ (0.13)	$ (0.02)

During the first quarter of 2003, we recorded $227,000 in compensation expense for the fair value of options granted to two non-employees. The 45,000 common shares under the 2001 Stock Plan were granted at an exercise price of $7.59 per share, the fair market value per share on the grant date, were fully vested at the date of grant and contained restrictions on when shares could be sold.

General

Our discussion and analysis of our financial condition and results of operations are based on our consolidated financial statements, which have been prepared in conformity with accounting principles generally accepted in the United States of America. Our preparation of these consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the dates of the financial statements and the reported amounts of revenues and expenses during the reporting periods. We based our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. The most significant estimates and assumptions relate to revenue recognition, impairment of goodwill, the realization of deferred tax assets and the allowance for doubtful accounts. Actual amounts may differ from such estimates under different assumptions or conditions. The following summarizes our critical accounting policies and significant estimates used in preparing our consolidated financial statements:

Revenue Recognition

We derive revenue from two sources: Design-to-Silicon-Yield solutions and gain share. We recognize revenue in accordance with the provisions of American Institute of Certified Public Accountants Statement of Position (SOP) 97-2, *Software Revenue Recognition,* as amended, and SOP 81-1, *Accounting for Performance of Construction-Type and Certain Production-Type Contracts.*

Design-to-Silicon-Yield Solutions — Design-to-Silicon-Yield solutions revenue is derived from solution implementations, software licenses and software support and maintenance. Revenue recognition for each element of Design-to-Silicon Yield solutions is as follows:

Solution Implementations — Our solution implementations generate a significant portion of revenue from fixed-price contracts delivered over a specific period of time. These contracts require the accurate estimation of the cost to perform obligations and the overall scope of each engagement. Revenue under contracts for solution implementation services is recognized as the services are performed using the cost-to-cost percentage of completion method of accounting. Losses on solution implementation contracts are recognized when determined. Revisions in profit estimates are reflected in the period in which the conditions that require the revisions become known and can be estimated. If we do not accurately estimate the resources required or the scope of work to be performed, or do not manage the projects properly within the planned period of time or satisfy our obligations under contracts, resulting contract margins could be materially different than those anticipated when the contract was executed. Any such reductions in contract margin could have a material negative impact on our operating results.

Software Licenses — We have entered into a few multi-year time-based licenses, generally three years. Revenue under arrangements which require us to provide support and maintenance over a period of time, where vendor-specific objective evidence of fair value does not exist to allocate a portion of the total fee to the undelivered elements, are recognized ratably over the term of the agreement. No revenue under arrangements with extended payment terms has been recognized in excess of amounts due.

Other license fees are recognized on the residual value method: (i) when an agreement has been signed, the software has been delivered, the license fee is fixed or determinable and collection of the fee is probable or (ii) as a component of a related solution implementation contract.

Software Support and Maintenance — Amounts allocated to undelivered support and maintenance are based on vendor specific objective evidence, generally negotiated renewal rates. Revenue from allocated support and maintenance and renewals is recognized ratably over the term of the support and maintenance contract, generally one year.

Gain Share — Gain share revenue represents profit sharing and performance incentives earned based upon our customers reaching certain defined operational levels. Upon achieving such operational levels, we receive either a fixed fee and/or royalties based on the units sold by the customer. Due to the uncertainties surrounding attainment of such operational levels, we recognize gain share revenue (to the extent of completion of the related solution implementation contract) upon receipt of performance reports or other related information from the customer supporting the determination of amounts and probability of collection. Our continued receipt of gain share revenue is dependent on many factors which are outside our control, including among others, continued production of the related integrated circuits (IC's) by our customers, sustained yield improvements by our customers and our ability to enter into new Design-to-Silicon-Yield solutions contracts containing gain share provisions.

Software Development Costs — Costs for the development of new software products and substantial enhancements to existing software products are expensed as incurred until technological feasibility has been established, at which time any additional costs would be capitalized in accordance with Statement of Financial Accounting Standards (SFAS) No. 86, *Computer Software to be Sold, Leased or Otherwise Marketed.* Because we believe our current process for developing software is essentially completed concurrently with the establishment of technological feasibility, no costs have been capitalized to date.

Goodwill and Intangible Assets — As of March 31, 2003, we had $841,000 of goodwill and intangible assets. In assessing the recoverability of our goodwill and intangible assets, we must make assumptions regarding estimated future cash flows and other factors to determine the fair value of the respective assets. If these estimates or their related assumptions change in the future, we may be required to record impairment charges for these assets. On January 1, 2002 we adopted Statement of Financial Accounting Standards No. 142, *Goodwill and Other Intangible Assets,* and have performed our transition impairment test of goodwill as of January 1, 2002 which did not indicate any impairment. SFAS No. 142 also requires that goodwill be tested for impairment on an annual basis and more frequently in certain circumstances. The required annual goodwill impairment test was performed as of December 31, 2002. We did not recognize any goodwill impairment as a result of performing the annual test.

Realization of Deferred Tax Assets — As of March 31, 2003, we had net deferred tax assets of $2.8 million. Realization of deferred tax assets is dependent on our ability to generate future taxable income and utilize tax planning strategies. We have recorded a deferred tax asset to the amount that is more likely than not to be realized based on current estimations and assumptions. We evaluate the valuation allowance on a quarterly basis. Any resulting changes to the valuation allowance will result in an adjustment to income in the period the determination is made.

Results of Operations

We have historically experienced fluctuations from period to period. We expect these fluctuations to continue, therefore, historical results are not indicative of future results.

Three Months Ended March 31, 2003

Total revenue for the three months ended March 31, 2003 was $9.1 million, compared with $11.5 million for the three months ended March 31, 2002, a decrease of 21%.

Design-to-Silicon-Yield Solutions. Design-to-Silicon-Yield solutions revenue for the three months ended March 31, 2003 was $8.1 million, compared with $8.4 million for the three months ended March 31, 2002, a decrease of 3%. The decrease for the three months ended March 31, 2003 was attributable to the general weakness in the semiconductor industry, as a whole, that resulted in a decrease in the number of solution implementations as well as a decrease in the average revenue per solution implementation.

Gain Share. Gain share revenue for the three months ended March 31, 2003 was $1.0 million, compared with $3.1 million for the three months

ended March 31, 2002, a decrease of 69%. The decrease for the three months ended March 31, 2003 was attributable to lower production volumes at leading edge process nodes. Additionally, a decreased number of existing customer solution implementations contributed to this decrease.

Cost of Design-to-Silicon-Yield Solutions. Cost of Design-to-Silicon-Yield solutions for the three months ended March 31, 2003 was $3.4 million, compared with $3.9 million for the three months ended March 31, 2002, a decrease of 11%. The absolute dollar decrease in Cost of Design-to-Silicon-Yield solutions for the three months ended March 31, 2003 was primarily due to a decreased number of solution implementations. As a percentage of Design-to-Silicon-Yield solutions revenue, Cost of Design-to-Silicon-Yield solutions for the three months ended March 31, 2003 was 42%, compared with 46% for the three months ended March 31, 2002. The percentage decrease for three months ended March 31, 2003 was primarily the result of better utilization of client services resources and a favorable mix of Design-to-Silicon-Yield solutions revenue elements.

Research and Development. Research and development expenses for the three months ended March 31, 2003 were $4.3 million, compared with $3.2 million for the three months ended March 31, 2002, an increase of 36%. The absolute dollar increase in research and development expenses was primarily due to increases in personnel related expenses and expansion of development activities in Europe. As a percentage of total revenue, research and development expenses for the three months ended March 31, 2003 were 48%, compared with 28% for the three months ended March 31, 2002. The percentage increase was primarily the result of an increase in overall research and development spending coupled with the decrease in revenue. We anticipate that we will continue to commit considerable resources to research and development in the future and that these expenses will continue to increase significantly in absolute dollars.

Selling, General and Administrative. Selling, general and administrative expenses for the three months ended March 31, 2003 were $2.7 million, compared with $2.6 million for the three months ended March 31, 2002, an increase of 6%. The absolute dollar increase in selling, general and administrative expenses was attributable to an increase in personnel related expenses partially offset by a smaller accrual to establish bad debt reserves and a drop in recruiting and relocation expenses. As a percentage of total revenue, selling, general and administrative expenses for the three months ended March 31, 2003 were 30%, compared with 22% for the three months ended March 31, 2002. The percentage increase for the three months ended March 31, 2003 was primarily the result of increased selling, general and administrative expenses and the decrease in overall revenue. We expect that selling, general and administrative expenses will increase in absolute dollars to support increased selling and administrative efforts.

Stock-Based Compensation. Stock-based compensation for the three months ended March 31, 2003 was $649,000 compared with $788,000 for the three months ended March 31, 2002, a decrease of 18%. The decrease was due to the effects of the graded vesting method of amortization resulting in higher amortization expense during the initial period following the respective option grants, partially offset by a one-time stock compensation charge of $227,000 for stock options granted to two non-employees.

Interest and Other Income, net. Interest and other income, net for the three months ended March 31, 2003 was $375,000, compared with $359,000 for the three months ended March 31, 2002, an increase of 4%. The increase was primarily due to interest earned on higher average cash and cash equivalents balances in 2003.

Provision (Benefit) for Taxes. The tax benefit for the three months ended March 31, 2003 was $352,000 compared with a tax provision of $840,000 for the three months ended March 31, 2002, a decrease of 142%. The decrease was primarily due to the shift from income before taxes for the three months ended March 31, 2002, to a loss before taxes for the three months ended March 31, 2003.

Liquidity and Capital Resources

As of March 31, 2003, working capital was $73.0 million, compared with $73.6 million as of December 31, 2002. Cash and cash equivalents as of March 31, 2003 were $71.9 million, compared to $71.5 million as of December 31, 2002, an increase of $376,000.

Net cash provided by operating activities was $477,000 for the three months ended March 31, 2003, compared to net cash used by operating activities of $1.1 million for the three months ended March 31, 2002. Net cash provided by operating activities for the three months ended March 31, 2003 resulted from a decrease in accounts receivable of $463,000 and increases in accrued compensation of $864,000, billings in excess of recognized revenue of $496,000 and accrued liabilities of $131,000 offset by net loss of $160,000 after adjustment for depreciation and amortization of $525,000 and of deferred stock compensation of $649,000, increases in prepaid expenses and other assets of $202,000 and taxes payable of $867,000. The increase in accrued compensation was primarily the result of increases in employee benefit contributions for employee stock purchase plans, accrued compensation and accrued vacation.

Net cash used in investing activities was $272,000 for the three months ended March 31, 2003 compared to $356,000 for the three months ended March 31, 2002. Net cash used in investing activities for the three months ended March 31, 2003 resulted from purchases of property and equipment.

Net cash provided by financing activities was $157,000 for the three months ended March 31, 2003 compared to $475,000 for the three months ended March 31, 2002. Net cash provided by financing activities for the three months ended March 31, 2003 was primarily the result of proceeds from the repayment of employee notes receivable of $162,000.

We expect to experience growth in our operating expenses, particularly for research and development and additions to our workforce in order to execute our business plan. As a result, we anticipate that our operating expenses, as well as planned capital expenditures, will constitute a material use of our cash resources. In addition, we may use cash resources to fund potential acquisitions of complementary products, technologies or businesses. We believe that our existing cash resources, available bank financing and anticipated funds from operations will satisfy our cash requirements for at least the next twelve months. In the event additional financing is required, we may not be able to raise it on acceptable terms or at all.

Euro-Currency

The Single European Currency, or Euro, was introduced on January 1, 1999, and we began doing business denominated in Euro on January 1, 2002. This adoption did not have a material effect on our business.

Recent Accounting Pronouncements

In July 2002, the Financial Accounting Standards Board ("FASB") issued Statements of Financial Accounting Standards ("SFAS") No. 146, "Accounting for Costs Associated with Exit or Disposal Activities," SFAS 146 addresses financial accounting and reporting for costs associated with exit or disposal activities and nullifies Emerging Issues Task Force ("EITF") Issue No. 94-3, "Liability Recognition for Certain Employee Termination Benefits and Other Costs to Exit an Activity (Including Certain Costs Incurred in a Restructuring)" and must be applied beginning January 1, 2003, SFAS 146 requires that a liability for a cost associated with an exit or disposal activity be recognized when the liability is incurred rather than when the exit or disposal plan is approved. We adopted SFAS 146 on January 1, 2003. The adoption of this statement did not have an effect on our financial position and operating results.

In November 2002, the FASB issued FASB Interpretation ("FIN") No. 45, "Guarantor's Accounting and Disclosure Requirements for Guarantees, including Indirect Guarantees of Indebtedness of Others". FIN 45 requires companies to recognize, at the inception of a guarantee, a liability for the fair value of the obligation undertaken in issuing the guarantee. Guarantees in existence at December 31, 2002 are grandfathered for the purposes of recognition and would only need to be disclosed. We adopted FIN 45 on January 1, 2003. The adoption of this statement did not have an effect on our financial position and operating results.

In December 2002, the EITF reached a consensus on EITF 00-21, "Revenue Arrangements with Multiple Deliverables". This issue addresses certain aspects of the accounting by a vendor for arrangements under which it will perform multiple revenue-generating activities. In some arrangements, the different revenue-generating activities (deliverables) are sufficiently separable and there exists sufficient evidence of their fair values to separately account for some or all of the deliverables (that is, there are separate units of accounting). In other arrangements, some or all of the deliverables are not independently functional, or there is not sufficient evidence of their fair values to account for them separately. This issue addresses when and, if so, how an arrangement involving multiple deliverables should be divided into separate units of accounting. This issue does not change otherwise applicable revenue recognition criteria. The guidance in this issue is effective for revenue arrangements entered into in fiscal periods beginning after June 15, 2003. We do not expect that the adoption of BITF 00-21 will have a material effect on our consolidated financial statements.

In December 2002, the FASB issued SFAS 148, "Accounting for Stock-Based Compensation — Transition and Disclosure, an amendment to FASB Statement 123", SFAS 148 provides alternative methods of transition for a voluntary change to the fair value based method of accounting of stock-based employee compensation. In addition, SFAS 148 amends the disclosure requirements of SFAS 123, "Accounting for Stock-Based Compensation", to require prominent disclosures in both annual and interim financial statements about the method of accounting for stock-based employee compensation and the effect of the method used on reported results. We adopted the disclosure provisions of SFAS 148 effective December 31, 2002.

Factors Which May Affect Future Results

If semiconductor designers and manufacturers do not adopt our Design-to-Silicon-Yield solutions, we may be unable to increase or maintain our revenue.

If semiconductor designers and manufacturers do not adopt our Design-to-Silicon-Yield solutions, our revenue could decline. To date, we have worked with a limited number of semiconductor companies on a limited number of IC products and processes. To be successful, we will need to enter into agreements covering a larger number of IC products and processes with existing customers and new customers. Our existing customers are primarily large integrated device manufacturers, or IDMs. We will need to target as new customers additional IDMs, fabless semiconductor companies and foundries, as well as system manufacturers. Factors that may limit adoption of our Design-to-Silicon-Yield solutions by semiconductor companies include:

- our customers' failure to achieve satisfactory yield improvements using our Design-to-Silicon-Yield solutions;
- a decrease in demand for semiconductors generally or the demand for deep submicron semiconductors failing to grow as rapidly as expected;
- the industry may develop alternative methods to enhance the integration between the semiconductor design and manufacturing processes due to a rapidly evolving market and the likely emergence of new technologies;
- our existing and potential customers' reluctance to understand and accept our innovative gain share fee component; and
- our customers' concern about our ability to keep highly competitive information confidential.

Our earnings per share and other key operating results may be unusually high in a given quarter, thereby raising investors' expectations, and then unusually low in the next quarter, thereby disappointing investors, which could cause our stock price to drop.

Historically, our quarterly operating results have fluctuated. Our future quarterly operating results will likely fluctuate from time to time and may not meet the expectations of securities analysts and investors in some future period. The price of our common stock could decline due to such fluctuations. The following factors may cause significant fluctuations in our future quarterly operating results:

- the size and timing of sales volumes achieved by our customers' products;
- the loss of any of our large customers or an adverse change in any of our large customers' businesses;
- the size of improvements in our customers' yield and the timing of agreement as to those improvements;
- our long and variable sales cycle;
- changes in the mix of our revenue;
- changes in the level of our operating expenses needed to support our projected growth; and
- delays in completing solution implementations for our customers.

General economic conditions and other worldwide events, including the recent outbreak of SARS in Asia and the probability of prolonged involvement in Iraq, may reduce our revenues and harm our business.

Future political or related events similar or comparable to the September 11, 2001 terrorist attacks, or significant military conflicts such as the continued involvement in Iraq, or long term reactions of governments and society to such events, may cause significant delays or reductions in technology purchases or limit our ability to travel to certain parts of the world. Further, the recent outbreak of Severe Acute Respiratory Syndrome (SARS) in Asia may adversely impact our operations and sales in that region if our business or the businesses of our customers are disrupted by travel restrictions or illness and quarantine of employees. In addition to political risks and other worldwide events, the global economy has remained in a downturn and any further global or regional weakening or the extension of the current recession beyond current reasonable market expectations could have a material adverse effect on our business and our financial condition and results of operations. The impact of these events and this slowdown on us is difficult to predict, but it may

result in reductions in purchases of our technologies and services by our customers, longer sales cycles and increased price competition.

Our adoption of a novel and unproven business model makes it difficult to evaluate our future prospects.

Since we adopted our current business model, we do not have a long history of operating results on which you can base your evaluation of our business. In 1998, we began selling software, services and other technologies together as a Design-to-Silicon-Yield solution for the first time. Because we have not demonstrated our ability to generate significant revenue, our business model is unproven, especially with respect to gain share fees, which we expect will constitute a significant portion of our revenue for the foreseeable future. In the past, we generally earned fixed fees for the separate sale of our software, services and other technologies. Under our current business model, we are selling these items together as a package and charging both a fixed fee and a variable fee based on demonstrated improvements in our customers' yields, which we call gain share. Our existing and potential customers may resist this approach and may seek to limit or restrict our gain share fees. As a result, it will be difficult for financial markets analysts and investors to evaluate our future prospects.

Our gain share revenue is largely dependent on the volume of integrated circuits, or ICs, our customers are able to sell to their customers, which is outside of our control.

Our gain share revenue for a particular product is largely determined by the volume of that product our customer is able to sell to its customers, which is outside of our control. We have limited ability to predict the success or failure of our customers' IC products. We may commit a significant amount of time and resources to a customer who is ultimately unable to sell as many units as we had anticipated when contracting with them. Since we currently work on a small number of large projects, any product that does not achieve commercial viability could significantly reduce our revenue and results of operations below expectations. In addition, if we work with two directly competitive products, volume in one may offset volume, and any of our related gain share, in the other product. Further, decreased demand for semiconductor products decreases the volume of products our customers are able to sell, which may adversely impact our gain share revenue.

Gain share measurement requires data collection and is subject to customer agreement, which can result in uncertainty and cause quarterly results to fluctuate.

We can only recognize gain share revenue once we have reached agreement with our customers on their level of yield performance improvements. Because measuring the amount of yield improvement is inherently complicated and dependent on our customers' internal information systems, there may be uncertainty as to some components of measurement. This could result in our recognition of less revenue than expected. In addition, any delay in measuring gain share could cause all of the associated revenue to be delayed until the next quarter. Since we currently have only a few large customers and we are relying on gain share as a significant component of our total revenue, any delay could significantly harm our quarterly results.

Changes in the structure of our customer contracts, particularly the mix between fixed and variable revenue, can adversely affect the size and timing of our total revenue.

Our success is largely dependent upon our ability to structure our future customer contracts to include a larger gain share component relative to the fixed fee component. If we are successful in increasing the gain share component of our customer contracts, we will experience an adverse impact on our operating results in the short term as we reduce the fixed fee component, which we typically recognize earlier than gain share fees. In addition, by increasing the gain share component, we increase the variability of our revenue, and therefore increase the risk that our total future revenue will be lower than expected and fluctuate significantly from period to period.

We generate virtually all of our total revenue from a limited number of customers, so the loss of any one of these customers could significantly reduce our revenue and results of operations below expectations.

Historically, we have had a small number of large customers and we expect this to continue in the near term. In the three months ended March 31, 2003, five customers accounted for 78% of our total net revenue, with Toshiba representing 22%, Cadence representing 17%, Matsushita representing 15%, Sony representing 14% and Epson representing 10%, respectively. For the year ended December 31, 2002, Toshiba, Cadence, Matsushita, Sony and Epson represented 25%, 5%, 22%, 17% and 1%, respectively. The loss of any of these customers or a decrease in the sales volumes of their products could significantly reduce our total revenue below expectations. In particular, such a loss could cause significant fluctuations in results of operations due to our expenses being fixed in the short term, the fact that it takes us a long time to replace customers and because any offsetting gain share revenue from new customers would not begin to be recognized until much later.

It typically takes us a long time to sell our novel solutions to new customers, which can result in uncertainty and delays in generating additional revenue.

Because our gain share business model is novel and our Design-to-Silicon-Yield solutions are unfamiliar, our sales cycle is lengthy and requires a significant amount of our senior management's time and effort. Furthermore, we need to target those individuals within a customer's organization who have overall responsibility for the profitability of an IC. These individuals tend to be senior management or executive officers. We may face difficulty identifying and establishing contact with such individuals. Even after initial acceptance, due to the complexity of structuring the gain share component, the negotiation and documentation processes can be lengthy. It can take six months or more to reach a signed contract with a customer. Unexpected delays in our sales cycle could cause our revenue to fall short of expectations.

We have a history of losses, we expect to incur losses in the future and we may be unable to achieve or subsequently maintain profitability.

We have experienced losses in the two most recent quarters. We may not achieve or subsequently maintain profitability if our revenue increases more slowly than we expect or not at all. In addition, virtually all of our operating expenses are fixed in the short term, so any shortfall in anticipated revenue in a given period could significantly reduce our operating results below expectations. Our accumulated deficit was $16.1 million as of March 31, 2003. We expect to continue to incur significant expenses in connection with:

- increased funding for research and development;
- expansion of our solution implementation teams;
- expansion of our sales and marketing efforts; and
- additional non-cash charges relating to amortization of intangibles and deferred stock compensation.

As a result, we will need to significantly increase revenue to maintain profitability on a quarterly or annual basis. Any of these factors could cause our stock price to decline.

We must continually attract and retain highly talented executives, engineers and research and development personnel or we will be unable to expand our business as planned.

We will need to continue to hire highly talented executives, engineers and research and development personnel to support our planned growth. We have experienced, and we expect to continue to experience, delays and limitations in hiring and retaining highly skilled individuals with appropriate qualifications. We intend to continue to hire foreign nationals, particularly as we expand our operations internationally. We have had, and expect to continue to have, difficulty in obtaining visas permitting entry into the United States, for several of our key personnel, which disrupts our ability to strategically locate our personnel. If we lose the services of any of our key executives or a significant number of our engineers, it could disrupt our ability to implement our business strategy. Competition for executives and qualified engineers can be intense, especially in Silicon Valley where we are principally based.

If our Design-to-Silicon-Yield solutions fail to keep pace with the rapid technological changes in the semiconductor industry, we could lose customers and revenue.

We must continually devote significant engineering resources to enable us to keep up with the rapidly evolving technologies and equipment used in the semiconductor design and manufacturing processes. These innovations are inherently complex and require long development cycles. Not only do we need the technical expertise to implement the changes necessary to keep our technologies current, we also rely heavily on the judgment of our advisors and management to anticipate future market trends. Our customers expect us to stay ahead of the technology curve and expect that our Design-to-Silicon-Yield solutions will support any new design or manufacturing processes or materials as soon as they are deployed. If we are not able to timely predict industry changes, or if we are unable to modify our Design-to-Silicon-Yield solutions on a timely basis, our existing solutions will be rendered obsolete and we may lose customers. If we do not keep pace with technology, our existing and potential customers may choose to develop their own solutions internally as an alternative to ours and we could lose market share, which could adversely affect our operating results.

We intend to pursue additional strategic relationships, which are necessary to maximize our growth, but could substantially divert management attention and resources.

In order to establish strategic relationships with industry leaders at each stage of the IC design and manufacturing processes, we may need to expend significant resources and will need to commit a significant amount of management's time and attention, with no guarantee of success. If we are unable to enter into strategic relationships with these companies, we will not be as effective at modeling existing technologies or at keeping ahead of the curve as new technologies are introduced. In the past, the absence of an established working relationship with key companies in the industry has meant that we have had to exclude the effect of their component parts from our modeling analysis, which reduces the overall effectiveness of our analysis and limits our ability to improve yield. We may be unable to establish key industry strategic relationships if any of the following occur:

- potential industry partners become concerned about our ability to protect their intellectual property;
- potential industry partners develop their own solutions to address the need for yield improvement;
- our potential competitors establish relationships with industry partners with which we seek to establish a relationship; or
- potential industry partners attempt to restrict our ability to enter into relationships with their competitors.

We face operational and financial risks associated with international operations.

We derive a majority of our revenue from international sales, principally from customers based in Asia. Revenue generated from customers in Asia accounted for 64% of total revenue in the quarter ended March 31, 2003. For the year ended December 31, 2002 revenue generated from customers in Asia was 71%. We expect that a significant portion of our total future revenue will continue to be derived from companies based in Asia. We are subject to risks inherent in doing business in international markets. These risks include:

- some of our key engineers and other personnel who are foreign nationals may have difficulty gaining access to the United States and other countries in which our customers or our offices may be located;
- greater difficulty in collecting account receivables resulting in longer collection periods;
- language and other cultural differences may inhibit our sales and marketing efforts and create internal communication problems among our U.S. and foreign research and development teams;
- compliance with, and unexpected changes in, a wide variety of foreign laws and regulatory environments with which we are not familiar;

- currency risk due to the fact that expenses for our international offices are denominated in the local currency, including the Euro, while virtually all of our revenue is denominated in U.S. dollars;
- economic or political instability; and
- the recent outbreak of SARS.

In Japan, in particular, we face the following additional risks:

- any recurrence of the recent overall downturn in Asian economies could limit our ability to retain existing customers and attract new ones in Asia;
- if the U.S. dollar increases in value relative to the Japanese Yen, the cost of our solutions will be more expensive to existing and potential Japanese customers and therefore less competitive; and
- if any of these risks materialize, we may be unable to continue to market our design-to-silicon yield solutions successfully in international markets.

Competition in the market for solutions that address yield improvement and integration between IC design and manufacturing may intensify in the future, which could slow our ability to grow or execute our strategy.

Competition in our market may intensify in the future, which could slow our ability to grow or execute our strategy. Our current and potential customers may choose to develop their own solutions internally, particularly if we are slow in deploying our solutions. Many of these companies have the financial and technical capability to develop their own solutions. Currently, we are not aware of any other provider of commercial solutions for systematic IC yield and performance enhancement. We face indirect competition from the internal groups at IC companies that use an incomplete set of components that is not optimized to accelerate their process-design integration. Some providers of yield management software or inspection equipment may seek to broaden their product offerings and compete with us. For example, KLA-Tencor has announced adding the use of test structures to one of their inspection product lines. Other companies, such as HPL Technologies which, through its acquisition of Test Chip Technologies, has indicated its intent to further utilize test chips in its product offering, may in the future seek to enter the silicon infrastructure market. In addition, we believe that the demand for solutions that address the need for better integration between the silicon design and manufacturing processes may encourage direct competitors to enter into our market. For example, large integrated organizations, such as IDMs, electronic design automation software providers, IC design service companies or semiconductor equipment vendors, may decide to spin-off a business unit that competes with us. Other potential competitors include fabrication facilities that may decide to offer solutions competitive with ours as part of their value proposition to their customers. If these potential competitors are able to attract industry partners or customers faster than we can, we may not be able to grow and execute our strategy as quickly or at all. In addition, customer preferences may shift away from our Design-to-Silicon-Yield solutions as a result of the increase in competition.

We must effectively manage and support our recent and planned growth in order for our business strategy to succeed.

We will need to continue to grow in all areas of operation and successfully integrate and support our existing and new employees into our operations, or we may be unable to implement our business strategy in the time frame we anticipate, if at all. We will also need to switch to a new accounting system in the near future, which could disrupt our business operations and distract management. In addition, we will need to expand our intranet to support new data centers to enhance our research and development efforts. Our intranet is expensive to expand and must be highly secure due to the sensitive nature of our customers' information that we transmit. Building and managing the support necessary for our growth places significant demands on our management and resources. These demands may divert these resources from the continued growth of our business and implementation of our business strategy. Further, we must adequately train our new personnel, especially our client service and technical support personnel, to adequately, and accurately, respond to and support our customers. If we fail to do this, it could lead to dissatisfaction among our customers, which could slow our growth.

Our solution implementations may take longer than we anticipate, which could cause us to lose customers and may result in adjustments to our operating results.

Our solution implementations require a team of engineers to collaborate with our customers to address complex yield loss issues by using our software and other technologies. We must estimate the amount of time needed to complete an existing solution implementation in order to estimate when the engineers will be able to commence a new solution implementation. Given the time pressures involved in bringing IC products to market, targeted customers may proceed without us if we are not able to commence their solution implementation on time. Due to our lengthy sales cycle, we may be unable to replace these targeted implementations in a timely manner, which could cause fluctuations in our operating results.

In addition, our accounting for solution implementation contracts, which generate fixed fees, sometimes require adjustments to profit and loss based on revised estimates during the performance of the contract. These adjustments may have a material effect on our results of operations in the period in which they are made. The estimates giving rise to these risks, which are inherent in fixed-price contracts, include the forecasting of costs and schedules, and contract revenues related to contract performance.

Our chief executive officer and our chief strategy officer are critical to our business and we cannot guarantee that they will remain with us indefinitely.

Our future success will depend to a significant extent on the continued services of John Kibarian, our President and Chief Executive Officer, and David Joseph, our Chief Strategy Officer. If we lose the services of either of these key executives, it could slow execution of our business plan, hinder our product development processes and impair our sales efforts. Searching for their replacements could divert our other senior management's time and increase our operating expenses. In addition, our industry partners and customers could become concerned about our future operations, which could injure our reputation. We do not have long-term employment agreements with these executives and we do not maintain any key person life insurance policies on their lives.

Inadvertent disclosure of our customers' confidential information could result in costly litigation and cause us to lose existing and potential customers.

Our customers consider their product yield information and other confidential information, which we must gather in the course of our engagement with the customer, to be extremely competitively sensitive. If we inadvertently disclosed or were required to disclose this information, we would likely lose existing and potential customers, and could be subject to costly litigation. In addition, to avoid potential disclosure of confidential information to competitors, some of our customers may, in the future, ask us not to work with key competitive products.

If we fail to protect our intellectual property rights, customers or potential competitors may be able to use our technologies to develop their own solutions which could weaken our competitive position, reduce our revenue or increase our costs.

Our success depends largely on the proprietary nature of our technologies. We currently rely primarily on copyright, trademark and trade secret protection. Whether or not patents are granted to us, litigation may be necessary to enforce our intellectual property rights or to determine the validity and scope of the proprietary rights of others. As a result of any such litigation, we could lose our proprietary rights and incur substantial unexpected operating costs. Litigation could also divert our resources, including our managerial and engineering resources. In the future, we intend to rely primarily on a combination of patents, copyrights, trademarks and trade secrets to protect our proprietary rights and prevent competitors from using our proprietary technologies in their products. These laws and procedures provide only limited protection. Our pending patent applications may not result in issued patents, and even if issued, they may not be sufficiently broad to protect our proprietary technologies. Also, patent protection in foreign countries may be limited or unavailable where we need such protection.

Our technologies could infringe the intellectual property rights of others causing costly litigation and the loss of significant rights.

Significant litigation regarding intellectual property rights exists in the semiconductor industry. It is possible that a third party may claim that our technologies infringe their intellectual property rights or misappropriate their trade secrets. Any claim, even if without merit, could be time consuming to defend, result in costly litigation or require us to enter into royalty or licensing agreements, which may not be available to us on acceptable terms, or at all. A successful claim of infringement against us in connection with the use of our technologies could adversely affect our business.

Defects in our proprietary technologies and software tools could decrease our revenue and our competitive market share.

If the software or proprietary technologies we provide to a customer contain defects that increase our customer's cost of goods sold and time to market, these defects could significantly decrease the market acceptance of our Design-to-Silicon-Yield solutions. Any actual or perceived defects with our software or proprietary technologies may also hinder our ability to attract or retain industry partners or customers, leading to a decrease in our revenue. These defects are frequently found during the period following introduction of new software or proprietary technologies or enhancements to existing software or proprietary technologies. Our software or proprietary technologies may contain errors not discovered until after customer implementation of the silicon design and manufacturing process recommended by us. If our software or proprietary technologies contain errors or defects, it could require us to expend significant resources to alleviate these problems, which could result in the diversion of technical and other resources from our other development efforts.

We may not be able to raise necessary funds to support our growth or execute our strategy.

We currently anticipate that our available cash resources will be sufficient to meet our presently anticipated working capital and capital expenditure requirements for at least the next 12 months. However, we may need to raise additional funds in order to:

- support more rapid expansion;
- develop or enhance Design-to-Silicon-Yield solutions;
- respond to competitive pressures; or
- acquire complementary businesses or technologies.

These factors will impact our future capital requirements and the adequacy of our available funds. We may need to raise additional funds through public or private financings, strategic relationships or other arrangements. We cannot guarantee that we will be able to raise any necessary funds on terms favorable to us, or at all.

We may not be able to expand our proprietary technologies if we do not consummate potential acquisitions or investments or successfully integrate them with our business.

To expand our proprietary technologies, we may acquire or make investments in complementary businesses, technologies or products if appropriate opportunities arise. We may be unable to identify suitable acquisition or investment candidates at reasonable prices or on reasonable terms, or consummate future acquisitions or investments, each of which could slow our growth strategy. We may have difficulty integrating the acquired products, personnel or technologies of any acquisitions we might make. These difficulties could disrupt our ongoing business, distract our management and employees and increase our expenses.

The semiconductor industry is cyclical in nature.

Our revenue is highly dependent upon the overall condition of the semiconductor industry, especially in light of our gain share revenue component. The semiconductor industry is highly cyclical and subject to rapid technological change and has been subject to significant economic downturns at various times, characterized by diminished product demand, accelerated erosion of average selling prices and production overcapacity. One such downturn commenced during the third quarter of calendar 2000 and is continuing currently. The semiconductor industry also periodically experiences increased demand and production capacity constraints. As a result, we may experience significant fluctuations in operating results due to general semiconductor industry conditions and overall economic conditions.

Semiconductor companies are subject to risk of natural disasters.

Semiconductor companies have in the past experienced major reductions in foundry capacity due to earthquakes in Taiwan, Japan and California. In light of our gain share revenue component, our results of operations can be significantly decreased if one of our customers must shut down IC production due to a natural disaster such as earthquake, fire, tornado or flood. Moreover, since semiconductor product life cycles have become relatively short, a significant delay in the production of a product could result in lost revenue, not merely delayed revenue.

Management has broad discretion as to the use of proceeds from our initial public offering and, as a result, we may not use the proceeds to the satisfaction of our stockholders.

On August 1, 2001, we closed our initial public offering. Our board of directors and management have broad discretion in allocating the net proceeds therefrom. They may choose to allocate such proceeds in ways that do not produce a favorable return or are not supported by our stockholders. We have designated only limited specific uses for the net proceeds from our initial public offering.

The concentration of our capital stock ownership with insiders will likely limit your ability to influence corporate matters.

The concentration of ownership of our outstanding capital stock with our directors and executive officers may limit your ability to influence corporate matters. Our directors, executive officers and their affiliates, beneficially own a significant portion of our outstanding capital stock. As a result, these stockholders, if acting together, will have the ability to control all matters submitted to our stockholders for approval, including the election and removal of directors and the approval of any corporate transactions.

We have anti-takeover defenses that could delay or prevent an acquisition of our company.

Provisions of our certificate of incorporation and bylaws and Delaware law could make it more difficult for a third party to acquire us, even if doing so would be beneficial to our stockholders.

Our stock price is likely to be extremely volatile as the market for technology companies' stock has recently experienced extreme price and volume fluctuations.

Volatility in the market price of our common stock could result in securities class action litigation. Any litigation would likely result in substantial costs and a diversion of management's attention and resources. Despite the strong pattern of operating losses of technology companies, the market demand, valuation and trading prices of these companies has at times been high. At the same time, the share prices of these companies' stocks have been highly volatile and have recorded lows well below their historical highs. As a result, investors in these companies often buy the stock at very high prices only to see the price drop substantially a short time later, resulting in an extreme drop in value in the stock holdings of these investors. Our stock may be volatile, may not trade at the same levels as other technology stocks or at or near its historical highs.

A large number of shares becoming eligible for sale could cause our stock price to decline.

Sales of a substantial number of shares of our common stock could cause our stock price to fall. Our current stockholders hold a substantial number of shares, which they are able to sell, from time-to-time, in the public market.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

The following discusses our exposure to market risk related to changes in interest rates and foreign currency exchange rates. We do not currently own any equity investments, nor do we expect to own any in the foreseeable future. This discussion contains forward-looking statements that are subject to risks and uncertainties. Our actual results could vary materially as a result of a number of factors.

Interest Rate Risk. As of March 31, 2003, we had cash and cash equivalents of $71.9 million, consisting of cash and highly liquid money market instruments with maturities of 90 days or less. Because of the short maturities of those instruments, a sudden change in market interest rates would not have a material impact on the fair value of the portfolio. We would not expect our operating results or cash flows to be affected to any significant degree by the effect of a sudden change in market interest on our portfolio. A hypothetical increase in market interest rates of 10% from the market rates in effect at March 31, 2003 would cause the fair value of these investments to decrease by an immaterial amount which would not have significantly impacted our financial position or results of operations. Declines in interest rates over time will result in lower interest income and increased interest expense.

Foreign Currency and Exchange Risk. Virtually all of our revenue is denominated in U.S. dollars, although such revenue is derived substantially from foreign customers. Foreign sales to date, generated by our German subsidiary PDF Solutions GmbH since the date of its acquisition, have for the most part, been invoiced in local currencies, creating receivables denominated in currencies other than the U.S. dollar. The risk due to foreign currency fluctuations associated with these receivables is partially reduced by local payables denominated in the same currencies, and presently we do not consider it necessary to hedge these exposures. We intend to monitor our foreign currency exposure. There can be no assurance that exchange rate fluctuations will not have a materially negative impact on our business.

Item 4. Controls and Procedures

(a) *Evaluation of disclosure controls and procedures.* Our chief executive officer and our chief financial officer, after evaluating the effectiveness of our “disclosure controls and procedures” (as defined in the Securities Exchange Act of 1934 Rules 13a-14(c) and 15-d-14(c)) as of a date (the “Evaluation Date”) within 90 days before the filing date of this quarterly report, have concluded that as of the Evaluation Date, our disclosure controls and procedures were adequate and designed to ensure that material information relating to us and our consolidated subsidiaries would be made known to them by others within those entities so that we are able to record, process, summarize and disclose such information in the reports we file with the SEC within the time periods specified in the SEC’s rules and forms.

(b) *Changes in internal controls.* There were no significant changes in our internal controls or to our knowledge, in other factors that could significantly affect our disclosure controls and procedures subsequent to the Evaluation Date.

PART II — OTHER INFORMATION

Item 2. Changes in Securities and Use of Proceeds

(d) Use of Proceeds

Our Registration Statement on Form S-1 (File No. 333-43192) related to our initial public offering was declared effective by the SEC on July 26, 2001. The public offering commenced on July 27, 2001. All 4,500,000 shares of common stock offered in the final prospectus, as well as an additional 675,000 shares of common stock subject to the underwriters' over-allotment option, were sold at the closing on August 1, 2001 at a price to the public of $12.00 per share (before deducting underwriting discounts and commissions) through a syndicate of underwriters managed by Credit Suisse First Boston Corporation, Robertson Stephens, Inc. and Dain Rauscher Incorporated. The aggregate gross proceeds of the shares offered and sold was $62.1 million, out of which we paid an aggregate of $4.3 million in underwriting discounts and commissions to the underwriters. Our total expenses, including underwriting discounts and commissions were approximately $5.6 million.

We intend to use the net proceeds of the public offering primarily for general corporate purposes, including working capital and capital expenditures. The amounts and timing of these expenditures will vary depending on a number of factors, including the amount of cash generated or used by our operations, competitive and technological developments and the rate of growth, if any, of our business. We may use some of the net proceeds to acquire up to $10 million of outstanding shares of our common stock in open market or negotiated transactions pursuant to the repurchase program approved by our Board of Directors in February 2003. We may also use a portion of the net proceeds to acquire businesses, services, products or technologies or invest in businesses that we believe will complement our current or future business. As a result, we will retain broad discretion in the allocation of the proceeds of the public offering. Pending the uses described above, we will invest the net proceeds of the public offering in cash, cash equivalents, money market funds or short-term interest-bearing, investment-grade securities to the extent consistent with applicable regulations. We cannot predict whether the proceeds will be invested to yield a favorable return.

Item 5. Other Information

Non-Audit Services Provided by Independent Auditors

In accordance with Section 10A(i)(2) of the Securities Exchange Act of 1934, as added by Section 202 of the Sarbanes-Oxley Act of 2002 (the "Act"), we are required to disclose the non-audit services approved by our Audit Committee to be performed by Deloitte & Touche LLP, our independent auditors. Non-audit services are defined in the Act as services other than those provided in connection with an audit or a review of the financial statements of a company. On March 4, 2003, the Audit Committee approved the engagement of Deloitte & Touche LLP for the following non-audit services project: Assistance in connection with the Company's internal and process control framework for future assessments.

Item 6. Exhibits and Reports on Form 8-K

(a) Exhibits:

Exhibit Number	Description
3.1	Third Amended and Restated Certificate of Incorporation of PDF Solutions, Inc. **
3.2	Amended and Restated Bylaws of PDF Solutions, Inc. **
4.1	Specimen Stock Certificate.**
4.2	Second Amended and Restated Rights Agreement dated July 6, 2001.*
10.22	Amendment to Lease Agreement between PDF Solutions, Inc. and Metropolitan Life Insurance Company dated as of March 19, 2003.
10.23	Office Lease between PDF Solutions, Inc. and 15015 Avenue of Science Associates LLC dated as of April 1, 2003.
99.1	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
99.2	Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Incorporated by reference to PDF's Registration Statement on Form S-1, Amendment No. 7 filed July 9, 2001 (File No. 333-43192).

** Incorporated by reference to PDF's Report on Form 10-Q filed September 6, 2001 (File No. 000-31311).

(b) Reports on Form 8-K

No reports on Form 8-K were filed by PDF during the three months ended March 31, 2003.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Date: May 14, 2003

By: /s/ John K. Kibarian

John K. Kibarian
President and Chief Executive Officer

By: /s/ P. Steven Melman

P. Steven Melman
Chief Financial Officer and Vice President, Finance and Administration

CERTIFICATIONS

I, John K. Kibarian, certify that:

1. I have reviewed this quarterly report on Form 10-Q of PDF Solutions, Inc.;

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

   a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;

   b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the “Evaluation Date”); and

   c) Presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant’s ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: May 14, 2003

By: /s/ John K. Kibarian

John K. Kibarian
President and
Chief Executive Officer
(Principal Executive Officer)

I, P. Steven Melman, certify that:

1. I have reviewed this quarterly report on Form 10-Q of PDF Solutions, Inc.;

2. Based on my knowledge, this quarterly report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this quarterly report;

3. Based on my knowledge, the financial statements, and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this quarterly report;

4. The registrant's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) for the registrant and we have:

   a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly report is being prepared;

   b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to the filing date of this quarterly report (the "Evaluation Date"); and

   c) Presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation Date;

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of registrant's board of directors (or persons performing the equivalent function):

   a) All significant deficiencies in the design or operation of internal controls which could adversely affect the registrant's ability to record, process, summarize and report financial data and have identified for the registrant's auditors any material weaknesses in internal controls; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls; and

6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: May 14, 2003

By: /s/ P. Steven Melman

P. Steven Melman
Chief Financial Officer
(Principal Financial Officer)

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EXHIBIT 10.22

FOURTH AMENDMENT TO OFFICE LEASE
(Amending the Seventh Floor Lease)

and

SECOND AMENDMENT TO LEASE
(Amending the Fifth Floor Lease)

This Fourth Amendment to Office Lease and Second Amendment to Lease (collectively, the "Amendment") is entered into, and dated for reference purposes, as of March 19, 2003 (the "Execution Date") by and between METROPOLITAN LIFE INSURANCE COMPANY, a New York corporation ("Metropolitan"), as Landlord ("Landlord"), and PDF Solutions, Inc., a Delaware corporation ("PDF"), as Tenant ("Tenant"), with reference to the following facts ("Recitals"):

A. Landlord and Tenant are the parties to that certain lease of the entire seventh floor (the "Seventh Floor Premises") of the building whose current street address is 333 West San Carlos Street, San Jose, California 95110 (the "Building"), all as described in the lease, which lease is comprised of the following: written lease (including, without limitation, the Addendum thereto) dated for reference purposes as of April 1, 1996 between Landlord and Tenant's predecessor-in-interest (PDF Solutions, Inc., a California corporation) (the "Original Lease"), as amended by that written amendment dated for reference purposes as of February 10, 1997 (the "First Amendment"), written amendment dated for reference purposes as of July 11, 1997 (the "Second Amendment") and written amendment dated for reference purposes as of August 17, 1999 (the "Third Amendment"), which collectively, as amended, is referred to herein as the "Existing Lease" or the "Seventh Floor Lease").

B Landlord and Tenant are also the parties to that certain lease of the entire fifth floor (the "Fifth Floor Premises") of the Building, all as described in the lease, which lease is comprised of the following: Letter dated February 20, 2002 from Metropolitan to PDF exercising Metropolitan's option that PDF attorn to Metropolitan as set forth therein; Metropolitan's consent to sublease by letter dated April 6, 2001 (which letter was addressed to Calico Commerce, Inc. ("Calico") as Prime Tenant, signed and agreed to by all of PDF, Calico and Metropolitan); Sublease dated March 14, 2001 between Calico and PDF (the "Sublease"); the Office Lease between Metropolitan and Calico, dated August 18, 1999, as amended as of September 7, 2000 (as amended, the "Master Lease"); and the Amendment to Lease dated as of August 9, 2002 between Landlord and Tenant's predecessor-in-interest (PDF Solutions, Inc., a California corporation) (which reference to Tenant's predecessor was due to clerical error). Collectively, the lease of the Fifth Floor Premises, as amended, is referred to herein as the "Fifth Floor Lease".

C. Landlord and Tenant desire to amend both the Fifth Floor Lease and the Seventh Floor Lease to consolidate both the Fifth Floor Premises and the Seventh Floor Premises into one lease under the Seventh Floor Lease (also referred to as the Existing Lease) for a modified and extended Term, and to provide for other amendments, as more particularly set forth below.

Section 1. Scope of Amendment; Defined Terms; Retroactive Effect; Tenant's Interest under the Leases.

(a) Except as expressly provided in this Amendment, the Existing Lease shall remain in full force and effect. Except as expressly provided in this Amendment, the Fifth Floor Lease shall remain in full force and effect as to the period through the Fifth Floor Lease Early Termination Date (defined below). Should any inconsistency arise between this Amendment and the Existing Lease as to the specific matters which are the subject of this Amendment, the terms and conditions of this Amendment shall control. The term "Existing Lease" defined above shall refer to the Existing Lease as it existed before giving effect to the modifications set forth in this Amendment and the term "Lease" as used herein and in the Existing Lease shall refer to the Existing Lease as modified by this Amendment. All capitalized terms used in this Amendment and not defined herein shall have the meanings set forth in the Existing Lease unless the context clearly requires otherwise. Tenant and Landlord acknowledge that they have executed this Amendment as of the Execution Date set forth above, but intend and agree that this Amendment shall be effective as of January 31, 2003 with the same force and effect as if executed on that date. Landlord acknowledges that prior to the Execution Date Tenant has paid rent for February at the rates applicable under the Existing Lease and Fifth Floor Lease and that

before the Execution Date Tenant may have paid rent for March. Tenant shall be entitled to credit against the rents due and becoming due under the Lease the amount (if any) by which the rents actually paid by Tenant for February and March, 2003 exceeded the rents payable under the Lease for such period, and Tenant shall pay Landlord within ten days after notice from Landlord the amount (if any) by which the rents actually paid by Tenant for February and March, 2003 underpaid the rents payable under the Lease for such period.

(b) PDF Solutions, Inc., a Delaware corporation ("PDF") represents and warrants and agrees that: (i) PDF occupies the Seventh Floor Premises and the Fifth Floor Premises and is the Tenant under the Existing Lease and the Fifth Floor Lease; (ii) PDF is the successor by merger to PDF Solutions, Inc, a California corporation ("PDF California") and as such is the surviving corporation after such merger, and assignee of or successor to the interest of PDF California under the Existing Lease and the Fifth Floor Lease, and has assumed, or hereby assumes, the obligations of PDF California under the Existing Lease and the Fifth Floor Lease, and holds all right, title and interest of PDF California and of the Tenant (as such term is defined and used in each of the Existing Lease and the Fifth Floor Lease) under the Existing Lease and the Fifth Floor Lease; (v) has not entered into any assignment of the Existing Lease or the Fifth Floor Lease, and no sublease or other agreement for use or occupancy of the Seventh Floor Premises or Fifth Floor Premises or any part of either is in effect. Tenant's obligations with respect to the representations, warranties and agreements under this Section survive the expiration or sooner termination of the Term of this Lease.

Section 2. Modification and Early Termination of Term of the Fifth Floor Lease. Landlord and Tenant acknowledge and agree that, before giving effect to this Amendment, pursuant to the Fifth Floor Lease, the Expiration Date of the Term of the Fifth Floor Lease is May 7, 2003. Notwithstanding any provision of the Fifth Floor Lease to the contrary, the Fifth Floor Lease is hereby amended to provide that the Expiration Date of the Term of the Fifth Floor Lease shall be January 31, 2003 (Fifth Floor Lease Early Termination Date) instead of any later date pursuant to its original terms, and the Fifth Floor Lease shall expire and terminate at midnight, January 31, 2003, including termination of any options or rights to extend or renew and all other options or rights, if any, provided in the Fifth Floor Lease, and

all rights and obligations with respect to rent thereunder shall be prorated on the basis of such early expiration and termination, except as otherwise provided herein with respect to the security deposit.

Section 3. Modification and Extension of Term of the Seventh Floor Lease. Landlord and Tenant acknowledge and agree that, before giving effect to this Amendment, pursuant to the Existing Lease, the Expiration Date of the Term of the Existing Lease is October 31, 2004. Notwithstanding any provision of the Existing Lease to the contrary, the Existing Lease is hereby amended to provide that the Expiration Date of the Term of the Existing Lease shall be January 31, 2003 instead of October 31, 2004, and then this Lease shall be for a term of five (5) years (the "Extended Term") beginning at midnight local time at the Building on February 1, 2003 (the "Extended Term Commencement Date") and expiring at midnight local time on January 31, 2008 (hereafter, the "Expiration Date" with respect to the Extended Term), unless sooner terminated pursuant to the terms of the Lease, and the Demised Premises for the Extended Term shall be both the Seventh Floor Premises and Fifth Floor Premises, as described in Section 5 below. Landlord and Tenant acknowledge and agree that this Amendment provides all rights and obligations of the parties with respect to extension of the Term, whether or not in accordance with any other provisions, if any, of the Existing Lease regarding renewal or extension, and any such provisions, options or rights for renewal or extension provided in the Existing Lease are hereby deleted as of the Execution Date.

Section 4. Deletion of Prior Amendments. For purposes of this Amendment, the "Prior Amendments" shall mean the First Amendment, Second Amendment and Third Amendment of the Existing Lease. Effective on the Extended Term Commencement Date (defined above), the "Prior Amendments" are deleted and shall not be part of the "Lease" , and shall have no further effect except with respect to any remaining determinations of the rights, claims and obligations of the parties for the period prior to February 1, 2003 with respect to the Seventh Floor Premises.

Section 5. Demised Premises; Tenant's Share of Taxes & Operating

Costs. Article L of Section I of the Original Lease is hereby deleted and amended as follows, and Articles F and K are hereby amended as follows, and notwithstanding any provision of the Existing Lease to the contrary, for the Extended Term:

(a) Demised Premises. The Demised Premises leased to and by Tenant shall mean the Seventh Floor Premises together with the Fifth Floor Premises, which shall be conclusively presumed to be the Rentable Area set forth below:

Fifth Floor Premises:	19,548 square feet of Rent
Seventh Floor Premises:	19,548 square feet
Demised Premises Total:	39,096 square feet

(b) Base Year; Tenant's Share of Taxes and Operating Costs. Tenant shall pay Tenant's Share of Taxes and Operating Costs in excess of the Base Taxes and Operating Costs Amount, and for such calculation, it is conclusively agreed that: (i) Tenant's Share is 13.274%; (ii) the Rentable Area of the Building is 294,532 square feet; and (iii) the Base Taxes and Operating Costs Amount is the amount of Taxes and Operating Costs for calendar year 2002.

Section 6. Base Annual Rent. Article H of Section I of the Original Lease is hereby amended as follows, and notwithstanding any provision of the Existing Lease to the contrary, for the Extended Term, Base Annual Rent and Monthly Installments thereof due and payable (in the manner required under the Lease for Monthly Installments of Base Annual Rent) by Tenant for the Extended Term shall be as follows:

Period from/through	Monthly Installment	Annual Rate/sq. ft. of Rentable Area
Month 01 - Month 12	$109,143.00	$33.50
Month 13 - Month 24	$114,030.00	$35.00
Month 25 - Month 36	$118,917.00	$36.50
Month 37 - Month 48	$123,804.00	$38.00
Month 49 - Month 60	$128,691.00	$39.50

Section 7. Parking. Notwithstanding any provision of the Existing Lease to the contrary, during the Extended Term, Tenant shall have the right to use on an unassigned basis ninety-four (94) parking spaces and for such right shall pay Landlord, as additional Rent in the same manner as for payment of Monthly Installments of Base Annual Rent, a total per month (prorated for any partial month(s) during such period) calculated at Landlord's prevailing rate for unassigned spaces; provided that Landlord's prevailing rate charged to Tenant shall not be increased at a rate greater than 3.25% per year following the Extended Term Commencement Date.

Section 8. Security Deposit. Article M of Section I of the Original Lease is hereby amended as follows, and notwithstanding any provision of the Existing Lease to the contrary, for the Extended Term the amount of the Security Deposit required under the Lease shall be One Hundred Forty-five Thousand Six Hundred and Thirty-two and 60/100 Dollars ($145,632.60). Landlord and Tenant acknowledge and agree that such amount is the combined total of the Security Deposit required under the Seventh Floor Lease ($57,666.60) plus that required under the Fifth Floor Lease ($87,966.00), and that Landlord shall transfer and credit toward that combined amount, such balance of the Security Deposit held under the Fifth Floor Lease which is not applied to any default of Tenant under the Fifth Floor Lease.

Section 9. Computer Room; Supplemental Cooling System; Supplemental Cooling Equipment.

(a) Landlord and Tenant acknowledge and agree that Tenant desires to locate certain computer servers and equipment (and/or other heat generating equipment) in a room ("Computer Room") within the Demised Premises. Landlord will allow such Computer Room provided that Tenant installs and operates a

"Supplemental Cooling System" (defined below) to cool the Computer Room. Tenant shall have the right, at Tenant's sole cost and expense, and subject to Landlord's reasonable approval of the plans and specifications for, and installation of, a Supplemental Cooling System, to install, operate and maintain a Supplemental Cooling System. Such right is further subject to all the additional terms and conditions set forth below. The term "Supplemental Cooling System" shall mean a supplemental cooling system for the Computer Room which meets all of the following requirements: (1) has sufficient capacity to cool the

Computer Room; (2) is separate from the Building's HVAC systems and shall not adversely affect the operation, maintenance or replacement of any Building HVAC system; (3) is capable of independent 24 hour operation daily; (4) does not, together with all other electrical loads of Tenant, exceed the capacity of the electrical circuits and equipment providing electrical power to the Demised Premises; and (5) is wholly contained within the Demised Premises, except as otherwise provided in Subsection (b) below.

(b) In meeting Tenant's obligation to provide a Supplemental Cooling System, Tenant shall have the right to use the "Supplemental Cooling Equipment" (defined below) and the additional area, to the extent available in the Building's existing pathways for utilities, necessary to connect the Supplemental Cooling Equipment to the Demised Premises from its existing terminal point (on the 8th floor of the Building), subject to Landlord's prior written approval of such additional area to be used and such connections, and further subject to the terms and conditions set forth below.

(c) For purposes of this Amendment, the term "Supplemental Cooling Equipment" shall mean the following:

(i) The existing equipment mounted on the Building's roof adjacent to the penthouse at column 7 between columns D and E, and which is described as follows:

one (1) Liebert Model DSC Dyrcooler and one (1) associated pump

one (1) Liebert Model DDC Dyrcooler and two (2) associated pumps

(ii) The existing associated devices, wiring and piping which extends from such roof equipment down to the 8th floor mechanical room, and the existing electrical connections and controls for such equipment; provided however, Tenant shall relocate any of such associated devices, wiring, piping and equipment, which are now located in the 8th floor mechanical room or elsewhere on the 8th floor, to a location within the Demised Premises.

(d) Tenant acknowledges and agrees that the Supplemental Cooling Equipment was installed and used by a former occupant, and that Tenant has requested to use it and is accepting it in its "As Is" condition, as more particularly provided in Section 10 below.

(e) Tenant shall pay all costs and expenses of all of the following (but items (1) and (2) are reimbursable out of funds in the "Landlord's Maximum Contribution" pursuant to Section 10 below): (1) providing and installing equipment, wiring and piping to connect to the Supplemental Cooling Equipment, the Building's electrical supply, the Building's water supply (if applicable) and the Building's condenser water supply and return lines (if applicable); (2) providing and installing separate meter(s) for Tenant's usage of electricity, water and condenser water for operation of the Supplemental Cooling System; (3) operation, maintenance, repair and replacement of the foregoing; (4) all costs of electricity, water and condenser water used in operation of the Supplemental Cooling System. Landlord may, in its discretion, require that such usage be separately metered or Landlord may reasonably estimate the amount and cost of such usage. In the event of failure or malfunction of any such meter(s), Tenant shall promptly repair or replace such failed or malfunctioning meter(s), and for any period of failure or malfunction, Landlord may estimate Tenant's usage and bill Tenant therefor. All installations contemplated by this Section, and the plans and specifications therefor, shall be part of the Work described in Section 10 if done prior to July 31, 2003 and, if done thereafter, shall be Tenant Alterations subject to Article 4 of the Original Lease. Tenant shall not have any right to remove the Supplemental Cooling System upon expiration or

earlier termination of the Extended Term, and the Supplemental Cooling System shall be (and the Supplemental Cooling Equipment shall remain) the property of Landlord.

Section 10. As Is Condition; Alterations by Tenant; Landlord's Maximum Contribution.

(a) Notwithstanding any provision of the Existing Lease to the contrary, Tenant acknowledges and agrees that: (1) Tenant has been in occupancy of the Demised Premises; (2) Tenant has been afforded ample opportunity to inspect the Supplemental Cooling Equipment and the Demised Premises, and has investigated their condition to the extent Tenant desires to do so; (3) Tenant is leasing the Demised Premises in its "As Is" condition and using the Supplemental Cooling Equipment in its "As Is" condition; (4) no representation regarding the condition of the Demised Premises or the Supplemental Cooling Equipment has been made by or on behalf of Landlord; and (5) Landlord has no obligation to remodel or to make any repairs, alterations or improvements in connection with Tenant's occupancy, use or this Amendment, and Landlord has no obligation to provide Tenant any allowance for any work in connection with the Demised Premises or the Supplemental Cooling Equipment, except to the extent provided in Subsection (e) below.

(b) Notwithstanding any provision of the Lease to the contrary, Landlord and Tenant acknowledge and agree that: (1) Tenant desires to make certain improvements and alterations to build a Computer Room in the Demised Premises on the Building's fifth floor and to adapt and connect the Supplemental Cooling Equipment for Tenant's use in connection therewith (collectively, the "Work"); (2) that such Work shall be done by Tenant as Tenant alterations within the meaning of Article 4 of the Original Lease (referred to in this Amendment as "Tenant Alterations") and pursuant to provisions of the Original Lease applicable to Tenant Alterations except as otherwise provided in this Amendment; (3) such Work, including all design, plan review, obtaining all approvals and permits, construction, a construction administration fee to Landlord equal to one percent (1%) of the total cost of the work ("Administration Fee"), and delivery to Landlord of plans and specifications (including final as-built plans and specifications of the Work, and if requested by Landlord, an as-built mylar and one digitized set of the plans and specifications), shall be at Tenant's sole cost and expense, except to the extent provided in Subsection (e) below; (4) if the aggregate cost of the Work does not exceed Landlord's Maximum Contribution, Tenant shall not be obligated to provide a completion and lien indemnity bond for such work; and (5) Tenant shall pay all costs and expenses of the Work subject to reimbursement to the extent the Landlord's Maximum Contribution is available pursuant to Subsection (e) below. Notwithstanding any provision of the Lease to the contrary, and notwithstanding any approval by Landlord of the Work to be done, Tenant, at Tenant's sole cost and expense, shall remove all of the Work no later than expiration or earlier termination of the Lease unless and except to the extent that Landlord specifically agrees in writing to allow some or all of the Work to remain. Tenant shall restore any area damaged by any permitted or required removal or shall pay Landlord an amount equal to Landlord's reasonable estimate of restoration costs.

(c) Tenant may select the general contractor to construct the Work in the Demised Premises from an approved list of contractors provided by Landlord.

(d) Tenant shall be responsible for the suitability for the Tenant's needs and business of the design and function of all such Work and for their construction in compliance with all laws, rules, orders, ordinances, directions, regulations and requirements pertaining to the Demised Premises, the Supplemental Cooling Equipment and Tenant's use thereof, as applicable and as interpreted at the time of construction of the Work, including all building codes and the Americans With Disabilities Act of 1990, as amended (the "ADA"). Tenant, through its architects, space planners, engineers and design-build contractors ("Tenant's Architect"), shall prepare all architectural plans and specifications, and engineering plans and specifications, for the real property improvements to be constructed by Tenant in the Demised Premises and with respect to the Supplemental Cooling Equipment in sufficient detail to be submitted for approval by Landlord pursuant to Article 4 of the Lease and to be submitted by Tenant for governmental approvals and building permits and to serve as the detailed construction drawings and specifications for the contractor, and shall include, among other things, all partitions, doors, HVAC (heating, ventilating and air conditioning systems) distribution, ceiling systems, light

fixtures, plumbing installations, electrical installations and outlets, telephone installations and outlets, any other installations required by Tenant, fire and life-safety systems, wall finishes and floor coverings, whether to be newly installed or requiring changes from the As-Is condition of the Demised Premises or of the Supplemental Cooling Equipment as of the date of execution of this Amendment. Tenant shall be responsible for the oversight, supervision and construction of all Work in compliance with this Lease, including compliance with all Law as applicable and as interpreted at the time of construction.

(e) Landlord's Maximum Contribution means an amount up to a maximum of Two Hundred Fifty Thousand Dollars ($250,000.00). Landlord's Maximum Contribution shall be payable as provided below and shall be used solely as follows: (1) to pay the Administration Fee to Landlord, the amount of which Landlord may deduct from the Landlord's Maximum Contribution and retain in payment of the Administration Fee; and (2) to reimburse Tenant for the actual costs of design, space planning and working drawings, services for electrical, mechanical, plumbing and structural engineering services, plan review, obtaining all approvals and permits, licenses, fees, construction management and construction of Work. In no event shall the Landlord's Maximum Contribution be used to reimburse any costs of designing, procuring or installing in the Demised Premises any trade fixtures, movable equipment, furniture, furnishings, telephone equipment, or other personal property (collectively "Personal Property" for purposes of this Amendment) to be used in the Demised Premises by Tenant, and the cost of such Personal Property shall be paid by Tenant. Landlord's Maximum Contribution shall be paid to Tenant within thirty (30) days after the later of final completion of the Tenant Work and Landlord's receipt of (i) a certificate of occupancy (if applicable), (ii) final as-built plans and specifications of the Work (if requested by Landlord, including an as-built mylar and one digitized set of the plans and specifications), (iii) full, final, unconditional lien releases from all contractors and subcontractors, and (iv) reasonable substantiation of costs incurred by Tenant with respect to the Work. Tenant must prior to July 31, 2003 submit written application with the items required above for disbursement or reimbursement for any reimbursable costs out of the Landlord's Maximum Contribution, and to the extent of any funds for which application has not been made prior to that date or if and to the extent that the reimbursable costs of the Tenant Work are less than the amount of Landlord's Maximum Contribution, then Landlord shall retain the unapplied or unused balance of the Landlord's Maximum Contribution and shall have no obligation or liability to Tenant with respect to such excess.

Section 11. Assignment, Mortgage, Subletting. Notwithstanding any provision of the Existing Lease to the contrary, as previously provided in the Third Amendment, for the Extended Term

(a) Subsection 3.1(5) of Section 3.1 of the Original Lease is hereby deleted.

(b) Subsection 3.2 of the Original Lease is deleted in its entirety, and the following substituted therefor:

"3.2. Tenant shall pay Landlord on the first day of each month during the term of the sublease or assignment fifty percent (50%) of the amount by which the sum of all rent and other consideration (direct or indirect) due from the subtenant or assignee for such month exceeds: (i) that portion of the Monthly Installments of Base Annual Rent and rental adjustments due under this Lease for said month which is allocable to the space sublet or assigned; and (ii) the following costs and expenses for the subletting or assignment of such space: (1) brokerage commissions and attorneys' fees and expenses, and (2) the actual costs paid in making any improvements or substitutions in the Demised Premises required by any sublease or assignment. All such costs and expenses shall be amortized over the term of the sublease or assignment pursuant to sound accounting principles. Vacancy period costs and expenses, including rent paid by Tenant during any vacancy, do not qualify as costs or expenses under item (ii) above."

Section 12. Option to Extend.

(i) Landlord hereby grants Tenant a single option to extend the Extended Term of the Lease for an additional period of five (5) years (such period may be referred to as the "Option Term"), as to the entire Demised Premises as it may then exist, upon and subject to the terms and conditions of this Section (the "Option To Extend"), and provided that at the time of exercise of such right: (i) Tenant must be in occupancy of the entire Demised Premises; and (ii) Tenant has a net worth sufficient to allow it to timely honor all of

its financial obligations thereunder at the time of the exercise.

(ii) Tenant's election (the "Election Notice") to exercise the Option To Extend must be given to Landlord in writing no earlier than February 1, 2007 and no later than May 1, 2007. If Tenant either fails or elects not to exercise its Option to Extend by not timely giving its Election Notice, then the Option to Extend shall be null and void.

(iii) The Option Term shall commence immediately after the expiration of the Extended Term of the Lease specified in Section 3 of this Amendment. Tenant's leasing of the Demised Premises during the Option Term shall be upon and subject to the same terms and conditions contained in the Lease except that (i) the Base Annual Rent and, if applicable, the Base Taxes and Operating Costs Amount shall be amended to equal the "Option Term Rent", defined and determined in the manner set forth in the immediately following Subsection; (ii) Tenant shall accept the Demised Premises in its "as is" condition without any obligation of Landlord to repaint, remodel, repair, improve or alter the Demised Premises or to provide Tenant any allowance therefor;

and (iii) there shall be no further option or right to extend the term of the Lease. If Tenant timely and properly exercises the Option To Extend, references in the Lease to the Term shall be deemed to mean the initial Term as extended by the Option Term unless the context clearly requires otherwise.

(iv) The Option Term Rent shall mean the greater of (i) the Annual Base Rent plus Tenant's then current Tenant's Share of Taxes and Operating Costs in excess of the Base Taxes and Operating Costs Amounts for calendar year 2002 (collectively, "Preceding Rent") or (ii) the "Prevailing Market Rent". As used herein Prevailing Market Rent shall mean the rent and all other monetary payments paid by tenants in connection with the use and occupancy of their premises that are then "market" (such as, for example, charges for after hours HVAC) and escalations, including consumer price increases, that Landlord could obtain from a third party desiring to lease the Demised Premises for a term equal to the Option Term, as second generation space, and commencing when the Option Term is to commence under market leasing conditions; provided however Prevailing Market Rent shall take into account the following: the size, location and floor levels of the Demised Premises; the type and quality of tenant improvements; age and location of the Building; quality of construction of the Building; services to be provided by Landlord or by tenant; and other factors that would be relevant to such a third party in determining what such party would be willing to pay therefor, all based upon comparable class A office buildings in San Jose; provided, however, that Prevailing Market Rent shall be determined without reduction or adjustment for "Tenant Concessions" (as defined below), if any, being offered to prospective new tenants of comparable space. For purposes of the preceding sentence, the term "Tenant Concessions" shall include, without limitation, "free rent", tenant improvement allowances and work, moving allowances, and lease takeovers. The determination of Prevailing Market Rent based upon the foregoing criteria shall be made by Landlord, in the good faith exercise of Landlord's business judgment. Within thirty (30) days after Tenant's exercise of the Option To Extend, Landlord shall notify Tenant of Landlord's determination of Option Term Rent for the Demised Premises. If, within five (5) days after Landlord notifies Tenant of Landlord's determination of Option Term Rent, Tenant does not accept Landlord's determination, Tenant shall so notify Landlord of Tenant's non-acceptance. Tenant shall then have the opportunity, within a period of twenty (20) days following the date Tenant notifies Landlord of Tenant's non-acceptance, to discuss with and request from Landlord a redetermination of Option Term Rent, with Tenant's acceptance, if any, of a redetermined Option Term Rent to be confirmed in writing during such twenty (20) day period. If Landlord does not offer a redetermined Option Term Rent, or Landlord and Tenant cannot agree upon an Option Term Rent for any reason or no reason whatsoever, then Tenant may notify Landlord no later than the expiration of the twenty (20) day period, that Tenant is rescinding Tenant's exercise of the Option to Extend. Upon such rescission, the Option to Extend shall become null and void. If Tenant does not notify Landlord of its rescission of the exercise of the Option to Extend within such twenty (20) day period, then Tenant shall be deemed to have exercised the Option to Extend at the Option Term Rent originally determined by Landlord, or the agreed-upon redetermined Option Term Rent, as applicable.

(v) This Option to Extend is personal to PDF Solutions, Inc. and may not be used by, and shall not be transferable or assignable (voluntarily or involuntarily) to any person or entity.

(vi) Upon the occurrence of any of the following events, Landlord shall have the option, exercisable at any time prior to commencement of the Option Term, to terminate all of the provisions of this Section with respect to the Option to Extend, with the effect of canceling and voiding any prior or subsequent exercise so this Option to Extend is of no force or effect:

a. Tenant's failure to timely exercise the Option to Extend in accordance with the provisions of this Section.

b. The existence at the time Tenant exercises the Option to Extend or at the commencement of the Option Term of any default on the part of Tenant under the Lease or of any state of facts which with the passage of time or the giving of notice, or both, would constitute such a default.

c. Tenant's third monetary default under the Lease prior to the commencement of the Option Term, notwithstanding that all such monetary defaults may subsequently be cured.

In the event of Landlord's termination of the Option to Extend pursuant to Section 12 (vi) b. or c., Tenant shall reimburse Landlord for all reasonable costs and expenses Landlord incurs in connection with Tenant's exercise of the Option to Extend including, without limitation, costs and expenses with respect to any brokerage commissions and attorneys' fees, and with respect to the design, construction or making of any tenant improvements, repairs or renovation or with respect to any payment of all or part of any allowance for any of the foregoing.

(vii) Without limiting the generality of any provision of the Lease, time shall be of the essence with respect to all of the provisions of this Section.

Section 13. Brokers. Notwithstanding any other provision of the Lease to the contrary, Tenant represents and warrants to Landlord that CB Richard Ellis, as Landlord's broker, is the sole broker who negotiated and brought about the consummation of this Amendment and that no discussions or negotiations were had with any other broker concerning this Amendment. Based on the foregoing representation and warranty, Landlord has agreed to pay any commission or fee owed to such broker in connection with this Amendment pursuant to Landlord's agreement between Landlord and such broker. Tenant hereby indemnifies and agrees to protect, defend and hold Landlord harmless from and against any claims of brokerage commissions arising out of any discussions or negotiations allegedly had by Tenant with any other broker in connection with the Building and the Demised Premises. The foregoing obligations of Tenant shall survive the expiration or sooner termination of the Lease.

Section 14. Change of Address for Copies of Notices to Landlord. Section 27.1 of the Original Lease is hereby amended to provide that (a) an additional method of sending notices which either party desires or is required to give the other is via reputable overnight national delivery service maintaining records of receipts, delivery and attempts at delivery, and (b) the current addresses for notices to be sent to Landlord pursuant to the Lease are modified as follows:

Metropolitan Life Insurance Company
c/o Office of the Building Manager
333 West San Carlos Street
Attention: Building Manager

with copies to the following:

Metropolitan Life Insurance Company
400 South El Camino Real, Suite 800
San Mateo, CA 94402
Attention: Director - Regional Manager, Real Estate Investments

and

Metropolitan Life Insurance Company
400 South El Camino Real, Suite 800

San Mateo, CA 94402
Attention: Associate General Counsel

Section 15. Time of Essence. Without limiting the generality of any other provision of the Existing Lease, time is of the essence to each and every term and condition of this Amendment.

Section 16. Attorneys' Fees. Notwithstanding any provision of the Existing Lease to the contrary: (a) each party to this Amendment shall bear its own attorneys' fees and costs incurred in connection with the discussions preceding, negotiations for and documentation of this Amendment; and (b) in the event any party brings any suit or other proceeding with respect to the subject matter or enforcement of this Amendment or the Lease, the prevailing party (as determined by the court, agency or other authority before which such suit or proceeding is commenced) shall, in addition to such other relief as may be awarded, be entitled to recover attorneys' fees, expenses and costs of investigation as actually incurred, including court costs, expert witness fees, costs and expenses of investigation, and all attorneys' fees, costs and expenses in any such suit or proceeding (including in any action or participation in or in connection with any case or proceeding under the Bankruptcy Code, 11 United States Code Sections 101 et seq., or any successor statutes, in establishing or enforcing the right to indemnification, in appellate proceedings, or in connection with the enforcement or collection of any judgment obtained in any such suit or proceeding).

Section 17. Effect of Headings. The titles or headings of the various parts or sections hereof are intended solely for convenience and are not intended and shall not be deemed to or in any way be used to modify, explain or place any construction upon any of the provisions of this Amendment.

Section 18. Entire Agreement; Amendment. This Amendment taken together with the Existing Lease, together with all exhibits, schedules, riders and addenda to each, constitutes the full and complete agreement and understanding between the parties hereto and shall supersede all prior communications, representations, understandings or agreements, if any, whether oral or written, concerning the subject matter contained in this Amendment and the Existing Lease, as so amended, and no provision of the Lease as so amended may be modified, amended, waived or discharged, in whole or in part, except by a written instrument executed by all of the parties hereto.

Section 19. Authority. Each person executing this Amendment represents and warrants that he or she is duly authorized and empowered to execute it, and does so as the act of and on behalf of the party indicated below.

Section 20. Counterparts. This Amendment may be executed in duplicates or counterparts, or both, and such duplicates or counterparts together shall constitute but one original of the Amendment. Each duplicate and counterpart shall be equally admissible in evidence, and each original shall fully bind each party who has executed it.

Section 21. Facsimile Signatures. In order to expedite the transaction contemplated herein, telecopied signatures may be used in place of original signatures on this Amendment. Tenant and Landlord intend to be bound by the signatures on the telecopied document, are aware that the other party will rely on the telecopied signatures, and hereby waive any defenses to the enforcement of the terms of this Amendment based on the form of signature.

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first set forth above.

TENANT: PDF SOLUTIONS, INC.,
a Delaware corporation

By: /s/ John K. Kibarian

Print Name: John K. Kibarian

Title: President and Chief Executive Officer

(Chairman of Board, President or Vice

President)

By: /s/ P. Steven Melman

Print Name: P. Steven Melman

Title: Chief Financial Officer

(Secretary, Assistant Secretary, CFO or Assistant Treasurer)

LANDLORD: METROPOLITAN LIFE INSURANCE COMPANY,
a New York corporation

By: /s/ Bill J. Fitzgerald

Print Name: Bill J. Fitzgerald

Title: Assistant Vice President

EXHIBIT 10.23

CARMEL CORPORATE PLAZA

OFFICE LEASE

This Office Lease, which includes the preceding Summary attached hereto and incorporated herein by this reference (the Office Lease and Summary to be known sometimes collectively hereafter as the "LEASE"), dated as of the date set forth in Section 1 of the Summary, is made by and between 15015 AVENUE OF SCIENCE ASSOCIATES LLC, a Delaware limited liability company ("LANDLORD") and PDF SOLUTIONS, INC., a Delaware corporation ("TENANT").

ARTICLE 1

PROJECT, BUILDING AND PREMISES

1.1 PROJECT, BUILDING AND PREMISES. Upon and subject to the terms set forth in this Lease, Landlord hereby leases to Tenant and Tenant hereby leases from Landlord the premises set forth in Section 6.1 of the Summary (the "PREMISES"), which Premises are located in the Building defined in Section 6.2 of the Summary. The outline of the Premises is set forth in EXHIBIT A attached hereto. The Building, commonly known as The Carmel Corporate Plaza, is located at 15015 Avenue of Science, San Diego, California 92128-3430. The Building, the parking facilities located adjacent to the Building (the "PROJECT PARKING AREA"), any outside plaza areas, land and other improvements surrounding the Building and such other future buildings (if any), and the land upon which all of the foregoing are situated, are herein sometimes collectively referred to herein as the "PROJECT" or "REAL PROPERTY." Tenant acknowledges that Landlord has made no representation or warranty that other office buildings will be constructed in the Project, and Landlord may at its sole discretion, elect to construct or not construct any such additional office buildings or phases within the Project. Tenant further acknowledges that Landlord has made no representation or warranty regarding the condition of the Real Property except as specifically set forth in this Lease or the Tenant Work Letter. Tenant is hereby granted the right to the nonexclusive use of the common corridors and hallways, stairwells, elevators, restrooms and other public or common areas located on the Real Property; provided, however, that the manner in which such public and common areas are maintained and operated shall be at the sole discretion of Landlord and the use thereof shall be subject to the rules, regulations and restrictions attached hereto as EXHIBIT B (the "RULES AND REGULATIONS"), as the same may be modified by Landlord from time to time. Landlord reserves the right to make alterations or additions to or to change the location of elements of the Project and the common areas thereof.

1.2 CONDITION OF PREMISES. Except as expressly set forth in this Lease and in the Tenant Work Letter attached hereto as EXHIBIT D, Landlord shall not be obligated to provide or pay for any improvements, work or services related to the improvement, remodeling or refurbishment of the Premises, and Tenant shall accept the Premises in its "AS IS" condition on the Lease Commencement Date. Tenant also acknowledges that Landlord has made no representation or warranty regarding the condition of the Premises or the Project, except as specifically set forth in this Lease and the Tenant Work Letter. Landlord represents that, as of the Lease Commencement Date, the Building's mechanical, electrical, heating, ventilating, air conditioning, and life safety systems will be in a good operating condition.

1.3 RENTABLE SQUARE FEET. The parties hereby stipulate that the Premises contain the rentable square feet set forth in Section 6.1 of the Summary, and such square footage amount is not subject to adjustment or remeasurement by Landlord or Tenant. Accordingly, there shall be no adjustment in the Base Rent or other amounts set forth in this Lease which are determined based upon rentable square feet of the Premises, except as set forth in Section 4.2.6 hereof.

ARTICLE 2

LEASE TERM

2.1 LEASE TERM. The terms and provisions of this Lease shall be effective as of the date of this Lease. The term of this Lease (the "LEASE TERM") shall be

as set forth in Section 7.1 of the Summary and shall commence on the date (the "LEASE COMMENCEMENT DATE") set forth in Section 7.3 of the Summary, and shall terminate on the date (the "LEASE EXPIRATION DATE") set forth in Section 7.4 of the Summary, unless this Lease is sooner terminated as hereinafter provided. At any time during the Lease Term, Landlord may deliver to Tenant an amendment to this Lease confirming the Lease Commencement Date and Lease Expiration Date, in the form as set forth in EXHIBIT C, attached hereto, which Tenant shall execute and return to Landlord within five (5) days of receipt thereof. Tenant may, no more than thirty (30) days prior to the Lease Commencement Date, enter the Premises in order to install cables, phone and computer systems and/or furniture and equipment. If Tenant desires to exercise its right of early entry in accordance with the provisions of this Section, Tenant further agrees (i) to provide to Landlord at least three (3) business days advance written notice of the date of its intended entry, (ii) that Tenant shall pay for and provide certificates evidencing the existence and amounts of liability insurance carried by Tenant, which insurance shall comply with the terms and conditions of this Lease, (iii) that Tenant and its employees, contractors and agents shall comply with all applicable laws, regulations, permits and other approvals applicable to such early entry work on the Premises, (iv) that Tenant and its employees, contractors and agents shall not interfere with or delay in any manner the construction of the Tenant Improvements, and (v) that during such early occupancy period, Tenant shall comply with all other terms and conditions of the Lease other than the payment of Rent.

ARTICLE 3

BASE RENT

3.1 BASE RENT. Tenant shall pay, without notice or demand, to Landlord at the management office of the Project, or, at Landlord's option, such other place as Landlord may from time to time designate in writing, in currency or a check for currency which, at the time of payment, is legal tender for private or public debts in the United States of America, base rent ("BASE RENT") as set forth in Section 8 of the Summary, payable in equal monthly installments as set forth in Section 8 of the Summary in advance on or before the first day of each and every calendar month during the Lease Term, without any setoff or deduction whatsoever. The Base Rent for the first full calendar month of the Lease Term shall be paid at the time of Tenant's execution of this Lease. If any rental payment date (including the Lease Commencement Date) falls on a day of a calendar month other than the first day of such calendar month or if any Rent payment is for a period which is shorter than one calendar month (such as during the last month of the Lease Term), the Rent for any fractional calendar month shall be the proportionate amount of a full calendar month's rental based on the proportion that the number of days in such fractional month bears to the number of days in the calendar month during which such fractional month occurs. All other payments or adjustments required to be made under the terms of this Lease that require proration on a time basis shall be prorated on the same basis.

3.2 RENT RECAPTURE. Notwithstanding anything to the contrary set forth herein, Landlord and Tenant hereby agree that, despite the provisions of Section 8 of the Lease Summary, the Monthly Base Rental Rate per Rentable Square Foot for the period commencing on the Lease Commencement Date and ending on December 31, 2003 (such period being called the "ADJUSTMENT PERIOD") normally would be computed on the basis of $1.50 per Rentable Square Foot (the "ACTUAL RATE"). As an inducement to Tenant's execution of this Lease, Landlord has agreed to accept, during the Adjustment Period, the Base Rent set forth in Section 8 of the Summary. However, in the event of a default by Tenant under the terms of this Lease which results in early termination of this Lease, then as a part of the recovery set forth in this Lease, Landlord shall be entitled to recover from Tenant an amount equal to the difference between the Base Rent paid by Tenant during the Adjustment Period and the amount of Base Rent that would have been paid to Landlord during the Adjustment Period if the Base Rent for such period was calculated using the Actual Rate.

ARTICLE 4

ADDITIONAL RENT

4.1 ADDITIONAL RENT. In addition to paying the Base Rent specified in Article 3 of this Lease, Tenant shall pay as additional rent:

(i) Tenant's Share of the annual "Direct Expenses," as those terms are defined in Sections 4.2.6 and 4.2.1 of this Lease, respectively; and

(ii) Tenant's Share of the annual Utilities Costs, as that term is defined in Section 4.2.5 of this Lease.

4.2 DEFINITIONS. As used in this Article 4, the following terms shall have the meanings hereinafter set forth:

4.2.1 "DIRECT EXPENSES" shall mean "Operating Expenses" and "Tax Expenses."

4.2.2 "EXPENSE YEAR" shall mean each calendar year in which any portion of the Lease Term falls, through and including the calendar year in which the Lease Term expires; provided, that Landlord, upon notice to Tenant, may change the Expense Year from time to time to any twelve (12) consecutive month period, and, in the event of any such change, Tenant's Share of the Direct Expenses and Tenant's Share of the Utilities Costs shall be equitably adjusted for any Expense Year involved in any such change.

4.2.3 "OPERATING EXPENSES" shall mean all expenses, costs and amounts of every kind and nature which Landlord shall pay or incur during any Expense Year because of or in connection with the ownership, management, maintenance, repair, replacement, restoration or operation of the Real Property, including, without limitation, any amounts paid or incurred for: (i) all Utilities Costs; (ii) the cost of janitorial service, alarm and security service, window cleaning, and trash removal, the cost of operating, maintaining, repairing, replacing, renovating, managing and complying with conservation measures in connection with the utility systems, mechanical systems, sanitary and storm drainage systems, and escalator and elevator systems, and the cost of supplies, tools, and equipment and maintenance and service contracts in connection therewith; (iii) the cost of licenses, certificates, permits and inspections and the cost of contesting the validity or applicability of any governmental enactments which may affect Operating Expenses, and the costs incurred in connection with the implementation and operation of a transportation system management program or similar program; (iv) the cost of insurance carried by Landlord in connection with the Real Property, in such amounts as Landlord may reasonably determine, or as may be required by any mortgagees, or the lessor of any underlying or ground lease affecting the Real Property; (v) the cost of landscaping, relamping, supplies, tools, equipment (including equipment rental agreements) and materials, and all fees, charges and other costs, including management fees (or amounts in lieu thereof), consulting fees, legal fees and accounting fees, incurred in connection with the management, operation, administration, maintenance and repair of the Real Property; (vi) the cost of parking area repair, restoration and maintenance, including, but not limited to, resurfacing, repainting, restriping, and cleaning; (vii) fees, charges and other costs, including consulting fees, legal fees and accounting fees, of all contractors and consultants engaged by Landlord in connection with the management, operation, maintenance and repair of the Building or Project; (viii) payments under any equipment rental agreements or management agreements (including the cost of any management fee and the fair rental value of any office space provided thereunder); (ix) wages, salaries and other compensation and benefits of all persons engaged in the operation, management, maintenance or security of the Real Property, and employer's Social Security taxes, unemployment taxes or insurance, and any other taxes which may be levied on such wages, salaries, compensation and benefits shall be included in Operating Expenses based on their work time devoted to the Building or Project; (x) payments under any easement, license, operating agreement, declaration, restrictive covenant, or instrument pertaining to the sharing of costs by the Real Property; (xi) amortization (including interest on the unamortized cost at a rate equal to the floating commercial loan rate announced from time to time by

Bank of America, a national banking association, or its successor, as its prime rate, plus 2% per annum (the "INTEREST RATE")) of the cost of acquiring or the rental expense of personal property used in the maintenance, operation and repair of the Real Property; (xii) the cost (including rent) of Landlord's property management office for the Real Property and all utilities, supplies and materials used in connection therewith; (xiii) costs which relate to the operation, repair, maintenance and replacement of all systems, equipment or

facilities which serve the Real Property in the whole or in part (including replacement of wall and floor coverings, ceiling tiles and fixtures in lobbies, corridors, restrooms and other common or public areas or facilities, maintenance and replacement of curbs, walkways and parking areas, and repairs to roofs and reroofing of improvements), and (xiv) the cost of any capital alterations, capital additions, or capital improvements made to the Real Property or any portion thereof, (A) which are intended as a labor-saving device or to effect other economies in the operation or maintenance of the Real Property, or any portion thereof, or (B) that are required under any governmental law or regulation that is then being enforced by a federal, state or local governmental agency; provided, however, that each such permitted capital expenditure shall be amortized (including interest on the unamortized cost at the Interest Rate in effect at the time such expenditure is placed in service) over its useful life as Landlord shall reasonably determine. If Landlord is not furnishing any particular work or service (the cost of which, if performed or provided by Landlord, would be included in Operating Expenses) to a tenant who has undertaken to perform such work or service in lieu of the performance thereof by Landlord, Operating Expenses shall be deemed to be increased by an amount equal to the additional Operating Expenses which would reasonably have been incurred during such period by Landlord if it had at its own expense furnished such work or service to such tenant. If the Building is not one hundred percent (100%) occupied during all or a portion of any Expense Year, Landlord shall make an appropriate adjustment to the variable components of Operating Expenses for such Expense Year as reasonably determined by Landlord employing sound accounting and management principles, to determine the amount of Operating Expenses that would have been paid had such building(s) been one hundred percent (100%) occupied, and the amount so determined shall be deemed to have been the amount of Operating Expenses for such Expense Year.

Landlord shall have the right, from time to time, to equitably allocate and prorate some or all of the Direct Expenses and/or Utilities Costs among different tenants of the Project (the "COST Pools"). Such Cost Pools may include, without limitation, the office space tenants and retail space tenants of the Project and may be modified to take into account the addition of any additional office buildings within the Project, if any.

Notwithstanding the foregoing, for purposes of this Lease, Operating Expenses shall not, however, include: (A) except as otherwise set forth above in this Section 4.2.3, interest on debt and amortization on mortgages; (B) ground lease payments; (C) costs of leasing commissions, attorneys' fees and other costs and expenses incurred in connection with negotiations or disputes with present or prospective tenants or other occupants of the Real Property; (D) any costs expressly excluded from Operating Expenses elsewhere in this Lease; (E) costs of any items to the extent Landlord receives reimbursement from insurance proceeds (such proceeds to be excluded from Operating Expenses in the year in which received, except that any deductible amount under any insurance policy shall be included within Operating Expenses) or from a third party; (F) tax penalties incurred as a result of Landlord's negligence, inability or unwillingness to make payments or file returns when due; (G) costs arising from Landlord's charitable or political contributions; (H) costs associated with the operation of the business of the partnership or entity which constitutes the Landlord, as the same are distinguished from the costs of operation of the Real Property, including costs of partnership accounting and legal matters, costs of defending any lawsuits with any mortgagee (except as the actions of Tenant may be in issue), costs of selling, syndicating, financing, mortgaging or hypothecating any of the Landlord's interest in the Building; (I) costs incurred in connection with any disputes between Landlord and other tenants or occupants; or (J) costs incurred to comply with laws relating to the removal of Hazardous Material (as hereinafter defined) which was in existence in the Building prior to the Lease Commencement Date, and was of such a nature that a federal, State or municipal governmental authority, if it then had knowledge of the presence of such Hazardous Material, in the state, and under the conditions that then existed in the

Building, would have then required the removal of such Hazardous Material or other remedial or containment action with respect thereto;

4.2.4 "TAX EXPENSES" shall mean all federal, state, county, or local governmental or municipal taxes, fees, charges or other impositions of every kind and nature, whether general, special, ordinary or extraordinary (including,

without limitation, real estate taxes, general and special assessments, transit taxes or charges, business or license taxes or fees, annual or periodic license or use fees, open space charges, housing fund assessments, leasehold taxes or taxes based upon the receipt of rent, including gross receipts or sales taxes applicable to the receipt of rent, personal property taxes imposed upon the fixtures, machinery, equipment, apparatus, systems and equipment, appurtenances, furniture and other personal property used in connection with the Project), which Landlord shall pay or incur during any Expense Year (without regard to any different fiscal year used by such governmental or municipal authority) because of or in connection with the ownership, leasing and operation of the Real Property or Landlord's interest therein.

4.2.4.1 Tax Expenses shall include, without limitation:

(i) any assessment, tax, fee, levy or charge in addition to, or in substitution, partially or totally, of any assessment, tax, fee, levy or charge previously included within the definition of real property tax, it being acknowledged by Tenant and Landlord that Proposition 13 was adopted by the voters of the State of California in the June 1978 election ("PROPOSITION 13") and that assessments, taxes, fees, levies and charges may be imposed by governmental agencies for such services as fire protection, street, sidewalk and road maintenance, conservation, refuse removal and for other governmental services formerly provided without charge to property owners or occupants, and, in further recognition of the decrease in the level and quality of governmental services and amenities as a result of Proposition 13, Tax Expenses shall also include any governmental or private assessments or the contribution of the Project towards a governmental or private cost-sharing agreement for the purpose of augmenting or improving the quality of services and amenities normally provided by governmental agencies. It is the intention of Tenant and Landlord that all such new and increased assessments, taxes, fees, levies, and charges and all similar assessments, taxes, fees, levies and charges be included within the definition of Tax Expenses for purposes of this Lease;

(ii) any assessment, tax, fee, levy, or charge allocable to or measured by the area of the Premises or the Rent payable hereunder, including, without limitation, any gross income tax with respect to the receipt of such Rent, or upon or with respect to the possession, leasing, operating, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises, or any portion thereof;

(iii) any assessment, tax, fee, levy or charge, upon this transaction or any document to which Tenant is a party, creating or transferring an interest or an estate in the Premises;

(iv) any possessory taxes charged or levied in lieu of real estate taxes; and

(v) any expenses incurred by Landlord in attempting to protest, reduce or minimize Tax Expenses.

4.2.4.2 Notwithstanding anything to the contrary contained in this Section 4.2.4, there shall be excluded from Tax Expenses: (i) all excess profits taxes, franchise taxes, gift taxes, capital stock taxes, inheritance and succession taxes, estate taxes, federal and state income taxes, and other taxes to the extent applicable to Landlord's general or net income (as opposed to rents, receipts or income attributable to operations at the Project); (ii) any items paid by Tenant under Section 4.4 of this Lease; and (iii) any items included as Operating Expenses or Utilities Costs.

4.2.5 "UTILITIES COSTS" shall mean the cost of all utilities supplied for the Project (including, without limitation, water, sewer, electricity, telephone and HVAC), other than those utilities which are paid directly by Tenant and other tenants of the Project for excess consumption and after-hours HVAC pursuant to Section 6.2 of this Lease or similar provisions in other tenants' leases.

4.2.6 "TENANT'S SHARE" shall mean the percentage set forth in Section 9.1 of the Summary. Tenant's Share was calculated by multiplying the

number of rentable square feet of the Premises by 100 and dividing the product by the total rentable square feet in the Building. In the event either the rentable square feet of the Premises, the Building, or the Project is changed, Tenant's Share shall be appropriately adjusted, and, as to the Expense Year in which such change occurs, Tenant's Share for such year shall be determined on the basis of the number of days during such Expense Year that each such Tenant's Share was in effect.

4.3 CALCULATION AND PAYMENT OF ADDITIONAL RENT.

4.3.1 CALCULATION. For each Expense Year ending or commencing within the Lease Term, Tenant shall pay to Landlord, in the manner set forth in Section 4.3.2, below, and as Additional Rent: (i) Tenant's Share of Direct Expenses for such Expense Year; and (ii) Tenant's Share of the Utilities Costs incurred for such Expense Year.

4.3.2 STATEMENT OF ACTUAL DIRECT EXPENSES AND UTILITIES COSTS AND PAYMENT BY TENANT. Following the end of each Expense Year, Landlord shall give to Tenant a statement (the "STATEMENT"), which shall indicate: (i) the Direct Expenses incurred or accrued for such preceding Expense Year; and (ii) the amount of the Utilities Costs incurred for such preceding Expense Year. Upon receipt of the Statement for each Expense Year ending during the Lease Term, Tenant shall pay, with its next installment of Base Rent due, but in no event later than thirty (30) days after receipt of such Statement, (A) the full amount of Tenant's Share of Direct Expenses for such Expense Year, less the amounts, if any, paid during such Expense Year as "Estimated Direct Expenses," as that term is defined in Section 4.3.3, below, plus (B) the full amount of Tenants Share of the Utilities Costs for such Expense Year, less the amounts, if any, paid by Tenant during the Expense Year as "Estimated Utilities Costs", as that term is defined in Section 4.3.3 below. The failure of Landlord to timely furnish the Statement for any Expense Year shall not prejudice Landlord from enforcing its rights under this Article 4. Even though the Lease Term has expired and Tenant has vacated the Premises, when the final determination is made of the Direct Expenses and Utilities Costs for the Expense Year in which this Lease terminates, taking into consideration that the Lease Expiration Date may have occurred prior to the final day of the applicable Expense Year, Tenant shall immediately pay to Landlord an amount as calculated pursuant to the provisions of Section 4.3.1 of this Lease as Tenant's Share of the Direct Expenses and Utilities Costs for such final Expense Year. The provisions of this Section 4.3.2 shall survive the expiration or earlier termination of the Lease Term.

4.3.3 STATEMENT OF ESTIMATED DIRECT EXPENSES AND UTILITIES COSTS. In addition, Landlord shall give Tenant a yearly expense estimate statement (the "ESTIMATE STATEMENT") which shall set forth Landlord's reasonable estimate (the "ESTIMATE") of (i) what the total amount of Direct Expenses for the then-current Expense Year shall be Direct Expenses (the "ESTIMATED DIRECT EXPENSES"), and (ii) what the total amount of Tenant's Share of the Utilities Costs for the then-current Expense Year shall be (the "ESTIMATED UTILITIES COSTS"). The Estimate Statement may be revised and reissued by Landlord from time to time. The failure of Landlord to timely furnish the Estimate Statement for any Expense Year shall not preclude Landlord from enforcing its rights to collect any Estimated Direct Expenses or Estimated Utilities Costs under this Article 4. Within thirty (30) days after receipt of such Estimate Statement, Tenant shall pay to Landlord an amount equal to (A) a fraction of the Estimated Direct Expenses (or the increase in the Estimated Direct Expenses if pursuant to a revised Estimate Statement) for the then-current Expense Year (reduced by any amounts paid as Estimated Direct Expenses pursuant to the last sentence of this Section 4.3.3), plus (B) a fraction of the Estimated Utilities Costs (or the increase in the Estimated Utilities Costs if pursuant to a revised Estimate Statement) for the then-current Expense Year (reduced by the amounts paid as Estimated Utilities Costs pursuant to the last sentence of

this Section 4.3.3). Such fraction shall have as its numerator the number of months which have elapsed in such current Expense Year to the month of such payment, both months inclusive, and shall have twelve (12) as its denominator. Until a new Estimate Statement is furnished, Tenant shall pay monthly, with the monthly Base Rent installments, an amount equal to the sum of (x) one-twelfth (1/12) of the total Estimated Direct Expenses plus (y) one-twelfth (1/12) of the total Estimated Utilities Costs set forth in the previous Estimate Statement delivered by Landlord to Tenant.

4.4 TAXES AND OTHER CHARGES FOR WHICH TENANT IS DIRECTLY RESPONSIBLE. Tenant shall reimburse Landlord, as Additional Rent, within ten (10) days after demand, for any and all taxes required to be paid by Landlord (except to the extent included in Tax Expenses by Landlord), excluding state, local and federal personal or corporate income taxes measured by the net income of Landlord from all sources and estate and inheritance taxes, whether or not now customary or within the contemplation of the parties hereto, when:

4.4.1 said taxes are measured by or reasonably attributable to the cost or value of Tenant's equipment, furniture, fixtures and other personal property located in the Premises, or by the cost or value of any leasehold improvements made in or to the Premises by or for Tenant, to the extent the cost or value of such leasehold improvements exceeds the cost or value of a building standard build-out as determined by Landlord regardless of whether title to such improvements shall be vested in Tenant or Landlord;

4.4.2 said taxes are assessed upon or with respect to the possession, leasing, operation, management, maintenance, alteration, repair, use or occupancy by Tenant of the Premises or any portion of the Project; or

4.4.3 said taxes are assessed upon this transaction or any document to which Tenant is a party creating or transferring an interest or an estate in the Premises.

4.5 UTILITIES AND SERVICES. Tenant agrees to contract directly for and to pay for all electricity, telephone and cable services supplied to the Premises, together with any taxes thereon. If any such services are not separately metered to Tenant, any charges related thereto shall constitute Operating Expenses and Tenant agrees to pay Tenant's Share of such charges as Additional Rent pursuant to this Lease.

4.6 LATE CHARGES. If any installment of Rent or any other sum due from Tenant shall not be received by Landlord or Landlord's designee within five (5) days after the due date therefor, then Tenant shall pay to Landlord a late charge equal to five percent (5%) of the amount due plus any attorneys' fees incurred by Landlord by reason of Tenant's failure to pay Rent and/or other charges when due hereunder. The late charge shall be deemed Additional Rent and the right to require it shall be in addition to all of Landlord's other rights and remedies hereunder, at law and/or in equity and shall not be construed as liquidated damages or as limiting Landlord's remedies in any manner. In addition to the late charge described above, any Rent or other amounts owing hereunder which are not paid by the date they are due shall thereafter bear interest until paid at a rate equal to the lesser of (i) the Interest Rate set forth in Section 4.2.3 above, or (ii) the highest rate permitted by applicable law.

ARTICLE 5

USE OF PREMISES

5.1 USE. Tenant shall use the Premises solely for general office purposes, and for research and development for an engineering firm, which uses shall be consistent with the character of the Project as a first-class office building project, and Tenant shall not use or permit the Premises to be used for any other purpose or purposes whatsoever. Tenant further covenants and agrees that it shall not use, or suffer or permit any person or persons to use, the Premises or any part thereof for any use or purpose contrary to the Rules and Regulations, or in violation of the laws of the United States of America, the State of California, or the ordinances, regulations or requirements of the local municipal or county

governing body or other lawful authorities having jurisdiction over the Project (including laws pertaining to Hazardous Materials, as defined below). Tenant shall comply with the Rules and Regulations. Landlord shall not be responsible to Tenant for the nonperformance of any of such Rules and Regulations by or otherwise with respect to the acts or omissions of any other tenants or occupants of the Project. Tenant shall comply with all recorded covenants, conditions, and restrictions now or hereafter affecting the Real Property.

5.2 HAZARDOUS MATERIALS.

5.2.1 PROHIBITION ON USE. Tenant shall not use or allow another person or entity to use any part of the Premises for the storage, use, treatment, manufacture or sale of Hazardous Materials. Landlord acknowledges, however, that Tenant will maintain products in the Premises which are incidental to the operation of its offices, such as photocopy supplies, secretarial supplies and limited janitorial supplies, which products contain chemicals which are categorized as Hazardous Materials. Landlord agrees that the use of such products in the Premises in compliance with all applicable laws and in the manner in which such products are designed to be used shall not be a violation by Tenant of this Section 5.2.1.

5.2.2 INDEMNITY. Tenant agrees to indemnify, defend (with legal counsel reasonably acceptable to Landlord), protect and hold Landlord and the Landlord Parties (as defined in Section 10.1 below) harmless from and against any and all claims, actions, administrative proceedings (including informal proceedings), judgments, damages, punitive damages, penalties, fines, costs, liabilities, interest or losses, including reasonable attorneys' fees and expenses, consultant fees, and expert fees, together with all other costs and expenses of any kind or nature, that arise during or after the Lease Term directly or indirectly from or in connection with the presence, suspected presence, release or suspected release of any Hazardous Materials in or into the air, soil, surface water or groundwater at, on, about, under or within the Premises or Real Property or any portion thereof, caused by Tenant, its assignees or subtenants and/or their respective agents, employees, contractors, licensees or invitees (collectively, "TENANT AFFILIATES").

5.2.3 REMEDIAL WORK. In the event any investigation or monitoring of site conditions or any clean-up, containment, restoration, removal or other remedial work (collectively, the "REMEDIAL WORK") is required under any applicable federal, state or local laws or by any judicial order, or by any governmental entity as the result of operations or activities upon, or any use or occupancy of any portion of the Premises by Tenant or Tenant Affiliates, Tenant shall perform or cause to be performed the Remedial Work in compliance with such laws or order. All Remedial Work shall be performed by one or more contractors, selected by Tenant and approved in advance in writing by Landlord. All costs and expenses of such Remedial Work shall be paid by Tenant, including, without limitation, the charges of such contractor(s), the consulting engineers, and Landlord's reasonable attorneys' fees and costs incurred in connection with monitoring or review of such Remedial Work.

5.2.4 DEFINITION OF HAZARDOUS MATERIALS. As used herein, the term "HAZARDOUS MATERIALS" means any hazardous or toxic substance, material or waste which is or becomes regulated by any local governmental authority, the State of California or the United States Government, including, without limitation, any material or substance which is (i) defined or listed as a "hazardous waste," "extremely hazardous waste," "restricted hazardous waste," "hazardous substance" or "hazardous material" under any applicable federal, state or local law or administrative code promulgated thereunder, (ii) petroleum, or (iii) asbestos.

ARTICLE 6

SERVICES AND UTILITIES

6.1 STANDARD TENANT SERVICES. Landlord shall provide the following services on all days during the Lease Term, unless otherwise stated below.

6.1.1 Subject to all governmental rules, regulations and guidelines applicable thereto, Landlord shall provide heating, ventilation and air conditioning ("HVAC") when necessary for normal comfort for normal office use in the Premises, from Monday through Friday, during the period from 7:00 a.m. to 6:00 p.m., and on Saturdays during the period from 8:00 a.m. to 12:00 p.m. (collectively, the "BUILDING HOURS"), except for nationally and locally recognized holidays as designated by Landlord (collectively, the "HOLIDAYS"). Notwithstanding anything to the contrary set forth in this Lease, Landlord shall provide HVAC for use in the Lab and the IT Room within the Premises, as such areas are depicted on EXHIBIT A attached hereto, twenty-four (24) hours per day seven (7) days per week.

6.1.2 Landlord shall provide adequate electrical wiring and

facilities and power for normal general office use as reasonably determined by Landlord. Tenant shall bear the cost of replacement of lamps, starters and ballasts for non-Building standard lighting fixtures within the Premises.

6.1.3 Landlord shall provide city water from the regular Building outlets for drinking, lavatory and toilet purposes.

6.1.4 Landlord shall provide janitorial services five (5) days per week, except the date of observation of the Holidays, in and about the Premises.

6.1.5 Landlord shall provide nonexclusive automatic elevator service at all times.

6.2 OVERSTANDARD TENANT USE. Tenant shall not, without Landlord's prior written consent, use heat-generating machines, machines other than normal fractional horsepower office machines, or equipment or lighting other than building standard lights in the Premises, which may adversely affect the temperature otherwise maintained by the air conditioning system or increase the water normally furnished for the Premises by Landlord pursuant to the terms of Section 6.1 of this Lease. If Tenant uses water or HVAC in excess of that supplied by Landlord pursuant to Section 6.1 of this Lease, or if Tenant's consumption of electricity shall exceed an average of three (3) watts per useable square foot of the Premises, connected load, calculated on a monthly basis during the Building Hours set forth in Section 6.1.1 above, then Tenant shall pay to Landlord, within ten (10) days after billing, the cost of such excess consumption, the cost of the installation, operation, and maintenance of equipment which is installed in order to supply such excess consumption, administrative and overhead costs incurred in connection with such excess consumption, and the cost of the increased wear and tear on existing equipment caused by such excess consumption; and Landlord may install devices to separately meter any increased use and in such event Tenant shall pay the increased cost directly to Landlord, within ten (10) days after demand, including the cost of such additional metering devices. If Tenant desires to use HVAC during hours other than the Building Hours, (i) Tenant shall give Landlord such prior notice, as Landlord shall from time to time establish as appropriate, of Tenant's desired use, (ii) Landlord shall supply such after-hours HVAC to Tenant at such hourly cost (which shall include, without limitation, the cost of the use of such HVAC, administrative and overhead charges, and the cost of maintenance and increased wear and tear on equipment used to provide such after-hours HVAC) to Tenant as Landlord shall from time to time establish, and (iii) Tenant shall pay such cost within ten (10) days after billing.

6.3 INTERRUPTION OF USE. Tenant agrees that Landlord shall not be liable for damages, by abatement of Rent or otherwise, for failure to furnish or delay in furnishing any service (including telephone and telecommunication services), or for any diminution in the quality or quantity thereof, when such failure or delay or diminution is occasioned, in whole or in part, by repairs, replacements, or improvements, by any strike, lockout or other labor trouble, by inability to secure electricity, gas, water, or other fuel at the Building after reasonable effort to do so, by any accident or casualty whatsoever, by act or default of Tenant or other parties, or by any other cause beyond Landlord's reasonable control; and such failures or delays or diminution shall never be deemed to constitute an eviction or disturbance of Tenant's use and possession of the Premises or relieve Tenant from paying Rent or performing any of its obligations under this Lease. Furthermore, Landlord shall not be liable under any circumstances for a loss of, or injury to, property or for injury to, or interference with, Tenant's business, including, without

limitation, loss of profits, however occurring, through or in connection with or incidental to a failure to furnish any of the services or utilities as set forth in this Article 6.

6.4 ADDITIONAL SERVICES. Landlord shall also have the exclusive right, but not the obligation, to provide any additional services which may be required by Tenant, including, without limitation, locksmithing, additional janitorial service, and additional repairs and maintenance, provided that Tenant shall pay to Landlord, within ten (10) days after billing, the sum of all costs to Landlord of such additional services plus an administration fee. Charges for any utilities or service for which Tenant is required to pay from time to time hereunder, shall be deemed Additional Rent hereunder and shall be billed on a

monthly basis.

ARTICLE 7

REPAIRS

7.1 TENANT'S REPAIRS. Subject to Landlord's repair obligations in Sections 7.2 and 11.1 below, Tenant shall, at Tenant's own expense, keep the Premises, including all improvements, fixtures and furnishings therein, in good order, repair and condition at all times during the Lease Term, which repair obligations shall include, without limitation, the obligation to promptly and adequately repair all damage to the Premises and replace or repair all damaged or broken fixtures and appurtenances; provided however, that, at Landlord's option, or if Tenant fails to make such repairs, Landlord may, but need not, make such repairs and replacements, and Tenant shall pay Landlord the cost thereof, including a percentage of the cost thereof (to be uniformly established for the Building) sufficient to reimburse Landlord for all overhead, general conditions, fees and other costs or expenses arising from Landlord's involvement with such repairs and replacements forthwith upon being billed for same.

7.2 LANDLORD'S REPAIRS. Anything contained in Section 7.1 above to the contrary notwithstanding, and subject to Articles 11 and 12 of this Lease, Landlord shall repair and maintain the structural portions of the Building and the basic plumbing, heating, ventilating, air conditioning and electrical systems serving the Building and not located in the Premises; provided, however, if such maintenance and repairs are caused in part or in whole by the act, neglect, fault of or omission of any duty by Tenant, its agents, contractors, employees, licenses or invitees (and, to the extent that such damage is not covered by Landlord's insurance), Tenant shall pay to Landlord, as additional rent, the reasonable cost of such maintenance and repairs. Landlord shall not be liable to Tenant for any failure to make any such repairs, or to perform any maintenance hereunder, and there shall be no abatement of Rent and no liability of Landlord by reason of any injury to or interference with Tenant's business arising from the making of a failure to make any repairs, alterations or improvements in or to any portion of the Premises or Project or in or to fixtures, appurtenances and equipment therein, except to the extent caused by the gross negligence or willful misconduct of Landlord. Landlord may, but shall not be required to, enter the Premises at all reasonable times to make any repairs, alterations, improvements or additions to the Premises or to the Project or to any equipment located in the Project as Landlord shall desire or deem necessary or as Landlord may be required to do by governmental or quasi-governmental authority or court order or decree. Tenant hereby waives and releases its right to make repairs at Landlord's expense under any law, statute, or ordinance now or hereafter in effect.

ARTICLE 8

ADDITIONS AND ALTERATIONS

8.1 LANDLORD'S CONSENT TO ALTERATIONS. Tenant may not make any improvements, alterations, additions or changes to the Premises (collectively, the "ALTERATIONS") without first procuring the prior written consent of Landlord to such Alterations, which consent shall be requested by Tenant not less than thirty (30) days prior to the commencement thereof, and which consent shall not be unreasonably withheld by Landlord; provided, however, Landlord may withhold its consent in its sole and absolute discretion with respect to any Alterations which (i) may affect the structural components of the Building, or the Building's mechanical, electrical, heating, ventilating, air-conditioning, or life safety

systems, or (ii) are visible from outside the Premises. Notwithstanding the foregoing, Tenant may make strictly cosmetic changes to the finish work in the Premises, not requiring any structural or other substantial modifications to the Premises, or changes costing less than of Five Thousand Dollars ($5,000) for any one work of improvement, or in excess of Five Thousand Dollars ($5,000) in the aggregate for multiple works of improvement during any period of twelve (12) consecutive months during the Lease Term (a "PERMITTED ALTERATION"), upon thirty (30) days prior written notice to Landlord. The construction of the initial improvements to the Premises shall be governed by the terms of the Tenant Work Letter, attached hereto as EXHIBIT D, and not the terms of this Article 8.

8.2 MANNER OF CONSTRUCTION. Landlord may impose, as a condition of its consent to any and all Alterations or repairs of the Premises or about the Premises, such requirements as Landlord in its sole discretion may deem desirable, including, but not limited to, the requirement that upon Landlord's request, Tenant shall, at Tenant's expense, remove such Alterations upon the expiration or any early termination of the Lease Term (upon Tenant's request, Landlord shall specify, at the time of its consent, which Alteration, if any, must be removed upon expiration or early termination of the Lease Term), and/or the requirement that Tenant utilize for such purposes only contractors, materials, mechanics and materialmen approved by Landlord. Tenant shall construct such Alterations and perform such repairs in conformance with any and all applicable rules and regulations of any federal, state, county or municipal code or ordinance and pursuant to a valid building permit, issued by the City of San Diego in conformance with Landlord's construction rules and regulations. All work with respect to any Alterations must be done in a good and workmanlike manner and diligently prosecuted to completion to the end that the Premises shall at all times be a complete unit except during the period of work. In performing the work of any such Alterations, Tenant shall have the work performed in such manner as not to obstruct access to the Building or Project or the common areas by any other tenant of the Project, and as not to obstruct the business of Landlord or other tenants in the Project, or interfere with the labor force working in the Project. If Tenant makes any Alterations, Tenant agrees to carry "Builder's All Risk" insurance in an amount approved by Landlord covering the construction of such Alterations, and such other insurance as Landlord may require, it being understood and agreed that all of such Alterations shall be insured by Tenant pursuant to Article 10 of this Lease immediately upon completion thereof. In addition, Landlord may, in its discretion, require Tenant to obtain a lien and completion bond or some alternate form of security satisfactory to Landlord in an amount sufficient to ensure the lien-free completion of such Alterations and naming Landlord as a co-obligee. Upon completion of any Alterations, Tenant shall (i) cause a timely Notice of Completion to be recorded in the office of the Recorder of San Diego County in accordance with the terms of Section 3093 of the Civil Code of the State of California or any successor statute, (ii) deliver to the Project management office a reproducible copy of the "as built" drawings of the Alterations, and (iii) deliver to Landlord evidence of payment, contractors' affidavits and full and final waivers of all liens for labor, services or materials.

8.3 PAYMENT FOR ALTERATIONS. If Tenant orders any Alterations or repair work directly from Landlord, Tenant shall pay to Landlord, within ten (10) days after demand, all charges for such work, including a percentage of the cost of such work (such percentage to be established on a uniform basis for the Building) sufficient to compensate Landlord for all overhead, general conditions, fees and other costs and expenses arising from Landlord's involvement with such work. If Tenant does not order any work directly from Landlord, Tenant shall reimburse Landlord, within ten (10) days after demand, for Landlord's out-of-pocket costs and expenses incurred in connection with Landlord's review of such work, plus a Landlord administrative fee equal to five percent (5%) of the total cost of such work.

8.4 LANDLORD'S PROPERTY. All Alterations, improvements and fixtures which may be installed or placed in or about the Premises, and all signs installed in, on or about the Premises, from time to time, shall be at the sole cost of Tenant and shall be and become the property of Landlord; provided, however, that Tenant may remove those improvements that Tenant can substantiate were not paid for with any Tenant improvement funds provided to Tenant by Landlord. Notwithstanding the foregoing, Landlord may, by written notice to Tenant at the time Landlord (i) grants its consent to an Alteration, or (ii) is notified by Tenant of a Permitted Alteration, notify Tenant as to whether it shall require Tenant at Tenant's expense to remove any Alterations from the Premises and repair any damage to the Premises and

Building caused by such removal upon termination of this Lease. If Tenant fails to complete such removal prior and/or to repair any damage caused by the removal of any Alterations by the end of the Lease Term, Landlord may do so and may charge the cost thereof to Tenant.

ARTICLE 9

COVENANT AGAINST LIENS

Tenant has no authority or power to cause or permit any lien or encumbrance of any kind whatsoever, whether created by act of Tenant, operation of law or otherwise, to attach to or be placed upon the Real Property or any portion thereof, and any and all liens and encumbrances created by Tenant shall attach to Tenant's interest only. Landlord shall have the right at all times to post and keep posted on the Premises any notice which it deems necessary for protection from such liens. Tenant covenants and agrees not to suffer or permit any lien of mechanics or materialmen or others to be placed against the Real Property or any portion thereof, with respect to work or services claimed to have been performed for or materials claimed to have been furnished to Tenant or the Premises, and, in case of any such lien attaching or notice of any lien, Tenant covenants and agrees to cause it to be immediately released and removed of record. Notwithstanding anything to the contrary set forth in this Lease, in the event that such lien is not released and removed on or before the date occurring five (5) days after notice of such lien is delivered by Landlord to Tenant, Landlord, at its sole option, may immediately take all action necessary to release and remove such lien, without any duty to investigate the validity thereof, and all sums, costs and expenses, including reasonable attorneys' fees and costs, incurred by Landlord in connection with such lien shall be deemed Additional Rent under this Lease and shall immediately be due and payable by Tenant.

ARTICLE 10

INSURANCE

10.1 INDEMNIFICATION AND WAIVER. Except as due to the gross negligence or willful misconduct of Landlord or Landlord Parties (as hereinafter defined), Tenant hereby assumes all risk of damage to property and injury to persons in, on or about the Premises from any cause whatsoever, and agrees that, to the extent not prohibited by law, Landlord, its partners and subpartners, and their respective officers, directors, shareholders, agents, property managers, employees and independent contractors (collectively, the "LANDLORD PARTIES") shall not be liable for, and are hereby released from any responsibility for, any damage either to person or property or resulting from the loss of use thereof, which damage is sustained by Tenant or by other persons claiming through Tenant. Tenant shall indemnify, defend, protect and hold harmless the Landlord Parties from and against any and all loss, cost, damage, expense, cause of action, claims and liability, including without limitation court costs and reasonable attorneys' fees (collectively "CLAIMS") incurred in connection with or arising from (a) any cause in, on or about the Premises, (b) any acts, omissions or negligence of Tenant or of any person claiming by, through or under Tenant, or of the contractors, agents, employees, licensees or invitees of Tenant or any such person in, on or about the Real Property, and (c) any cause relating to the Nitrogen Tank (as hereinafter defined); provided that the terms of the foregoing indemnity shall not apply to: (i) any Claims to the extent resulting from the gross negligence or willful misconduct of Landlord or the Landlord Parties; or (ii) any loss of or damage to Landlord's property to the extent Landlord has waived such loss or damage pursuant to Section 10.4 below. Tenant's agreement to indemnify Landlord pursuant to this Section 10.1 is not intended and shall not relieve any insurance carrier of its obligations under policies required to be carried by Tenant pursuant to the provision of this Lease. The provisions of this Section 10.1 shall survive the expiration or sooner termination of this Lease with respect to any Claims occurring prior to such expiration or termination.

10.2 TENANT'S COMPLIANCE WITH LANDLORD'S FIRE AND CASUALTY INSURANCE. Tenant shall, at Tenant's expense, comply with all insurance company requirements pertaining to the use of the Premises. If Tenant's conduct or use of the Premises causes any increase in the premium for any insurance policies carried by Landlord, then Tenant shall reimburse Landlord for any such increase.

Tenant, at Tenant's expense, shall comply with all rules, orders, regulations or requirements of the American Insurance Association (formerly the National Board of Fire Underwriters) and with any similar body.

10.3 TENANT'S INSURANCE. Tenant shall maintain the following coverages in

the following amounts at all times following the date (the "INSURANCE START DATE") which is the earlier of (i) Tenant's entry into the Premises to perform any work therein, or (ii) the Lease Commencement Date, and continuing thereafter throughout the Lease Term:

10.3.1 Commercial General Liability Insurance covering the insured against claims of bodily injury, personal injury and property damage arising out of Tenant's operations, assumed liabilities or use of the Premises, including a Commercial General Liability endorsement covering the insuring provisions of this Lease and the performance by Tenant of the indemnity agreements set forth in Section 10.1 of this Lease, for limits of liability not less than: (i) Bodily Injury and Property Damage Liability - $2,000,000 each occurrence and $2,000,000 annual aggregate, and (ii) Personal Injury Liability - $2,000,000 each occurrence and $2,000,000 annual aggregate.

10.3.2 Physical Damage Insurance covering (i) all office furniture, trade fixtures, office equipment, merchandise and all other items of Tenant's property on the Premises installed by, for, or at the expense of Tenant, (ii) the "Tenant Improvements," as that term is defined in the Tenant Work Letter, and (iii) all Alterations and other improvements and additions in and to the Premises. Such insurance shall be written on an "all risks" of physical loss or damage basis, for the guaranteed replacement cost value new without deduction for depreciation of the covered items and in amounts that meet any co-insurance clauses of the policies of insurance and shall include a vandalism and malicious mischief endorsement, sprinkler leakage coverage and earthquake sprinkler leakage coverage.

10.3.3 Business interruption, loss-of-income and extra-expense insurance in such amounts as will reimburse Tenant for direct or indirect loss of earnings attributable to all perils commonly insured against by prudent tenants or attributable to prevention of access to the Premises or to the Building as a result of such perils.

10.3.4 The minimum limits of policies of insurance required of Tenant under this Lease shall in no event limit the liability of Tenant under this Lease. Such insurance shall: (i) name Landlord, and any other party it so specifies, as an additional insured; (ii) specifically cover the liability assumed by Tenant under this Lease, including, but not limited to, Tenant's obligations under Section 10.1 of this Lease; (iii) be issued by an insurance company having a rating of not less than A-X in Best's Insurance Guide or which is otherwise acceptable to Landlord and licensed to do business in the State of California; (iv) be primary insurance as to all claims thereunder and provide that any insurance carried by Landlord is excess and is non-contributing with any insurance requirement of Tenant; (v) provide that said insurance shall not be canceled or coverage changed unless thirty (30) days' prior written notice shall have been given to Landlord and any mortgagee of Landlord; and (vi) contain a cross-liability endorsement or severability of interest clause acceptable to Landlord. Tenant shall deliver said policy or policies or certificates thereof to Landlord on or before the Insurance Start Date and at least thirty (30) days before the expiration dates thereof. In the event Tenant shall fail to procure such insurance, or to deliver such certificate, Landlord may, at its option, procure such policies for the account of Tenant, and the costs of it shall be paid to Landlord as Additional Rent within five (5) days after delivery to Tenant of bills therefor.

10.4 SUBROGATION. Landlord and Tenant agree to have their respective insurance companies issuing property damage, loss of income and/or rental interruption and extra expense insurance waive any rights of subrogation that such companies may have against Landlord or Tenant, as the case may be, so long as the insurance carried by such party is not invalidated thereby. Landlord and Tenant hereby waive any right that either may have against the other on account of any loss or damage to their respective property to the extent such loss or damage is insured under property damage insurance policies carried by the waiving party under this Lease (or would have been covered had the waiving party maintained such insurance as so required under this Lease). If either party fails to carry the amounts and

types of insurance required to be carried by it pursuant to this Article 10, in addition to any remedies the other party may have under this Lease, such failure shall be deemed to be a covenant and agreement by such party to self-insure with

respect to the type and amount of insurance which such party so failed to carry, with full waiver of subrogation with respect thereto.

10.5 ADDITIONAL INSURANCE OBLIGATIONS. Tenant shall carry and maintain during the entire Lease Term, at Tenant's sole cost and expense, increased amounts of the insurance required to be carried by Tenant pursuant to this Article 10, and such other reasonable types of insurance coverage and in such reasonable amounts covering the Premises and Tenant's operations therein, as may be reasonably requested by Landlord, but in no event shall such increased amounts of insurance or such other reasonable types of insurance be in excess of that required by landlords of comparable Class "A" buildings located in the area in which the Project is located.

10.6 LANDLORD'S INSURANCE. During the Term, Landlord shall maintain casualty insurance covering the Building (excluding the property which Tenant is obligated to insure pursuant to the terms hereof). Such insurance shall provide protection against any peril generally included within the classification "Fire and Extended Coverage." Landlord shall also maintain comprehensive general liability and property damage insurance with respect to the operation of the Building. Such insurance shall be in such amounts and with such deductibles as Landlord reasonably deems appropriate. Landlord may, but shall not be obligated to, obtain and carry any other form or forms of insurance as it or Landlord's mortgagees or deed of trust beneficiaries may determine advisable. Notwithstanding any contribution by Tenant to the cost of insurance premiums as provided in this Lease, Tenant acknowledges that it has no right to receive any proceeds from any insurance policies maintained by Landlord and will not be named as an additional insured thereunder.

ARTICLE 11

DAMAGE AND DESTRUCTION

11.1 REPAIR OF DAMAGE TO PREMISES BY LANDLORD. Tenant shall promptly notify Landlord of any damage to the Premises resulting from fire or any other casualty or any condition existing in the Premises as a result of a fire or other casualty that would give rise to the terms of this Article 11. If the Premises or any common areas of the Project serving or providing access to the Premises shall be damaged by fire or other casualty or be subject to a condition existing as a result of a fire or other casualty, Landlord shall promptly and diligently, subject to reasonable delays for insurance adjustment or other matters beyond Landlord's reasonable control, and subject to all other terms of this Article 11, restore the base, shell, and core of the Premises and such common areas to substantially the same condition as existed prior to the casualty, except for modifications required by zoning and building codes and other laws or by the holder of a mortgage on the Project (or any portion thereof) or any other modifications to the common areas deemed desirable by Landlord, provided that access to the Premises and any common restrooms serving the Premises shall not be materially impaired. Notwithstanding any other provision of this Lease, upon the occurrence of any damage to the Premises, Tenant shall assign to Landlord (or to any party designated by Landlord) all insurance proceeds payable to Tenant under Tenant's insurance required under Sections 10.3.2(ii) and 10.3.2(iii) of this Lease, and Landlord shall repair any injury or damage to the Tenant Improvements and Alterations installed in the Premises and shall return such Tenant Improvements and Alterations to their original condition; provided that if the cost of such repair by Landlord exceeds the amount of insurance proceeds received by Landlord from Tenant's insurance carrier, as assigned by Tenant, the cost of such repairs shall be paid by Tenant to Landlord prior to Landlord's repair of the damage. In connection with such repairs and replacements, Tenant shall, prior to the commencement of construction, submit to Landlord, for Landlord's review and approval, all plans, specifications and working drawings relating thereto, and Landlord shall select the contractors to perform such improvement work. Landlord shall not be liable for any inconvenience or annoyance to Tenant or its visitors, or injury to Tenant's business resulting in any way from such damage or the repair thereof; provided however, that if such fire or other casualty shall have damaged the Premises or common areas necessary to Tenant's occupancy, and if such damage is not the result of the negligence or willful misconduct of Tenant or Tenant's agents, employees, contractors, licensees or

invitees, Landlord shall allow Tenant a proportionate abatement of Base Rent

during the time and to the extent the Premises are unfit for occupancy for the purposes permitted under this Lease, and not occupied by Tenant as a result thereof.

11.2 LANDLORD'S OPTION TO REPAIR. Notwithstanding the terms of Section 11.1 of this Lease, Landlord may elect not to rebuild and/or restore the Premises and/or Building and/or any other portion of the Project and instead terminate this Lease by notifying Tenant in writing of such termination within sixty (60) days after the date of damage, such notice to include a termination date giving Tenant ninety (90) days to vacate the Premises, but Landlord may so elect only if the Project shall be damaged by fire or other casualty or cause or be subject to a condition existing as a result of such a fire or other casualty or cause, whether or not the Premises are affected, and one or more of the following conditions is present: (i) repairs cannot reasonably be completed within one hundred eighty (180) days of the date of damage (when such repairs are made without the payment of overtime or other premiums); (ii) the holder of any mortgage on the Real Property or ground lessor with respect to the Real Property shall require that the insurance proceeds or any portion thereof be used to retire the mortgage debt, or shall terminate the ground lease, as the case may be; or (iii) the damage or condition arising as a result of such damage is not fully covered, except for deductible amounts, by Landlord's insurance policies. In addition, if the Premises, the Building or any portion of the Project is destroyed or damaged to any substantial extent during the last eighteen (18) months of the Lease Term, then notwithstanding anything contained in this Article 11, Landlord shall have the option to terminate this Lease by giving written notice to Tenant of the exercise of such option within thirty (30) days after such damage or destruction, in which event this Lease shall cease and terminate as of the date of such notice. Upon such termination of this Lease pursuant to this Section 11.2, Tenant shall pay the Base Rent and Additional Rent, properly apportioned up to such date of damage (subject to any abatement as provided in Section 11.1 above), and both parties hereto shall thereafter be freed and discharged of all further obligations hereunder, except as provided for in provisions of this Lease which by their terms survive the expiration or earlier termination of this Lease Term.

11.3 WAIVER OF STATUTORY PROVISIONS. The provisions of this Lease, including this Article 11, constitute an express agreement between Landlord and Tenant with respect to any and all damage to, or destruction of, all or any part of the Real Property, and any statute or regulation of the State of California, including, without limitation, Sections 1932(2) and 1933(4) of the California Civil Code, with respect to any rights or obligations concerning damage or destruction in the absence of an express agreement between the parties, and any other statute or regulation, now or hereafter in effect, shall have no application to this Lease or any damage or destruction to all or any part of the Real Property.

ARTICLE 12

CONDEMNATION

If ten percent (10%) or more of the Premises or Project shall be taken by power of eminent domain or condemned by any competent authority for any public or quasi-public use or purpose, or if Landlord shall grant a deed or other instrument in lieu of such taking by eminent domain or condemnation, Landlord shall have the option to terminate this Lease upon ninety (90) days' notice to Tenant, provided such notice is given no later than one hundred eighty (180) days after the date of such taking, condemnation, reconfiguration, vacation, deed or other instrument. If more than twenty-five percent (25%) of the rentable square feet of the Premises is taken, or if access to the Premises is substantially impaired as a result of any taking of all or any portion of the Project, Tenant shall have the option to terminate this Lease upon ninety (90) days' notice to Landlord, provided such notice is given no later than one hundred eighty (180) days after the date of such taking. Landlord shall be entitled to receive the entire award or payment in connection therewith, except that Tenant shall have the right to file any separate claim available to Tenant for any taking of Tenant's personal property and fixtures belonging to Tenant and removable by Tenant upon expiration of the Lease Term pursuant to the terms of this Lease, and for moving expenses, so long as such claim does not diminish the award available to Landlord, its ground lessor with respect to the Real Property or its mortgagee, and such claim is payable separately to Tenant. All Rent shall be apportioned as of the date of such termination, or the date of such

taking, whichever shall first occur. If any part of the Premises shall be taken, and this Lease shall not be so terminated, the Base Rent shall be proportionately abated. Tenant hereby waives any and all rights it might otherwise have pursuant to Section 1265.130 of the California Code of Civil Procedure.

ARTICLE 13

COVENANT OF QUIET ENJOYMENT

Landlord covenants that Tenant, on paying the Rent, charges for services and other payments herein reserved and on keeping, observing and performing all the other terms, covenants, conditions, provisions and agreements herein contained on the part of Tenant to be kept, observed and performed, shall, during the Lease Term, peaceably and quietly have, hold and enjoy the Premises subject to the terms, covenants, conditions, provisions and agreements hereof without interference by any persons lawfully claiming by or through Landlord. The foregoing covenant is in lieu of any other covenant express or implied.

ARTICLE 14

ASSIGNMENT AND SUBLETTING

14.1 TRANSFERS. Tenant shall not, without the prior written consent of Landlord, assign, mortgage, pledge, hypothecate, encumber, or permit any lien to attach to, or otherwise transfer, this Lease or any interest hereunder, permit any assignment or other such foregoing transfer of this Lease or any interest hereunder by operation of law, sublet the Premises or any part thereof, or permit the use of the Premises by any persons other than Tenant and its employees (all of the foregoing are hereinafter sometimes referred to collectively as "TRANSFERS" and any person to whom any Transfer is made or sought to be made is hereinafter sometimes referred to as a "TRANSFEREE"). If Tenant shall desire Landlord's consent to any Transfer, Tenant shall notify Landlord in writing, which notice (the "TRANSFER NOTICE") shall include (i) the proposed effective date of the Transfer, which shall not be less than forty-five (45) days nor more than one hundred eighty (180) days after the date of delivery of the Transfer Notice, (ii) a description of the portion of the Premises to be transferred (the "SUBJECT SPACE"), (iii) all of the terms of the proposed Transfer and the consideration therefor, including a calculation of the "Transfer Premium," as that term is defined in Section 14.3, below, in connection with such Transfer, the name and address of the proposed Transferee, and a copy of all existing and/or proposed documentation pertaining to the proposed Transfer, including all existing operative documents to be executed to evidence such Transfer or the agreements incidental or related to such Transfer, (iv) current financial statements of the proposed Transferee certified by an officer, partner or owner thereof, and (v) such other information as Landlord may reasonably require. Any Transfer made without Landlord's prior written consent shall, at Landlord's option, be null, void and of no effect, and shall, at Landlord's option, constitute a default by Tenant under Section 19.1.7 of this Lease. Whether or not Landlord consents to any proposed Transfer, Tenant shall pay Landlord's review and processing fees, as well as any reasonable legal fees incurred by Landlord, within thirty (30) days after written request by Landlord.

14.2 LANDLORD'S CONSENT. Subject to Landlord's rights in Section 14.4 below, Landlord shall not unreasonably withhold or delay its consent to any proposed Transfer of the Subject Space to the Transferee on the terms specified in the Transfer Notice. The parties hereby agree that it shall be deemed to be reasonable under this Lease and under any applicable law for Landlord to withhold consent to any proposed Transfer where one or more of the following apply, without limitation as to other reasonable grounds for withholding consent:

14.2.1 The Transferee is of a character or reputation or engaged in a business which is not consistent with the quality of the Project, or would be a significantly less prestigious occupant of the Building than Tenant;

14.2.2 The Transferee's intended use of the Subject Space is not permitted under this Lease;

14.2.3 The Transfer will result in more than a reasonable and safe number of occupants per floor within the Subject Space;

14.2.4 The Transferee is a governmental entity or agency;

14.2.5 The Transferee is not a party of reasonable financial worth and/or financial stability in light of the responsibilities involved under the Lease on the date consent is requested;

14.2.6 The proposed Transfer would cause Landlord to be in violation of another lease or agreement to which Landlord is a party, or would give an occupant of the Project a right to cancel its lease;

14.2.7 The terms of the proposed Transfer will allow the Transferee to exercise a right of renewal, right of expansion, right of first offer, or other similar right held by Tenant (or will allow the Transferee to occupy space leased by Tenant pursuant to any such right); or

14.2.8 Either the proposed Transferee, or any person or entity which directly or indirectly, controls, is controlled by, or is under common control with, the proposed Transferee, (i) occupies space in the Project at the time of the request for consent, (ii) is negotiating with Landlord to lease space in the Project at such time, or (iii) has negotiated with Landlord during the twelve (12)-month period immediately preceding the Transfer Notice.

If Landlord consents to any Transfer pursuant to the terms of this Section 14.2 (and does not exercise any recapture rights Landlord may have under Section 14.4 of this Lease), Tenant may within six (6) months after Landlord's consent, but not later than the expiration of said six (6)-month period, enter into such Transfer of the Premises or portion thereof, upon substantially the same terms and conditions as are set forth in the Transfer Notice furnished by Tenant to Landlord pursuant to Section 14.1 of this Lease, provided that if there are any changes in the terms and conditions from those specified in the Transfer Notice (i) such that Landlord would initially have been entitled to refuse its consent to such Transfer under this Section 14.2, or (ii) which would cause the proposed Transfer to be more favorable to the Transferee than the terms set forth in Tenant's original Transfer Notice, Tenant shall again submit the Transfer to Landlord for its approval and other action under this Article 14 (including Landlord's right of recapture, if any, under Section 14.4 of this Lease). Notwithstanding any contrary provisions of this Lease, if Tenant or any proposed Transferee claims that Landlord has unreasonably withheld or delayed its consent to a proposed Transfer or otherwise has breached its obligations under this Article, Tenant's and such Transferee's only remedy shall be to seek a declaratory judgment and/or injunctive relief, and Tenant, on behalf of itself and, to the extent permitted by law, such proposed Transferee, waives all other remedies against Landlord, including without limitation, the right to seek monetary damages or terminate this Lease.

14.3 TRANSFER PREMIUM.

14.3.1 DEFINITION OF TRANSFER PREMIUM. If Landlord consents to a Transfer, as a condition thereto which the parties hereby agree is reasonable, Tenant shall pay to Landlord fifty percent (50%) of the "Transfer Premium," as that term is defined in this Section 14.3, received by Tenant from such Transferee. "TRANSFER PREMIUM" shall mean all rent, additional rent or other consideration payable by such Transferee in connection with the Transfer which is in excess of the Rent payable by Tenant under this Lease during the term of the Transfer, on a per rentable square foot basis if less than all of the Premises is transferred, after deducting the reasonable expenses incurred by Tenant for (i) any changes, alterations and improvements to the Premises in connection with the Transfer, and (ii) any brokerage commissions and third party legal fees in connection with the Transfer (collectively, the "SUBLEASING COSTS"). "Transfer Premium" shall also include, but not be limited to, key money and bonus money paid by Transferee to Tenant in connection with such Transfer, and any payment in excess of fair market value for services rendered by Tenant to Transferee or for assets, fixtures, inventory, equipment, or furniture transferred by Tenant to Transferee in connection with such Transfer.

14.3.2 PAYMENT OF TRANSFER PREMIUMS. The determination of the amount of the Transfer Premium shall be made on an annual basis in accordance with the terms of this Section 14.3.2, but an estimate of the amount of the Transfer Premium shall be made each month and one-twelfth of such estimated amount shall be paid to Landlord promptly, but in no event later than the next date for payment of Base Rent hereunder, subject to an annual reconciliation on each anniversary date of the Transfer. If the payments to Landlord under this Section 14.3.2 during the twelve (12) months preceding each annual reconciliation exceed the amount of Transfer Premium determined on an annual basis, then Landlord shall credit the overpayment against Tenant's future obligations under this Section 14.3.2 or if the overpayment occurs during the last year of the Transfer in question, refund the excess to Tenant. If Tenant has underpaid the Transfer Premium, as determined by such annual reconciliation, Tenant shall pay the amount of such deficiency to Landlord promptly, but in no event later than the next date for payment of Basic Rent hereunder. For purposes of calculating the Transfer Premium on an annual basis, Tenant's Subleasing Costs shall be deemed to be offset against the first rent, additional rent or other consideration payable by the Transferee, until such Subleasing Costs are exhausted.

14.3.3 CALCULATIONS OF RENT. In the calculation of the Rent, as it relates to the Transfer Premium calculated under Section 14.3.1 above, the Rent paid during each annual period for the Subject Space by Tenant, shall be computed after adjusting such rent to the actual effective rent to be paid, taking into consideration any and all leasehold concessions granted in connection therewith, including, but not limited to, any rent credit and tenant improvement allowance. For purposes of calculating any such effective rent, all such concessions shall be amortized on a straight-line basis over the relevant term.

14.4 LANDLORD'S OPTION AS TO SUBJECT SPACE. Notwithstanding anything to the contrary contained in this Article 14, in the event that the Transfer involves a Transfer of less than the entire Premises, Landlord shall have the option, by giving written notice to Tenant within thirty (30) days after receipt of any Transfer Notice, to recapture the Subject Space. Such recapture notice shall cancel and terminate this Lease with respect to the Subject Space as of the date stated in the Transfer Notice as the effective date of the proposed Transfer. If this Lease shall be canceled with respect to less than the entire Premises, the Rent reserved herein shall be prorated on the basis of the number of rentable square feet retained by Tenant in proportion to the number of rentable square feet contained in the Premises, and this Lease as so amended shall continue thereafter in full force and effect, and upon request of either party, the parties shall execute written confirmation of the same. If Landlord declines, or fails to elect in a timely manner to recapture the Subject Space under this Section 14.4, then, provided Landlord has consented to the proposed Transfer, Tenant shall be entitled to proceed to transfer the Subject Space to the proposed Transferee, subject to provisions of the last paragraph of Section 14.2 of this Lease.

14.5 EFFECT OF TRANSFER. If Landlord consents to a Transfer, (i) the terms and conditions of this Lease shall in no way be deemed to have been waived or modified, (ii) such consent shall not be deemed consent to any further Transfer by either Tenant or a Transferee, (iii) Tenant shall deliver to Landlord, promptly after execution, an original executed copy of all documentation pertaining to the Transfer in form reasonably acceptable to Landlord, (iv) Tenant shall furnish upon Landlord's request a complete statement, certified by an independent certified public accountant, or Tenant's chief financial officer, setting forth in detail the computation of any Transfer Premium Tenant has derived and shall derive from such Transfer, and (v) no Transfer relating to this Lease or agreement entered into with respect thereto, whether with or without Landlord's consent, shall relieve Tenant or any guarantor of the Lease from liability under this Lease. Landlord or its authorized representatives shall have the right at all reasonable times to audit the books, records and papers of Tenant relating to any Transfer, and shall have the right to make copies thereof. If the Transfer Premium with respect to any Transfer shall be found understated, Tenant shall, within thirty (30) days after demand, pay the deficiency and Landlord's costs of such audit and if understated by more than ten percent (10%), Landlord shall have the right to cancel this Lease upon thirty (30) days' notice to Tenant.

14.6 ADDITIONAL TRANSFERS. For purposes of this Lease, the term "Transfer" shall also include (i) if Tenant is a partnership, the withdrawal or change, voluntary, involuntary or by operation of law, of

twenty-five percent (25%) or more of the partners, or transfer of twenty-five percent or more of partnership interests, within a twelve (12)-month period, or the dissolution of the partnership without immediate reconstitution thereof, and (ii) if Tenant is a closely held corporation (i.e., whose stock is not publicly held and not traded through an exchange or over the counter), (A) the dissolution, merger, consolidation or other reorganization of Tenant, or (B) the sale or other transfer of more than an aggregate of twenty-five percent (25%) of the voting shares of Tenant (other than to immediate family members by reason of gift or death), within a twelve (12)-month period, or (C) the sale, mortgage, hypothecation or pledge of more than an aggregate of twenty-five percent (25%) of the value of the unencumbered assets of Tenant within a twelve (12) month period.

14.7 PERMITTED TRANSFERS. Notwithstanding anything to the contrary contained in the Lease, Landlord's consent shall not be required for any assignment of this Lease or sublease of all or a portion of the Premises to an Affiliate of Tenant (as defined below) so long as the following conditions are met: (i) at least thirty (30) business days before any such assignment or sublease, Landlord receives written notice of such assignment or sublease (as well as any documents or information reasonably requested by Landlord regarding the proposed intended transfer and the transferee); (ii) Tenant is not then in default under this Lease; (iii) if the transfer is an assignment or any other transfer to an Affiliate other than a sublease, the intended assignee assumes in writing all of Tenant's obligations under this Lease relating to the Premises in a form satisfactory to Landlord or, if the transfer is a sublease, the intended sublessee accepts the sublease in form satisfactory to Landlord; (iv) the intended transferee has a tangible net worth, as evidenced by financial statements delivered to Landlord and certified by an independent certified public accountant in accordance with generally accepted accounting principles that are consistently applied, at least equal to the net worth of the original Tenant under the Lease as of the Effective Date; (v) the Premises shall continue to be operated solely for the use specified in the Lease; and (vi) Tenant shall pay to Landlord all costs reasonably incurred by Landlord or any mortgagee or ground lessor for such assignment or subletting, including, without limitation, reasonable attorneys' fees. No transfer to an Affiliate in accordance with this subparagraph shall relieve Tenant named herein of any obligation under this Lease or alter the primary liability of Tenant named herein for the payment of Rent or for the performance of any other obligation to be performed by Tenant, including the obligations contained in the Lease with respect to any Affiliate. As used herein, an "AFFILIATE" means any entity that (i) controls, is controlled by, or is under common control with Tenant; (ii) results from the transfer of all or substantially all of Tenant's assets or stock; or (iii) results from the merger or consolidation of Tenant with another entity. "CONTROL" means the direct or indirect ownership of more than fifty percent (50%) of the voting securities of an entity or possession of the right to vote more than fifty percent (50%) of the voting interest in the ordinary direction of the entity's affairs.

ARTICLE 15

SURRENDER OF PREMISES; REMOVAL OF TRADE FIXTURES

15.1 SURRENDER OF PREMISES. No act or thing done by Landlord or any agent or employee of Landlord during the Lease Term shall be deemed to constitute an acceptance by Landlord of a surrender of the Premises unless such intent is specifically acknowledged in a writing signed by Landlord. The delivery of keys to the Premises to Landlord or any agent or employee of Landlord shall not constitute a surrender of the Premises or effect a termination of this Lease, whether or not the keys are thereafter retained by Landlord, and notwithstanding such delivery Tenant shall be entitled to the return of such keys at any reasonable time upon request until this Lease shall have been terminated. The voluntary or other surrender of this Lease by Tenant, whether accepted by Landlord or not, or a mutual termination hereof, shall not work a merger, and at the option of Landlord shall operate as an assignment to Landlord of all subleases or subtenancies affecting the Premises.

15.2 REMOVAL OF TENANT PROPERTY BY TENANT. All articles of personal property and all business and trade fixtures, machinery and equipment, furniture and movable partitions owned by Tenant or installed by Tenant at its expense in the Premises, which items are not a part of the tenant improvements installed in the Premises, shall remain the property of Tenant, and may be removed by Tenant at any time during the Lease Term. Upon the expiration of the Lease Term, or

upon any earlier

termination of this Lease, Tenant shall, subject to the provisions of this Article 15, quit and surrender possession of the Premises to Landlord in as good order and condition as when Tenant took possession and as thereafter improved by Landlord and/or Tenant, reasonable wear and tear and repairs which are specifically made the responsibility of Landlord hereunder excepted. Upon such expiration or termination, Tenant shall, without expense to Landlord, remove or cause to be removed from the Premises all debris and rubbish, and such items of furniture, equipment, free-standing cabinet work, and other articles of personal property owned by Tenant or installed or placed by Tenant at its expense in the Premises, and such similar articles of any other persons claiming under Tenant, as Landlord may, in its sole discretion, require to be removed, and Tenant shall repair at its own expense all damage to the Premises and Building resulting from such removal.

15.3 REMOVAL OF TENANT'S PROPERTY BY LANDLORD. Whenever Landlord shall re-enter the Premises as provided in this Lease, any personal property of Tenant not removed by Tenant upon the expiration of the Lease Term, or within forty-eight (48) hours after a termination by reason of Tenant's default as provided in this Lease, shall be deemed abandoned by Tenant and may be disposed of by Landlord in accordance with Sections 1980 through 1991 of the California Civil Code and Section 1174 of the California Code of Civil Procedure, or in accordance with any laws or judicial decisions which may supplement or supplant those provisions from time to time.

15.4 LANDLORD'S ACTIONS ON PREMISES. In the event that Tenant has not removed its personal property from the Premises upon the expiration of the Lease Term, or within forty-eight (48) hours after a termination by reason of Tenant's default as provided in this Lease, and Landlord elects to enter the Premises for the purposes of removing, retaining, storing or selling the property of Tenant as herein provided, then Tenant hereby waives, and releases Landlord from, all claims for damages or other liability in connection with such entry by Landlord or its agents or representatives, and Tenant hereby indemnifies and holds Landlord harmless from any such damages or other liability, and no such re-entry shall be considered or construed to be a forcible entry.

ARTICLE 16

HOLDING OVER

If Tenant holds over after the expiration of the Lease Term, with or without the express or implied consent of Landlord, such tenancy shall be from month-to-month only, and shall not constitute a renewal hereof or an extension for any further term, and in such case Base Rent shall be payable at a monthly rate equal to one hundred fifty percent (150%) of the Base Rent applicable during the last rental period of the Lease Term under this Lease. Such month-to-month tenancy shall be subject to every other applicable term, covenant and agreement contained herein. Nothing contained in this Article 16 shall be construed as consent by Landlord to any holding over by Tenant, and Landlord expressly reserves the right to require Tenant to surrender possession of the Premises to Landlord as provided in this Lease upon the expiration or other termination of this Lease. The provisions of this Article 16 shall not be deemed to limit or constitute a waiver of any other rights or remedies of Landlord provided herein or at law. Tenant acknowledges that if Tenant holds over without Landlord's consent, such holding over may compromise or otherwise affect Landlord's ability to enter into new leases with prospective tenants regarding the Premises. Therefore, if Tenant fails to surrender the Premises upon the termination or expiration of this Lease, in addition to any other liabilities to Landlord accruing therefrom, Tenant shall protect, defend, indemnify and hold Landlord harmless from and against all Claims resulting from such failure, including, without limiting the generality of the foregoing, any claims made by any succeeding tenant founded upon such failure to surrender, and any losses suffered by Landlord, including lost profits, resulting from such failure to surrender.

ARTICLE 17

ESTOPPEL CERTIFICATES

Within ten (10) days following a request in writing by Landlord, Tenant shall execute and deliver to Landlord an estoppel certificate which, as submitted by Landlord, shall be substantially in the form of EXHIBIT E, attached hereto (or such other form as may be required by any prospective mortgagee or purchaser of the Project or any portion thereof), indicating therein any exceptions thereto that may exist at that time, and shall also contain any other information reasonably requested by Landlord or Landlord's mortgagee or prospective mortgagee or purchasers. Tenant shall execute and deliver whatever other instruments may be reasonably required for such purposes. At any time during the Lease Term, Landlord may require Tenant to provide Landlord with a current financial statement and financial statements of the two (2) years prior to the current financial statement year. Such statements shall be prepared in accordance with generally accepted accounting principles and, if such is the normal practice of Tenant, shall be audited by an independent certified public accountant. Failure of Tenant to timely execute and deliver such estoppel certificate or other instruments shall constitute an acceptance of the Premises and an acknowledgment by Tenant that statements included in the estoppel certificate are true and correct, without exception.

ARTICLE 18

SUBORDINATION

This Lease shall be subject and subordinate to all easement agreements and covenants, conditions and restrictions recorded against the land underlying the Project, and to all present and future ground or underlying leases of the Real Property and to the lien of any mortgages or trust deeds, now or hereafter in force against the Real Property, if any, and to all renewals, extensions, modifications, consolidations and replacements thereof, and to all advances made or hereafter to be made upon the security of such mortgages or trust deeds, unless the holders of such mortgages or trust deeds, or the lessors under such ground lease or underlying leases, require in writing that this Lease be superior thereto. Tenant covenants and agrees in the event any proceedings are brought for the foreclosure of any such mortgage or deed in lieu thereof, to attorn, without any deductions or set-offs whatsoever, to the purchaser or any successors thereto upon any such foreclosure sale or deed in lieu thereof if so requested to do so by such purchaser, and to recognize such purchaser as the lessor under this Lease. Tenant shall, within five (5) days of request by Landlord, execute such further instruments or assurances as Landlord may reasonably deem necessary to evidence or confirm the subordination or superiority of this Lease to any such mortgages, trust deeds, ground leases or underlying leases; provided, however, that Landlord shall use its commercially reasonable efforts to obtain from any such first mortgagee or ground lessor a commercially reasonable form of nondisturbance agreement, which shall provide that so long as Tenant is in compliance with the terms of this Lease, Tenant shall not be disturbed by such first mortgagee or ground lessor. Tenant waives the provisions of any current or future statute, rule or law which may give or purport to give Tenant any right or election to terminate or otherwise adversely affect this Lease and the obligations of the Tenant hereunder in the event of any foreclosure proceeding or sale.

ARTICLE 19

DEFAULTS; REMEDIES

19.1 DEFAULTS. All covenants and agreements to be kept or performed by Tenant under this Lease shall be performed by Tenant at Tenant's sole cost and expense and without any reduction of Rent. The occurrence of any of the following shall constitute a default of this Lease by Tenant:

19.1.1 Any failure by Tenant to pay any Rent or any other charge required to be paid under this Lease, or any part thereof, when due, which failure is not corrected within five (5) days after the date that Landlord has provided Tenant with written notice that such sums are due and owing; or

19.1.2 Any failure by Tenant to observe or perform any other

provision, covenant or condition of this Lease to be observed or performed by Tenant where such failure continues for thirty (30) days after written notice thereof from Landlord to Tenant; provided however, that any such notice shall be in lieu of, and not in addition to, any notice required under California Code of Civil Procedure Section 1161 or any similar or successor law; and provided further that if the nature of such default is such that the same cannot reasonably be cured within a thirty (30) day period, Tenant shall not be deemed to be in default if it diligently commences such cure within such period and thereafter diligently proceeds to rectify and cure said default, as soon as possible; or

19.1.3 Abandonment or vacation of the Premises by Tenant; or

19.1.4 To the extent permitted by law, a general assignment by Tenant or any guarantor of the Lease for the benefit of creditors, or the filing by or against Tenant or any guarantor of any proceeding under an insolvency or bankruptcy law, unless in the case of a proceeding filed against Tenant or any guarantor the same is dismissed within sixty (60) days, or the appointment of a trustee or receiver to take possession of all or substantially all of the assets of Tenant or any guarantor, unless possession is restored to Tenant or such guarantor within thirty (30) days, or any execution or other judicially authorized seizure of all or substantially all of Tenant's assets located upon the Premises or of Tenant's interest in this Lease, unless such seizure is discharged within thirty (30) days; or

19.1.5 The hypothecation or assignment of this Lease or subletting of the Premises, in violation of Article 14 hereof.

19.2 REMEDIES UPON DEFAULT. Upon the occurrence of such default by Tenant, Landlord shall have, in addition to any other remedies available to Landlord at law or in equity, the option to pursue any one or more of the following remedies, each and all of which shall be cumulative and nonexclusive, without any notice or demand whatsoever.

19.2.1 Terminate this Lease, in which event Tenant shall immediately surrender the Premises to Landlord, and if Tenant fails to do so, Landlord may, without prejudice to any other remedy which it may have for possession or arrearages in rent, enter upon and take possession of the Premises and expel or remove Tenant and any other person who may be occupying the Premises or any part thereof, without being liable for prosecution or any claim or damages therefor; and Landlord may recover from Tenant the following:

(i) The worth at the time of award of any unpaid rent which has been earned at the time of such termination; plus

(ii) The worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(iii) The worth at the time of award of the amount by which the unpaid rent for the balance of the Lease Term after the time of award exceeds the amount of such rental loss that Tenant proves could have been reasonably avoided; plus

(iv) Any other amount necessary to compensate Landlord for all the detriment proximately caused by Tenant's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, specifically including but not limited to, brokerage commissions and advertising expenses incurred, expenses of remodeling the Premises or any portion thereof for a new tenant, whether for the same or a different use, and any special concessions made to obtain a new tenant; and

(v) At Landlord's election, such other amounts in addition to or in lieu of the foregoing as may be permitted from time to time by applicable law.

The term "RENT" as used in this Section 19.2 shall be deemed to be and to mean all sums of every nature required to be paid by Tenant pursuant to the terms of this Lease, whether to Landlord or to others. As used in Sections

19.2.1(i) and (ii), above, the "worth at the time of award" shall be computed by allowing interest at the Interest Rate set forth in Section 4.2.3 of this Lease, but in no case greater than the maximum amount of such interest permitted by law. As used in Section 19.2.1(iii) above, the "worth at the time of award" shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of San Francisco at the time of award plus one percent (1%).

19.2.2 Landlord shall have the remedy described in California Civil Code Section 1951.4 (lessor may continue lease in effect after lessee's breach and abandonment and recover rent as it becomes due, if lessee has the right to sublet or assign, subject only to reasonable limitations). Accordingly, if Landlord does not elect to terminate this Lease on account of any default by Tenant, Landlord may, from time to time, without terminating this Lease, enforce all of its rights and remedies under this Lease, including the right to recover all rent as it becomes due.

19.2.3 After notice and the expiration of any applicable cure period, Landlord may, but shall not be obligated to, make any such payment or perform or otherwise cure any such obligation, provision, covenant or condition on Tenant's part to be observed or performed (and may enter the Premises for such purposes), all at Tenant's expense, without waiving its rights based upon any default of Tenant and without releasing Tenant from any obligations hereunder. Notwithstanding the foregoing, in the event of Tenant's failure to perform any of its obligations or covenants under this Lease, and such failure to perform poses a material risk of injury or harm to persons or damage to or loss of property, then Landlord shall have the right to cure or otherwise perform such covenant or obligation at any time after such failure to perform by Tenant, whether or not any such notice or cure period set forth in Section 19.1 above has expired. Any such actions undertaken by Landlord pursuant to the foregoing provisions of this Section 19.2.3 shall not be deemed a waiver of Landlord's rights and remedies as a result of Tenant's failure to perform and shall not release Tenant from any of its obligations under this Lease.

19.3 PAYMENT BY TENANT. Tenant shall pay to Landlord, within fifteen (15) days after delivery by Landlord to Tenant of statements therefor: (i) sums equal to expenditures reasonably made and obligations incurred by Landlord in connection with Landlord's performance or cure of any of Tenant's obligations pursuant to the provisions of Section 19.2.3 above; and (ii) sums equal to all expenditures made and obligations incurred by Landlord in collecting or attempting to collect the Rent or in enforcing or attempting to enforce any rights of Landlord under this Lease or pursuant to law, including, without limitation, all legal fees and other amounts so expended. Tenant's obligations under this Section 19.3 shall survive the expiration or sooner termination of the Lease Term.

19.4 SUBLEASES OF TENANT. Whether or not Landlord elects to terminate this Lease on account of any default by Tenant, as set forth in this Article 19, following any such default by Tenant, Landlord shall have the right to terminate any and all subleases, licenses, concessions or other consensual arrangements for possession entered into by Tenant and affecting the Premises or may, in Landlord's sole discretion, succeed to Tenant's interest in such subleases, licenses, concessions or arrangements. In the event of Landlord's election to succeed to Tenant's interest in any such subleases, licenses, concessions or arrangements, Tenant shall, as of the date of notice by Landlord of such election, have no further right to or interest in the rent or other consideration receivable thereunder.

19.5 FORM OF PAYMENT AFTER DEFAULT. Following the occurrence of an event of default by Tenant, Landlord shall have the right to require that any or all subsequent amounts paid by Tenant to Landlord hereunder, whether in the cure of the default in question or otherwise, be paid in the form of cash, money order, cashier's or certified check drawn on an institution acceptable to Landlord, or by other means approved by Landlord, notwithstanding any prior practice of accepting payments in any different form.

19.6 WAIVER OF DEFAULT. No waiver by Landlord of any violation or breach by Tenant of any of the terms, provisions and covenants herein contained shall be deemed or construed to constitute a

waiver of any other or later violation or breach by Tenant of the same or any

other of the terms, provisions, and covenants herein contained. Forbearance by Landlord in enforcement of one or more of the remedies herein provided upon a default by Tenant shall not be deemed or construed to constitute a waiver of such default. The acceptance of any Rent hereunder by Landlord following the occurrence of any default, whether or not known to Landlord, shall not be deemed a waiver of any such default, except only a default in the payment of the Rent so accepted.

19.7 EFFORTS TO RELET. For the purposes of this Article 19, Tenant's right to possession shall not be deemed to have been terminated by efforts of Landlord to relet the Premises, by its acts of maintenance or preservation with respect to the Premises, or by appointment of a receiver to protect Landlord's interests hereunder. The foregoing enumeration is not exhaustive, but merely illustrative of acts which may be performed by Landlord without terminating Tenant's right to possession.

ARTICLE 20

SECURITY DEPOSIT AND GUARANTY

Concurrent with Tenant's execution of this Lease, Tenant shall deposit with Landlord a security deposit (the "SECURITY DEPOSIT") in the amount set forth in Section 10 of the Summary. The Security Deposit shall be held by Landlord as security for the faithful performance by Tenant of all the terms, covenants, and conditions of this Lease to be kept and performed by Tenant during the Lease Term. If Tenant defaults with respect to any provisions of this Lease, including, but not limited to, the provisions relating to the payment of Rent, Landlord may, but shall not be required to, use, apply or retain all or any part of the Security Deposit for the payment of any Rent or any other sum in default, or for the payment of any amount that Landlord may spend or become obligated to spend by reason of Tenant's default, or to compensate Landlord for any other loss or damage that Landlord may suffer by reason of Tenant's default. If any portion of the Security Deposit is so used or applied, Tenant shall, within five (5) days after written demand therefor, deposit cash with Landlord in an amount sufficient to restore the Security Deposit to its original amount, and Tenant's failure to do so shall be a default under this Lease. If Tenant shall fully and faithfully perform every provision of this Lease to be performed by it, the Security Deposit, or any balance thereof, shall be returned to Tenant, or, at Landlord's option, to the last assignee of Tenant's interest hereunder, within sixty (60) days following the expiration of the Lease Term. Tenant shall not be entitled to any interest on the Security Deposit. Tenant hereby waives the provisions of Section 1950.7 of the California Civil Code, and all other provisions of law, now or hereafter in force, which provide that Landlord may claim from a security deposit only those sums reasonably necessary to remedy defaults in the payment of rent, to repair damage caused by Tenant or to clean the Premises, it being agreed that Landlord may, in addition, claim those sums reasonably necessary to compensate Landlord for any other loss or damage, foreseeable or unforeseeable, caused by the act or omission of Tenant or any officer, employee, agent or invitee of Tenant.

ARTICLE 21

SIGNS

21.1 FULL FLOOR TENANTS. Subject to Landlord's prior written approval, in its sole discretion, and provided all signs are in keeping with the quality, design and style of the Project, if the Premises or any portion thereof comprise an entire floor of the Building, Tenant, at its sole cost and expense, may install identification signage anywhere in the Premises including in the elevator lobby of the Premises, provided that such signs must not be visible from the exterior of the Building.

21.2 MULTI-TENANT FLOOR TENANTS. If Tenant occupies less than the entire floor on which the Premises is located, Tenant's identifying signage shall be provided by Landlord, at Tenant's sole cost and expense, and such signage shall be comparable to that used by Landlord for other similar floors in the Building and shall comply with Landlord's Building standard signage program. Any additions, deletions or modifications to such Building standard signage shall be at Tenant's sole expense and subject to the prior written approval of Landlord, in Landlord's sole discretion.

21.3 PROHIBITED SIGNAGE AND OTHER ITEMS. Any signs, notices, logos, pictures, names or advertisements which are installed and that have not been separately approved by Landlord may be removed without notice by Landlord at the sole expense of Tenant. Tenant may not install any signs on the exterior or roof of the Building or the common areas of the Building or the Real Property. Any signs, window coverings, or blinds (even if the same are located behind the Landlord approved window coverings for the Building), or other items visible from the exterior of the Premises or Building are subject to the prior written approval of Landlord, in its sole discretion.

21.4 BUILDING DIRECTORY. Tenant shall, at Tenant's expense, be entitled to one (1) line on the Building directory to display Tenant's name and suite number.

ARTICLE 22

COMPLIANCE WITH LAW

Tenant shall not do anything or suffer anything to be done in or about the Premises which will in any way conflict with any law, statute, ordinance or other governmental rule, regulation or requirement now in force or which may hereafter be enacted or promulgated. At its sole cost and expense, Tenant shall promptly comply with all such governmental measures (including those pertaining to Hazardous Materials), other than the making of structural changes to the Building (collectively, the "EXCLUDED CHANGES"), except to the extent such Excluded Changes are required due to Tenant's alterations to or manner of use of the Premises. Should any standard or regulation now or hereafter be imposed on Landlord or Tenant by a state, federal or local governmental body charged with the establishment, regulation and enforcement of occupational, health or safety standards for employers, employees, landlords or tenants, then Tenant agrees, at its sole cost and expense, to comply promptly with such standards or regulations. In addition, Tenant shall fully comply with all present or future programs intended to manage parking, transportation or traffic in and around the Building, and in connection therewith, Tenant shall take responsible action for the transportation planning and management of all employees located at the Premises by working directly with Landlord, any governmental transportation management organization or any other transportation-related committees or entities. The judgment of any court of competent jurisdiction or the admission of Tenant in any judicial action, regardless of whether Landlord is a party thereto, that Tenant has violated any of said governmental measures, shall be conclusive of that fact as between Landlord and Tenant.

ARTICLE 23

ENTRY BY LANDLORD

Landlord reserves the right at all reasonable times and upon prior reasonable notice to Tenant (except no such prior notice shall be required in emergencies) to enter the Premises to: (i) inspect them; (ii) show the Premises to prospective purchasers, mortgagees or ground or underlying lessors, or, during the last twelve (12) months of the Lease Term, prospective tenants; (iii) post notices of nonresponsibility; or (iv) alter, improve or repair the Premises or the Building if necessary to comply with current building codes or other applicable laws, or for structural alterations, repairs or improvements to the Building, or as Landlord may otherwise reasonably desire or deem necessary. Notwithstanding anything to the contrary contained in this Article, Landlord may enter the Premises at any time, without notice to Tenant, to (A) perform janitorial and other services required of Landlord, (B) take possession due to any breach of this Lease in the manner provided herein; and (C) perform any covenants of Tenant which Tenant fails to perform. Any such entries shall be without the abatement of Rent and shall include the right to take such reasonable steps as required to accomplish the stated purposes; provided, however, that any such entry shall be accomplished as expeditiously as reasonably possible and in a manner so as to cause as little interference to Tenant as reasonably possible. Tenant hereby waives any claims for damages or for any injuries or inconvenience to or interference with Tenant's business, lost profits, any loss of occupancy or quiet enjoyment of the Premises, and any other loss occasioned by Landlord's entry into the Premises. For each of the above purposes, Landlord shall at all times have a key with which to unlock all the doors in the Premises, excluding Tenant's vaults, safes and special security areas designated in advance by

Tenant. In an emergency, Landlord shall have the right to use any means that Landlord may deem proper to open the doors in and to the Premises. Any entry into the Premises by Landlord in the manner hereinbefore described shall not be deemed to be a forcible or unlawful entry into, or a detainer of, the Premises, or an actual or constructive eviction of Tenant from any portion of the Premises.

ARTICLE 24

TENANT PARKING

Tenant shall be entitled to use throughout the Lease Term the number of unreserved parking passes set forth in Section 12 of the Summary, in a location in the Project Parking Area as designated by Landlord from time to time. Tenant shall not be required to pay to Landlord any parking fees for the use of such parking passes during the initial term, other than any parking taxes which may be imposed by governmental authorities in connection with the use of such parking. Thereafter, Tenant shall pay to Landlord for the use of such parking passes, on a monthly basis, the prevailing rate charged from time to time by Landlord or Landlord's parking operator for parking passes in the Project Parking Area where such parking passes are located. Tenant's continued right to use the parking passes is conditioned upon Tenant abiding by all rules and regulations which are prescribed from time to time for the orderly operation and use of the Project Parking Area and upon Tenant's cooperation in seeing that Tenant's employees and visitors also comply with such rules and regulations. In addition, Landlord may assign any parking spaces and/or make all or a portion of such spaces reserved or institute an attendant-assisted tandem parking program and/or valet parking program if Landlord determines in its sole discretion that such is necessary or desirable for orderly and efficient parking. Landlord specifically reserves the right, from time to time, to change the size, configuration, design, layout, location and all other aspects of the Project Parking Area, and Tenant acknowledges and agrees that Landlord, from time to time, may, without incurring any liability to Tenant and without any abatement of Rent under this Lease temporarily close-off or restrict access to the Project Parking Area, or temporarily relocate Tenant's parking spaces to other parking structures and/or surface parking areas within a reasonable distance from the Project Parking Area, for purposes of permitting or facilitating any such construction, alteration or improvements or to accommodate or facilitate renovation, alteration, construction or other modification of other improvements or structures located on the Real Property. Landlord may delegate its responsibilities hereunder to a parking operator in which case such parking operator shall have all the rights of control attributed hereby to Landlord.

ARTICLE 25

MISCELLANEOUS PROVISIONS

25.1 BINDING EFFECT; SUCCESSORS. Each of the provisions of this Lease shall extend to and shall, as the case may require, bind or inure to the benefit not only of Landlord and of Tenant, but also of their respective successors or assigns, provided this clause shall not permit any assignment by Tenant contrary to the provisions of Article 14 of this Lease, and no assignment, sublease or other transfer in violation of the provisions of Article 14 shall operate to vest any rights in any putative assignee, subtenant or transferee of Tenant.

25.2 NO AIR RIGHTS. No rights to any view or to light or air over any property, whether belonging to Landlord or any other person, are granted to Tenant by this Lease. If at any time any windows of the Premises are temporarily darkened or the light or view therefrom is obstructed by reason of any repairs, improvements, maintenance or cleaning in or about the Building, the same shall be without liability to Landlord and without any reduction or diminution of Tenant's obligations under this Lease.

25.3 MODIFICATION OF LEASE. Should any current or prospective mortgagee or ground lessor for the Project require a modification or modifications of this Lease, which modification or modifications will not cause an increased cost or expense to Tenant or in any other way materially and adversely change the rights and obligations of Tenant hereunder, then and in such event, Tenant agrees that this Lease may be so modified and agrees to execute whatever documents are required therefor and deliver

the same to Landlord within ten (10) days following the request therefor. Should Landlord or any such prospective mortgagee or ground lessor require execution of a short form of Lease for recording, containing, among other customary provisions, the names of the parties, a description of the Premises and the Lease Term, Tenant agrees to execute such short form of Lease and to deliver the same to Landlord within ten (10) days following the request therefor.

25.4 TRANSFER OF LANDLORD'S INTEREST. Tenant acknowledges that Landlord has the right to transfer all or any portion of its interest in the Real Property and in this Lease, and Tenant agrees that in the event of any such transfer and a transfer of the Security Deposit, Landlord shall automatically be released from all liability under this Lease and Tenant agrees to look solely to such transferee for the performance of Landlord's obligations hereunder after the date of transfer. Tenant further acknowledges that Landlord may assign its interest in this Lease to the holder of any mortgage or deed of trust as additional security, but agrees that such an assignment shall not release Landlord from its obligations hereunder and that Tenant shall continue to look to Landlord for the performance of its obligations hereunder.

25.5 PROHIBITION AGAINST RECORDING. Except as provided in Section 25.3 of this Lease, neither this Lease, nor any memorandum, affidavit or other writing with respect thereto, shall be recorded by Tenant or by anyone acting through, under or on behalf of Tenant, and the recording thereof in violation of this provision shall make this Lease null and void at Landlord's election.

25.6 CAPTIONS. The captions of Articles and Sections are for convenience only and shall not be deemed to limit, construe, affect or alter the meaning of such Articles and Sections.

25.7 RELATIONSHIP OF PARTIES. Nothing contained in this Lease shall be deemed or construed by the parties hereto or by any third party to create the relationship of principal and agent, partnership, joint venturer or any association between Landlord and Tenant, it being expressly understood and agreed that neither the method of computation of Rent nor any act of the parties hereto shall be deemed to create any relationship between Landlord and Tenant other than the relationship of landlord and tenant.

25.8 TIME OF ESSENCE. Time is of the essence of this Lease and each of its provisions.

25.9 PARTIAL INVALIDITY. If any term, provision or condition contained in this Lease shall, to any extent, be invalid or unenforceable, the remainder of this Lease, or the application of such term, provision or condition to persons or circumstances other than those with respect to which it is invalid or unenforceable, shall not be affected thereby, and each and every other term, provision and condition of this Lease shall be valid and enforceable to the fullest extent possible permitted by law.

25.10 LANDLORD EXCULPATION. It is expressly understood and agreed that notwithstanding anything in this Lease to the contrary, and notwithstanding any applicable law to the contrary, the liability of Landlord and the Landlord Parties hereunder (including any successor landlord) and any recourse by Tenant against Landlord or the Landlord Parties (including any successor landlord) shall be limited solely and exclusively to an amount which is equal to the interest of Landlord in the Project, and neither Landlord, nor any of the Landlord Parties shall have any personal liability therefor, and Tenant hereby expressly waives and releases such personal liability on behalf of itself and all persons claiming by, through or under Tenant.

25.11 CHILD CARE FACILITIES. Tenant acknowledges that any child care facilities located or which may be located in the Project (the "CHILD CARE FACILITIES") which are available to Tenant and Tenant's employees are provided by a third party (the "CHILD CARE PROVIDER") which is leasing space in the Project, and not by Landlord. If Tenant or its employees choose to use the Child Care Facilities, Tenant acknowledges that Tenant and Tenant's employees are not relying upon any investigation which Landlord may have conducted concerning the Child Care Provider or any warranties or representation with respect thereto, it being the sole responsibility of Tenant and the individual user of the Child Care Facilities to conduct any and all investigations of the Child Care Facilities prior to making use thereof.

Accordingly, Landlord shall have no responsibility with respect to the quality or care provided by the Child Care Facilities, or for any acts or omissions of the Child Care Provider. Furthermore, Tenant, for Tenant and for Tenant's employees, hereby agrees that Landlord, its partners, subpartners and their respective officers, agents, servants, employees, and independent contractors shall not be liable for, and are hereby released from any responsibility for any loss, cost, damage, expense or liability, either to person or property, arising from the use of the Child Care Facilities by Tenant or Tenant's employees. Tenant hereby covenants that Tenant shall inform all of Tenant's employees of the provisions of this Section prior to such employees' use of the Child Care Facilities. Nothing contained herein is intended to be a representation nor warranty by Landlord that any Child Care Facilities will be available during the Lease Term and Landlord shall have no obligation to provide, or to make available, any such Child Care Facilities.

25.12 ENTIRE AGREEMENT. It is understood and acknowledged that there are no oral agreements between the parties hereto affecting this Lease and this Lease supersedes and cancels any and all previous negotiations, arrangements, brochures, agreements and understandings, if any, between the parties hereto or displayed by Landlord to Tenant with respect to the subject matter thereof, and none thereof shall be used to interpret or construe this Lease. This Lease, the exhibits and schedules attached hereto, and any side letter or separate agreement executed by Landlord and Tenant in connection with this Lease and dated of even date herewith contain all of the terms, covenants, conditions, warranties and agreements of the parties relating in any manner to the rental, use and occupancy of the Premises, shall be considered to be the only agreement between the parties hereto and their representatives and agents, and none of the terms, covenants, conditions or provisions of this Lease can be modified, deleted or added to except in writing signed by the parties hereto.

25.13 RIGHT TO LEASE. Landlord reserves the absolute right to effect such other tenancies in the Project as Landlord in the exercise of its sole business judgment shall determine to best promote the interests of the Project. Tenant does not rely on the fact, nor does Landlord represent, that any specific tenant or type or number of tenants shall, during the Lease Term, occupy any space in the Project.

25.14 FORCE MAJEURE. Any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, inability to obtain services, labor, or materials or reasonable substitutes therefor, governmental actions, civil commotions, fire or other casualty, and other causes beyond the reasonable control of the party obligated to perform (collectively, the "FORCE MAJEURE"), except with respect to the obligations imposed with regard to Rent and other charges to be paid by Tenant pursuant to this Lease, and except as to Tenant's obligations under EXHIBIT D, notwithstanding anything to the contrary contained in this Lease, shall excuse the performance of such party for a period equal to any such prevention, delay or stoppage and, therefore, if this Lease specifies a time period for performance of an obligation of either party, that time period shall be extended by the period of any delay in such party's performance caused by a Force Majeure.

25.15 NOTICES. All notices, demands, statements, approvals or communications (collectively, "NOTICES") given or required to be given by either party to the other hereunder shall be in writing, shall be sent by United States certified or registered mail, postage prepaid, return receipt requested, or delivered personally (i) to Tenant at the appropriate address set forth in Section 5 of the Summary, or to such other place as Tenant may from time to time designate in a Notice to Landlord; or (ii) to Landlord at the addresses set forth in Section 3 of the Summary, or to such other firm or to such other place as Landlord may from time to time designate in a Notice to Tenant. Any Notice will be deemed given on the date which is two (2) business days after it is mailed as provided in this Section or upon the date personal delivery is made. If Tenant is notified of the identity and address of Landlord's mortgagee or ground or underlying lessor, Tenant shall give to such mortgagee or ground or underlying lessor written notice of any default by Landlord under the terms of this Lease by registered or certified mail, and such mortgagee or ground or underlying lessor shall be given a reasonable opportunity to cure such default prior to Tenant's exercising any remedy available to Tenant.

25.16 JOINT AND SEVERAL. If there is more than one Tenant, the obligations imposed upon Tenant under this Lease shall be joint and several.

25.17 AUTHORITY. If Tenant is a corporation or partnership, each individual executing this Lease on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in California and that Tenant has full right and authority to execute and deliver this Lease and that each person signing on behalf of Tenant is authorized to do so.

25.18 GOVERNING LAW. This Lease shall be construed and enforced in accordance with the laws of the State of California.

25.19 SUBMISSION OF LEASE. Submission of this instrument for examination or signature by Tenant does not constitute a reservation of or an option for lease, and it is not effective as a lease or otherwise until execution and delivery by both Landlord and Tenant.

25.20 BROKERS. Landlord and Tenant hereby warrant to each other that they have had no dealings with any real estate broker or agent in connection with the negotiation of this Lease, excepting only the real estate brokers or agents specified in Section 13 of the Summary and Landlord's designated representative (the "BROKERS"), and that they know of no other real estate broker or agent who is entitled to a commission in connection with this Lease. Landlord shall pay the brokerage commissions owing to the Brokers in connection with the transaction contemplated by this Lease pursuant to the terms of a separate written agreement between Landlord and the Brokers. Each party agrees to indemnify, defend, protect and hold the other party harmless from and against any and all Claims with respect to any leasing commission or equivalent compensation alleged to be owing on account of the indemnifying party's dealings with any real estate broker or agent other than the Brokers. The terms of this Section shall survive the expiration or earlier termination of the Lease Term.

25.21 INDEPENDENT COVENANTS. This Lease shall be construed as though the covenants herein between Landlord and Tenant are independent and not dependent and Tenant hereby expressly waives the benefit of any statute to the contrary and agrees that if Landlord fails to perform its obligations set forth herein, Tenant shall not be entitled to make any repairs or perform any acts hereunder at Landlord's expense or to any setoff of the Rent or other amounts owing hereunder against Landlord; provided, however, that the foregoing shall in no way impair the right of Tenant to commence a separate action against Landlord for any violation by Landlord of the provisions hereof so long as notice is first given to Landlord and any holder of a mortgage or deed of trust covering the Building, Real Property or any portion thereof, of whose address Tenant has theretofore been notified, and an opportunity is granted to Landlord and such holder to correct such violations as provided above.

25.22 BUILDING NAME AND SIGNAGE. Landlord shall have the right at any time to designate and/or change the name of the Project, the Building and/or any other building in the Project, and to install, affix and maintain any and all signs on the exterior and on the interior of the Project, the Building and/or any other building in the Project, as Landlord may, in Landlord's sole discretion, desire. Tenant shall not use the name of the Project, the Building or any other building in the Project, or use pictures or illustrations of the Project, the Building or any other building in the Project, in advertising or other publicity, without the prior written consent of Landlord.

25.23 HAZARDOUS MATERIALS. Tenant acknowledges that Landlord has agreed to make the existing Phase I Environmental Assessment Report, if any, available to Tenant upon Tenant's prior written request. Tenant acknowledges that Landlord may incur costs (a) for complying with laws, codes, regulations or ordinances relating to Hazardous Materials, or (b) otherwise in connection with Hazardous Materials including, without limitation, the following: (i) Hazardous Materials present in soil or ground water, (ii) Hazardous Materials that migrate, flow, percolate, diffuse or in any way move onto or under the Project, (iii) Hazardous Materials present on or under the Project as a result of any discharge, dumping or spilling (whether accidental or otherwise) on the Project by other tenants of the Project or their agents, employees, contractors or invitees, or by others, and (iv) material which becomes Hazardous Materials

due to a change in laws, codes, regulations or ordinances which relate to hazardous or toxic material, substances or waste. Tenant agrees that the costs incurred by Landlord with respect to, or in connection with, the Project for complying with laws, codes, regulations or ordinances relating to Hazardous Materials shall be an Operating Expense, unless the cost of such compliance, as between Landlord and Tenant, is made the responsibility of Tenant under this Lease. Notwithstanding the foregoing, Tenant shall not be responsible for any costs or expenses incurred in connection with any loss or injury caused by (A) the presence of any Hazardous Materials existing on the Project prior to the Effective Date of this Lease, or (B) the release of any Hazardous Materials on the Project by Landlord. To the extent any such Operating Expense relating to Hazardous Materials is subsequently recovered or reimbursed through insurance, or recovery from responsible third parties, or other action, Tenant shall be entitled to a proportionate share of such Operating Expense to which such recovery or reimbursement relates.

25.24 TRANSPORTATION MANAGEMENT. Tenant shall fully comply with all present or future programs intended to manage parking, transportation or traffic in and around the Project, and in connection therewith, Tenant shall take responsible action for the transportation planning and management of all employees located at the Premises by working directly with Landlord, any governmental transportation management organization or any other transportation-related committees or entities. Such programs may include, without limitation: (i) restrictions on the number of peak-hour vehicle trips generated by Tenant; (ii) increased vehicle occupancy; (iii) implementation of an in-house ridesharing program and an employee transportation coordinator; (iv) working with employees and any Project or area-wide ridesharing program manager; (v) instituting employer-sponsored incentives (financial or in-kind) to encourage employees to rideshare; and (vi) utilizing flexible work shifts for employees.

25.25 NO DISCRIMINATION. Tenant covenants by and for itself, its heirs, executors, administrators and assigns, and all persons claiming under or through Tenant, and this Lease is made and accepted upon and subject to the following conditions: that there shall be no discrimination against or segregation of any person or group of persons, on account of race, color, creed, sex, religion, marital status, ancestry or national origin in the leasing, subleasing, transferring, use, or enjoyment of the Premises, nor shall Tenant itself, or any person claiming under or through Tenant, establish or permit such practice or practices of discrimination or segregation with reference to the selection, location, number, use or occupancy, of tenants, lessees, sublessees, subtenants or vendees in the Premises.

25.26 Intentionally Omitted.

25.27 DEVELOPMENT OF THE PROJECT.

25.27.1 SUBDIVISION. Tenant acknowledges that the Project may be comprised of separate legal lots. Landlord reserves the right to further subdivide or sell all or a portion of the Project. Tenant agrees to execute and deliver, upon demand by Landlord and in the form requested by Landlord, any additional documents reasonably necessary to conform this Lease to the circumstances resulting from such a subdivision or sale and any all ancillary transactions in connection therewith.

25.27.2 OTHER IMPROVEMENTS. If portions of the Project or property adjacent to the Project (collectively, the "OTHER IMPROVEMENTS") are owned by an entity other than Landlord, Landlord, at its option, may enter into an agreement with the owner or owners of any of the Other Improvements to provide (i) for reciprocal rights of access, use and/or enjoyment of the Project and the Other Improvements, (ii) for the common management, operation, maintenance, improvement and/or repair of all or any portion of the Project and all or any portion of the Other Improvements, (iii) for the allocation of a portion of the Project Expenses to the Other Improvements and the allocation of a portion of the operating expenses and taxes for the Other Improvements to the Project, (iv) for the use or improvement of the Other Improvements and/or the Project in connection with the improvement, construction, and/or excavation of the Other Improvements and/or the Project, and (v) for any other matter which Landlord deems necessary. Nothing contained herein shall be deemed or construed to limit or otherwise affect

Landlord's right to sell all or any portion of the Project or any other of Landlord's rights described in this Lease.

25.27.3 LANDLORD RENOVATIONS. It is specifically understood and agreed that Landlord has made no representation or warranty to Tenant and has no obligation to alter, remodel, improve, renovate, repair or decorate the Premises, Building, Project or any part thereof, or to add any additional phases or office buildings to the Project, and that no representations respecting the condition of the Premises or the Project have been made by Landlord to Tenant except as specifically set forth herein or in the Tenant Work Letter. However, Tenant acknowledges that Landlord may during the Lease Term renovate, improve, alter, or modify (collectively, the "RENOVATIONS") the Building, Premises, and/or Real Property, including without limitation the Project Parking Area, common areas, systems and equipment, roof, and structural portions of the same, which Renovations may include, without limitation, (i) modifying the driveways and other common areas and tenant spaces to comply with applicable laws and regulations, including regulations relating to the physically disabled, seismic conditions, and building safety and security, (ii) installing new floor covering, lighting, and wall coverings in the common areas, and in connection with any Renovations, Landlord may, among other things, erect scaffolding or other necessary structures in the Building or Project, limit or eliminate access to portions of the Real Property, including portions of the common areas, or perform work in the Building or Project, which work may create noise, dust or leave debris in the Project, (iii) renovation and/or expansion of the main entry to the Project and the main Building lobby area, (iv) renovation of the elevator, lobbies, elevator doors and frames and restrooms, and (v) installations, repairs or maintenance of telephone risers. Tenant hereby agrees that such Renovations and Landlord's actions in connection with such Renovations shall in no way constitute a constructive eviction of Tenant nor entitle Tenant to any abatement of Rent. Landlord shall have no responsibility or for any reason be liable to Tenant for any direct or indirect injury to or interference with Tenant's business arising from the Renovations, nor shall Tenant be entitled to any compensation or damages from Landlord for loss of the use of the whole or any part of the Premises or of Tenant's personal property or improvements resulting from the Renovations or Landlord's actions in connection with such Renovations, or for any inconvenience or annoyance occasioned by such Renovations or Landlord's actions in connection with such Renovations.

25.28 CONFIDENTIALITY. Tenant acknowledges that the content of this Lease and any related documents are confidential information. Tenant shall keep such confidential information strictly confidential and shall not disclose such confidential information to any person or entity other than Tenant's financial, legal, accounting, real estate and space planning consultants, respectively, or as otherwise required by law.

25.29 LANDLORD'S TITLE. Landlord's title is and always shall be paramount to the title of Tenant. Nothing herein contained shall empower Tenant to do any act which can, shall or may encumber the title of Landlord.

25.30 NO WAIVER. No waiver of any provision of this Lease shall be implied by any failure of a party to enforce any remedy on account of the violation of such provision, even if such violation shall continue or be repeated subsequently, any waiver by a party of any provision of this Lease may only be in writing, and no express waiver shall affect any provision other than the one specified in such waiver and that one only for the time and in the manner specifically stated. No receipt of monies by Landlord from Tenant after the termination of this Lease shall in any way alter the length of the Lease Term or of Tenant's right of possession hereunder or after the giving of any notice shall reinstate, continue or extend the Lease Term or affect any notice given Tenant prior to the receipt of such monies, it being agreed that after the service of notice or the commencement of a suit or after final judgment for possession of the Premises, Landlord may receive and collect any Rent due, and the payment of said Rent shall not waive or affect said notice, suit or judgment.

25.31 JURY TRIAL; ATTORNEYS' FEES. IF EITHER PARTY COMMENCES LITIGATION AGAINST THE OTHER FOR THE SPECIFIC PERFORMANCE OF THIS LEASE, FOR DAMAGES FOR THE BREACH HEREOF OR OTHERWISE FOR ENFORCEMENT OF ANY REMEDY HEREUNDER, THE

PARTIES HERETO AGREE TO AND HEREBY DO WAIVE ANY RIGHT TO A TRIAL BY JURY. In the event of any such commencement of litigation, the prevailing party shall be entitled to recover from the other party such costs and reasonable attorneys' fees as may have been incurred, including any and all costs incurred in enforcing, perfecting and executing such judgment.

25.32 SUBSTITUTION OF OTHER PREMISES. Landlord shall have the right to move Tenant to other space on the ground floor of the Project comparable in size to the Premises, and all terms hereof shall apply to the new space with equal force. In such event, Landlord shall give Tenant at least sixty (60) days' prior notice of Landlord's election to so relocate Tenant, and shall move Tenant's effects (including, without limitation, its lab equipment) to the new space at Landlord's sole cost and expense at such time and in such manner as to inconvenience Tenant as little as reasonably practicable. The new space shall be delivered to Tenant with improvements substantially similar to those improvements existing in the Premises at the time of Landlord's notification to Tenant of the relocation, which improvements shall be paid for by Landlord at Landlord's cost. Simultaneously with such relocation of the Premises, the parties shall immediately execute an amendment to this Lease stating the relocation of the Premises.

25.33 NITROGEN TANK. Tenant shall have the right, at its sole cost and expense, to install, access, repair, replace, remove, operate and maintain a nitrogen tank, together with necessary equipment (collectively, the "NITROGEN TANK") on a pad in the rear of the Building, in the location designated on EXHIBIT A-1 attached hereto and incorporated herein. Tenant's rights and obligations with regard to the Nitrogen Tank shall be governed by the following terms and conditions:

25.33.1 Tenant's right to install, access, replace, repair, remove, operate and maintain the Nitrogen Tank shall be subject to all governmental laws, rules and regulations and Landlord makes no representations that such laws, rules and regulations permit such installation and operation.

25.33.2 The exact size, quality, materials and aesthetics of, and any required screening for, the Nitrogen Tank shall be subject to Landlord's prior written consent, which shall not be unreasonably withheld or delayed.

25.33.3 Tenant shall use the Nitrogen Tank so as not to cause any interference with any other existing tenants or occupants in the Project and in a manner so as not to damage or interfere with the normal operation of the Project and related facilities. Tenant shall be solely responsible for any damage caused as a result of the Nitrogen Tank and shall indemnify, protect, defend and hold Landlord and the Landlord Parties harmless with regard to any Claims relating to the Nitrogen Tank, as provided in Section 10.1 above.

25.34 The Nitrogen Tank shall remain the sole property of Tenant. Tenant shall remove the Nitrogen Tank, at Tenant's sole cost and expense, upon the expiration or sooner termination of this Lease or upon the imposition of any governmental law or regulation which may require removal, and shall repair the area in which the Nitrogen Tank is located upon such removal. If Tenant fails to remove the Nitrogen Tank and repair the Building within thirty (30) days after the expiration or earlier termination of this Lease, Landlord may do so at Tenant's expense. The provisions of this Section shall survive the expiration or earlier termination of this Lease.

IN WITNESS WHEREOF, Landlord and Tenant have caused their duly authorized representatives to execute this Lease as of the day and date first above written.

"LANDLORD" 15015 AVENUE OF SCIENCE ASSOCIATES LLC,
a Delaware limited liability company

By: PV 15015 Avenue of Science LLC,
a Delaware limited liability company,
its managing member

By: _____,
a _____,
Its _____

By: _____,
a _____,
Its _____

By: /s/ Christopher Hughes
Name: Christopher Hughes
Title: Vice President

"TENANT" PDF SOLUTIONS, INC., a Delaware corporation

By: /s/ John K. Kibarian
Name: John K. Kibarian
Its: President and Chief Executive Officer

By: /s/ P. Steven Melman
Name: P. Steven Melman
Its: Chief Financial Officer

EXHIBIT A

CARMEL CORPORATE PLAZA

FLOOR PLAN OF PREMISES

[TO BE ATTACHED]

EXHIBIT A-1

CARMEL CORPORATE PLAZA

LOCATION OF NITROGEN TANK

[TO BE ATTACHED]

EXHIBIT B

CARMEL CORPORATE PLAZA

RULES AND REGULATIONS

Tenant shall faithfully observe and comply with the following Rules and Regulations. Landlord shall not be responsible to Tenant for the nonperformance of any of said Rules and Regulations by or otherwise with respect to the acts or omissions of any other tenants or occupants of the Project.

1. Tenant shall not alter any lock or install any new or additional locks or bolts on any doors or windows of the Premises without obtaining Landlord's prior written consent. Tenant shall bear the cost of any lock changes or repairs required by Tenant. Two keys will be furnished by Landlord for the Premises, and any additional keys required by Tenant must be obtained from Landlord at a reasonable cost to be established by Landlord.

2. All doors opening to public corridors shall be kept closed at all times except for normal ingress and egress to the Premises, unless electrical hold backs have been installed.

3. Landlord reserves the right to close and keep locked all entrance and exit doors of the Building and to exclude from the Building between the hours of 6:00 p.m. and 7:00 a.m. and at all hours on Saturday, Sunday and Holidays (as defined in the Lease) all persons who do not present a pass or card key to the Building approved by Landlord. Tenant, its employees and agents must be sure that the doors to the Building are securely closed and locked when leaving the Premises if it is after the normal hours of business for the Building. Any tenant, its employees, agents or any other persons entering or leaving the Building at any time when it is so locked, or any time when it is considered to be after normal business hours for the Project may be required to sign the Building register when so doing. Access to the Building may be refused unless the person seeking access has proper identification or has a previously arranged pass for access. Landlord and his agents shall in no case be liable for damages for any error with regard to the admission to or exclusion from the Project of any person. In case of invasion, mob, riot, public excitement, or other commotion, Landlord reserves the right to prevent access to the Project during the continuance of same by any means it deems appropriate for the safety and protection of life and property.

4. Landlord shall have the right to prescribe the weight, size and position of all safes and other heavy property brought into the Building. Safes and other heavy objects shall, if considered necessary by Landlord, stand on supports of such thickness as is necessary to properly distribute the weight. Landlord will not be responsible for loss of or damage to any such safe or property in any case. All damage done to any part of the Project, its contents, occupants or visitors by moving or maintaining any such safe or other property shall be the sole responsibility of Tenant and any expense of said damage or injury shall be borne by Tenant.

5. No furniture, freight, packages, supplies, equipment or merchandise will be brought into or removed from the Building or carried up or down in the elevators, except upon prior notice to Landlord, and in such manner, in such specific elevator, and between such hours as shall be designated by Landlord. Tenant shall provide Landlord with not less than 24 hours prior notice of the need to utilize an elevator for any such purpose, so as to provide Landlord with a reasonable period to schedule such use and to install such padding or take such other actions or prescribe such procedures as are appropriate to protect against damage to the elevators or other parts of the Building.

6. Landlord shall have the right to control and operate the public portions of the Project, the public facilities, the heating and air conditioning, and any other facilities furnished for the common use of tenants, in such manner as is customary for comparable building projects in the vicinity of the Project.

7. The requirements of Tenant will be attended to only upon application at the management office of the Project or at such office location designated by Landlord. Employees of Landlord shall not perform any work or do anything outside their regular duties unless under special instructions from Landlord.

8. Tenant shall not disturb, solicit, or canvass any occupant of the

Project and shall cooperate with Landlord or Landlord's agents to prevent same.

9. The toilet rooms, urinals, wash bowls and other apparatus shall not be used for any purpose other than that for which they were constructed, and no foreign substance of any kind whatsoever shall be thrown therein. The expense of any breakage, stoppage or damage resulting from the violation of this rule shall be borne by the tenant who, or whose employees or agents, shall have caused it.

10. Tenant shall not overload the floor of the Premises, nor mark, drive nails or screws, or drill into the partitions, woodwork or plaster or in any way deface the Premises or any part thereof without Landlord's consent first had and obtained.

11. Except for vending machines intended for the sole use of Tenant's employees and invitees, no vending machine or machines of any description other than fractional horsepower office machines shall be installed, maintained or operated upon the Premises without the written consent of Landlord.

12. Tenant shall not use any method of heating or air conditioning other than that which may be supplied by Landlord, without the prior written consent of Landlord.

13. Tenant shall not use or keep in or on the Premises or the Project any kerosene, gasoline or other inflammable or combustible fluid or material. Tenant shall not use, keep or permit to be used or kept, any foul or noxious gas or substance in or on the Premises, or permit or allow the Premises to be occupied or used in a manner offensive or objectionable to Landlord or other occupants of the Project by reason of noise, odors, or vibrations, or interfere in any way with other Tenants or those having business therein.

14. Tenant shall not bring into or keep within the Project or the Premises any animals, birds, bicycles or other vehicles.

15. No cooking shall be done or permitted by any tenant on the Premises, nor shall the Premises be used for the storage of merchandise, for lodging or for any improper, objectionable or immoral purposes. Notwithstanding the foregoing, Underwriters' laboratory-approved equipment and microwave ovens may be used in the Premises for heating food and brewing coffee, tea, hot chocolate and similar beverages, provided that such use is in accordance with all applicable federal, state and city laws, codes, ordinances, rules and regulations, and does not cause odors which are objectionable to Landlord and other Tenants.

16. Landlord will approve where and how telephone and telegraph wires are to be introduced to the Premises. No boring or cutting for wires shall be allowed without the consent of Landlord. The location of telephone, call boxes and other office equipment affixed to the Premises shall be subject to the approval of Landlord.

17. Landlord reserves the right to exclude or expel from the Project any person who, in the judgment of Landlord, is intoxicated or under the influence of liquor or drugs, or who shall in any manner do any act in violation of any of these Rules and Regulations.

18. Tenant, its employees and agents shall not loiter in the entrances or corridors, nor in any way obstruct the sidewalks, lobby, halls, stairways or elevators, and shall use the same only as a means of ingress and egress for the Premises.

19. Tenant shall not waste electricity, water or air conditioning and agrees to cooperate fully with Landlord to ensure the most effective operation of the Building's heating and air conditioning system, and shall refrain from attempting to adjust any controls.

20. Tenant shall store all its trash and garbage within the interior of the Premises. No material shall be placed in the trash boxes or receptacles if such material is of such nature that it may not be disposed of in the ordinary and customary manner of removing and disposing of trash and garbage in the city in which the Building is located without violation of any law or ordinance governing such disposal. All trash, garbage and refuse disposal shall be made

only through entry-ways and elevators provided for such purposes at such times as Landlord shall designate.

21. Tenant shall comply with all safety, fire protection and evacuation procedures and regulations established by Landlord or any governmental agency.

22. Tenant shall assume any and all responsibility for protecting the Premises from theft, robbery and pilferage, which includes keeping doors locked and other means of entry to the Premises closed, when the Premises are not occupied.

23. No awnings or other projection shall be attached to the outside walls of the Building without the prior written consent of Landlord. No curtains, blinds, shades or screens shall be attached to or hung in, or used in connection with, any window or door of the Premises without the prior written consent of Landlord. The sashes, sash doors, skylights, windows, and doors that reflect or admit light and air into the halls, passageways or other public places in the Building shall not be covered or obstructed by Tenant, nor shall any bottles, parcels or other articles be placed on the windowsills. All electrical ceiling fixtures hung in offices or spaces along the perimeter of the Building must be fluorescent and/or of a quality, type, design and bulb color approved by Landlord.

24. The washing and/or detailing of or, the installation of windshields, radios, telephones in or general work on, automobiles shall not be allowed on the Real Property.

25. The term "PERSONAL GOODS OR SERVICES VENDORS" as used herein means persons who periodically enter the Building of which the Premises are a part for the purpose of selling goods or services to a tenant, other than goods or services which are used by the Tenant only for the purpose of conducting its business in the Premises. "Personal goods or services" include, but are not limited to, drinking water and other beverages, food, barbering services and shoe shining services. Landlord reserves the right to prohibit personal goods and services vendors from access to the Building except upon Landlord's prior written consent and upon such reasonable terms and conditions, including, but not limited to, the payment of a reasonable fee and provision for insurance coverage, as are related to the safety, care and cleanliness of the Building, the preservation of good order thereon, and the relief of any financial or other burden on Landlord or other tenants occasioned by the presence of such vendors or the sale by them of personal goods or services to Tenant or its employees. Under no circumstance shall the personal goods or services vendors display their products in a public or common area, including corridors and elevator lobbies. If necessary for the accomplishment of these purposes, Landlord may exclude a particular vendor entirely or limit the number of vendors who may be present at any one time in the Building.

26. Tenant must comply with requests by the Landlord concerning the informing of their employees of items of importance to the Landlord.

27. Tenant shall comply with any non-smoking ordinance adopted by any applicable governmental authority.

28. Landlord may waive any one or more of these Rules and Regulations for the benefit of any particular tenant or tenants, but no such waiver by Landlord shall be construed as a waiver of such Rules and Regulations in favor of any other tenant or tenants, nor prevent Landlord from thereafter enforcing any such Rules or Regulations against any or all tenants of the Project. Landlord reserves the right at any time to change or rescind any one or more of these Rules and Regulations, or to make such other and further reasonable Rules and Regulations as in Landlord's judgment may from time to time be necessary for the management, safety, care and cleanliness of the Premises and Project, and for the preservation of good order therein, as well as for the convenience of other occupants and tenants therein. Landlord shall not be responsible to Tenant or to any other person for the nonobservance of the Rules and Regulations by another tenant or other person. Tenant shall be deemed to have read these Rules and Regulations and to have agreed to abide by them as a condition of its occupancy of the Premises.

EXHIBIT C

CARMEL CORPORATE PLAZA

AMENDMENT TO LEASE

This AMENDMENT TO LEASE ("AMENDMENT") is made and entered into effective as of _____, 200_, by and between 15015 AVENUE OF SCIENCE ASSOCIATES LLC, a Delaware limited liability company ("Landlord"), and PDF SOLUTIONS, INC., a Delaware corporation ("TENANT")

R E C I T A L S:

A. Landlord and Tenant entered into that certain Office Lease dated as of _____ (the "LEASE") pursuant to which Landlord leased to Tenant and Tenant leased from Landlord certain "Premises", as described in the Lease, known as Suite ____ of the Building located at 15015 Avenue of Science, San Diego, California 92128-3430.

B. Except as otherwise set forth herein, all capitalized terms used in this Amendment shall have the same meaning gives such terms in the Lease.

C. Landlord and Tenant desire to amend the Lease to confirm the commencement and expiration dates of the Lease Term, as hereinafter provided.

NOW, THEREFORE, in consideration of the foregoing Recitals and the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. Confirmation of Dates. The parties hereby confirm that (a) the Premises are Ready for Occupancy and Landlord has performed all work required to be performed by Landlord pursuant to the Tenant Work Letter attached to the Lease, (b) the Lease Term for the Lease commenced as of _____ (the "LEASE COMMENCEMENT DATE") for a term of _____ (____) years ending on _____ (the "LEASE EXPIRATION DATE") (unless sooner terminated or extended as provided in the Lease) and (c) in accordance with the Lease, Rent commenced to accrue on _____.

2. No Further Modification. Except as set forth in this Amendment, all of the terms and provisions of the Lease shall remain unmodified and in full force and effect.

IN WITNESS WHEREOF, this Amendment has been executed as of the day and year first above written.

"LANDLORD" 15015 AVENUE OF SCIENCE ASSOCIATES LLC,
a Delaware limited liability company

By: PV 15015 Avenue of Science LLC,
a Delaware limited liability company,
its managing member

By: _____,
a _____,
Its _____

By: _____,
a _____,

Its

By:

Name:

Title:

"TENANT" PDF SOLUTIONS, INC., a Delaware corporation

By:

Name:

Its:

By:

Name:

Its:

EXHIBIT D

CARMEL CORPORATE PLAZA

TENANT WORK LETTER

Tenant acknowledges and agrees that the Premises have previously been constructed including interior tenant improvements therein, and is satisfactory and shall be accepted by Tenant in its "AS IS" condition as of the date of execution of this Lease and on the Lease Commencement Date; provided, however, that Landlord shall construct certain modifications to the interior of the Premises pursuant to the Approved Working Drawings in accordance with the following provisions of this Tenant Work Letter.

SECTION 1

CONSTRUCTION DRAWINGS FOR THE PREMISES

Prior to the execution of this Lease, Landlord and Tenant have approved a detailed space plan for the construction of certain improvements in the Premises, which space plan has been prepared by Facility Solutions, and is attached to the Lease as EXHIBIT A (the "FINAL SPACE PLAN"). Based upon and in conformity with the Final Space Plan, Landlord shall cause its architect and engineers to prepare and deliver to Tenant, for Tenant's approval, detailed specifications and engineered working drawings for the tenant improvements shown on the Final Space Plan (the "WORKING DRAWINGS"). The Working Drawings shall incorporate modifications to the Final Space Plan as necessary to comply with the floor load and other structural and system requirements of the Building. To the extent that the finishes and specifications are not completely set forth in the Final Space Plan for any portion of the tenant improvements depicted thereon, the actual specifications and finish work shall be in accordance with the specifications for the Building's standard improvement package items, as determined by Landlord. Within three (3) business days after Tenant's receipt of the Working Drawings, Tenant shall approve or disapprove the same, which approval shall not be unreasonably withheld; provided, however, that Tenant may only disapprove the Working Drawings to the extent such Working Drawings are inconsistent with the Final Space Plan and only if Tenant delivers to Landlord, within such three (3) business days period, specific changes proposed by Tenant which are consistent with the Final Space Plan and do not constitute changes which would result in any of the circumstances described in items (i) through (iv) below. If any such revisions are timely and properly proposed by Tenant,

Landlord shall cause its architect and engineers to revise the Working Drawings to incorporate such revisions and submit the same for Tenant's approval in accordance with the foregoing provisions, and the parties shall follow the foregoing procedures for approving the Working Drawings until the same are finally approved by Landlord and Tenant. Upon Landlord's and Tenant's approval of the Working Drawings, the same shall be known as the "APPROVED WORKING DRAWINGS". Once the Approved Working Drawings have been approved by Landlord and Tenant, Tenant shall make no changes, change orders or modifications thereto without the prior written consent of Landlord, which consent may be withheld in Landlord's sole discretion if such change or modification would: (i) directly or indirectly delay the Substantial Completion of the Premises; (ii) increase the cost of designing or constructing the Tenant Improvements above the cost of the tenant improvements depicted in the Final Space Plan; (iii) be of a quality lower than the quality of the standard improvement package items for the Building; and/or (iv) require any changes to the base, shell and core work or structural improvements or systems of the Building. The Final Space Plan, Working Drawings and Approved Working Drawings shall be collectively referred to herein as, the "CONSTRUCTION DRAWINGS". The tenant improvements shown on the Approved Working Drawings shall be referred to herein as the "TENANT IMPROVEMENTS".

SECTION 2

OVER-ALLOWANCE AMOUNT

Landlord and Tenant hereby agree that Landlord shall, at Landlord's expense (except as provided in this Section 2) cause a contractor designated by Landlord (the "CONTRACTOR") to (i) obtain all applicable building permits for construction of the Tenant Improvements, and (ii) construct the Tenant Improvements as depicted on the Approved Working Drawings, in compliance with such building permits and all applicable laws in effect at the time of construction, and in good workmanlike manner; provided, however, in the event that (A) the Approved Working Drawings differ with respect to the quality and quantity of those tenant improvements depicted on the Final Space Plan, and/or (B) Tenant shall request any changes or substitutions to any of the Construction Drawings, and such differences, changes and/or substitutions result in increased costs of construction in excess of the costs of those tenant improvements depicted on the Final Space Plan, then Tenant shall pay such excess costs to Landlord in cash within five (5) days after Landlord's request therefor. Notwithstanding the foregoing to the contrary, in no event shall Landlord be obligated to pay for any of Tenant's furniture, computer systems, telephone systems, equipment or other personal property which may be depicted on the Construction Drawings; such items shall be paid for by Tenant.

SECTION 3

READY FOR OCCUPANCY; SUBSTANTIAL COMPLETION OF THE TENANT IMPROVEMENTS

3.1 READY FOR OCCUPANCY; SUBSTANTIAL COMPLETION. For purposes of this Lease, the Premises shall be "READY FOR OCCUPANCY" upon Substantial Completion of the Premises. For purposes of this Lease, "SUBSTANTIAL COMPLETION" of the Premises shall occur upon (i) the completion of construction of the Tenant Improvements in the Premises pursuant to the Approved Working Drawings, with the exception of any punch list items and any tenant fixtures, work-stations, built-in furniture, or equipment to be installed by Tenant or under the supervision of Contractor, and (ii) the issuance by the City of San Diego, California of a temporary certificate of occupancy (or comparable document) for the Premises.

3.2 DELAY OF THE SUBSTANTIAL COMPLETION OF THE PREMISES. If there shall be a delay or there are delays in the Substantial Completion of the Premises as a direct, indirect, partial, or total result of any of the following (collectively, "TENANT DELAYS"):

3.2.1 Tenant's failure to timely approve the Working Drawings or any other matter requiring Tenant's approval;

3.2.2 A breach by Tenant of the terms of this Tenant Work Letter or the Lease;

3.2.3 Tenant's request for changes in any of the Construction Drawings;

3.2.4 Tenant's requirement for materials, components, finishes or improvements which are not available in a commercially reasonable time given the estimated date of Substantial Completion of the Premises, as set forth in the Lease, or which are different from, or not included in, Landlord's standard improvement package items for the Building;

3.2.5 Changes to the base, shell and core work, structural components or structural components or systems of the Building required by the Approved Working Drawings; or

3.2.6 Any other acts or omissions of Tenant, or its agents, or employees;

then, notwithstanding anything to the contrary set forth in the Lease and regardless of the actual date of Substantial Completion, the Lease Commencement Date (as set forth in Section 7.3 of the Summary) shall be deemed to be the date the Lease Commencement Date would have occurred if no Tenant Delay or Delays, as set forth above, had occurred.

SECTION 4

MISCELLANEOUS

Provided that Tenant and its agents do not interfere with Contractor's work in the Building and the Premises, Contractor shall allow Tenant access to the Premises prior to the Substantial Completion of the Premises for the purpose of Tenant installing overstandard equipment or fixtures (including Tenant's data and telephone equipment) in the Premises. Prior to Tenant's entry into the Premises as permitted by the terms of this Section 4, Tenant shall submit a schedule to Landlord and Contractor, for their approval, which schedule shall detail the timing and purpose of Tenant's entry. Tenant shall hold Landlord harmless from and indemnify, protect and defend Landlord against any loss or damage to the Premises or Real Property and against injury to any persons caused by Tenant's actions pursuant to this Section 4.

SECTION 5

RELOCATION OF TENANT LAB EQUIPMENT;
REIMBURSEMENT OF COSTS TO RELOCATE TENANT LAB EQUIPMENT

Landlord has agreed to reimburse Tenant for the reasonable, actual and direct costs incurred by Tenant to relocate its lab equipment from its current premises to the new Premises at the commencement of the Lease Term (including, without limitation, any of the costs incurred (if any) in redistributing the air conditioning within the Premises to accommodate any special requirements for such lab equipment). Such reimbursement shall be made within thirty (30) days after Landlord's receipt of a written statement from Tenant setting forth the costs incurred by Tenant, together with invoices supporting the same.

EXHIBIT E

CARMEL CORPORATE PLAZA

FORM OF TENANT'S ESTOPPEL CERTIFICATE

The undersigned, as Tenant under that certain Office Lease (the "LEASE") made and entered into as of _____, 200_ and between 15015 AVENUE OF SCIENCE ASSOCIATES LLC, a Delaware limited liability company, as Landlord, and the undersigned as Tenant, for Premises on the _____ (____) floor(s) of the Building located at 15015 Avenue of Science, San Diego, California 92128-3430 hereby certifies as follows:

1. Attached hereto as EXHIBIT A is a true and correct copy of the Lease and all amendments and modifications thereto. The documents contained in EXHIBIT A represent the entire agreement between the parties as to the Premises.

2. The undersigned has commenced occupancy of the Premises described in the Lease, currently occupies the Premises, and the Lease Term commenced on _____.

3. The Lease is in full force and effect and has not been modified, supplemented or amended in any way except as provided in EXHIBIT A.

4. Tenant has not transferred, assigned, or sublet any portion of the Premises nor entered into any license or concession agreements with respect thereto except as follows:

5. Tenant shall not modify the documents contained in EXHIBIT A or prepay any amounts owing under the Lease to Landlord in excess of thirty (30) days without the prior written consent of Landlord's mortgagee.

6. Base Rent became payable on _____.

7. The Lease Term expires on _____.

8. All conditions of the Lease to be performed by Landlord necessary to the enforceability of the Lease have been satisfied and Landlord is not in default thereunder.

9. No rental has been paid in advance and no security has been deposited with Landlord except as provided in the Lease.

10. As of the date hereof, there are no existing defenses or offsets that the undersigned has, which preclude enforcement of the Lease by Landlord.

11. All monthly installments of Base Rent, all Additional Rent and all monthly installments of estimated Additional Rent have been paid when due through _____. The current monthly installment of Base Rent is $_____.

12. The undersigned acknowledges that this Estoppel certificate may be delivered to Landlord's prospective mortgagee, or a prospective purchaser, and acknowledges that it recognizes that if same is done, said mortgagee, prospective mortgagee, or prospective purchaser will be relying upon the statements contained herein in making the loan or acquiring the property of which the Premises are a part, and in accepting an assignment of the Lease as collateral security, and that receipt by it of this certificate is a condition of making of the loan or acquisition of such property.

13. If Tenant is a corporation or partnership, each individual executing this Estoppel Certificate on behalf of Tenant hereby represents and warrants that Tenant is a duly formed and existing entity qualified to do business in California and that Tenant has full right and authority to execute and deliver this Estoppel Certificate and that each person signing on behalf of Tenant is authorized to do so.

Executed at _____ on the _____ day of _____, 200_.

"TENANT" PDF SOLUTIONS, INC., a Delaware corporation

By: _____

Name: _____

Its: _____

By:

Name:

Its:

CARMEL CORPORATE PLAZA

OFFICE LEASE

15015 AVENUE OF SCIENCE ASSOCIATES LLC,
A DELAWARE LIMITED LIABILITY COMPANY,

AS LANDLORD,

AND

PDF SOLUTIONS, INC.,
A DELAWARE CORPORATION

AS TENANT.

CARMEL CORPORATE PLAZA
[PDF Solutions, Inc.]

CARMEL CORPORATE PLAZA

SUMMARY OF BASIC LEASE INFORMATION

This Summary of Basic Lease Information (the "SUMMARY") is hereby incorporated by reference into and made a part of the attached Office Lease. Each reference in the Office Lease to any term of this Summary shall have the meaning as set forth in this Summary for such term. In the event of a conflict between the terms of this Summary and the Office Lease, the terms of the Office Lease shall prevail. Any initially capitalized terms used herein and not otherwise defined herein shall have the meaning as set forth in the Office Lease.

	TERMS OF LEASE (REFERENCES ARE TO THE OFFICE LEASE)	DESCRIPTION
1.	Dated as of:	April 1, 2003 (the "EFFECTIVE DATE")
2.	Landlord:	15015 AVENUE OF SCIENCE ASSOCIATES LLC, a Delaware limited liability company
3.	Address of Landlord (Section 29.14):	c/o The Shidler Group 4660 La Jolla Village Drive, Suite 800 San Diego, CA 92122 Attn: Mr. Matt Root and Teel, Palmer & Roeper, LLP 8910 University Center Lane, Suite 630 San Diego, CA 92122 Attn: Dean E. Roeper, Esq.
4.	Tenant:	PDF SOLUTIONS, INC., a Delaware corporation
5.	Address of Tenant (Section 29.14):	PDF Solutions, Inc. 15015 Avenue of Science San Diego, CA 92128 Attn: P. Steven Melman, CFO (Prior to Lease Commencement Date) and

15015 Avenue of Science, Suite 150
San Diego, California 92128-3430
Attn: P. Steven Melman, CFO
(After Lease Commencement Date)

6. Premises (Article 1):

6.1	Premises:	Approximately 11,221 rentable square feet of space located on the first (1st) floor of the Building (as defined below), as set forth in EXHIBIT A attached hereto, known as Suite 150.

6.2	Building:	The Premises are located in the "BUILDING" whose address is 15015 Avenue of Science, San Diego, California 92128-3430.

7. Term (Article 2):

7.1	Lease Term:	Sixty (60) months
7.2	Option Term(s):	None.
7.3	Lease Commencement Date:	The date that the Premises are Ready For Occupancy (as defined in EXHIBIT D attached hereto).
7.4	Lease Expiration Date:	The last day of the month in which the sixtieth (60th) anniversary of the Lease Commencement Date occurs.
7.5	Lease Amendment:	Landlord and Tenant shall confirm the Lease Commencement Date and the Lease Expiration Date in an Amendment to the Lease (EXHIBIT C) to be executed pursuant to Article 2 of the Office Lease.

8. Base Rent (Article 3):

Period	Annual Base Rent	Monthly Installment of Base Rent	Monthly Base Rental Rate per Rentable Square Foot
Lease Commencement Date - 12/31/03*	**	$8,415.75	$0.75
1/1/04 - 12/31/04	$208,710.60	$17,392.55	$1.55
1/1/05 - 12/31/05	$215,443.20	$17,953.60	$1.60
1/1/06 - 12/31/06	$222,175.86	$18,514.65	$1.65
1/1/07 - 12/31/07	$228,908.40	$19,075.70	$1.70
1/1/08 - Lease Expiration Date	**	$19,636.75	$1.75

* Subject to Section 3.2 below.

** Note: Years 2003 and 2008 will be partial years.

9. Additional Rent (Article 4):

9.1	Tenant's Share of Direct Expenses (and Utilities Costs):	13.187% (11,221 rentable square feet within the Premises/85,090 rentable square feet within the Building) (See Section 4.2.6 of Office Lease).

10. Security Deposit (Article 20): $19,636.75.

11.	Guarantor(s) (Article 20):	None.
12.	Number of Parking Passes(Article 24):	Thirty-five (35) unreserved parking passes for the Premises.

13.	Brokers (Section 25.19):	Colliers International (Landlord and Tenant)
14.	Tenant Improvement Allowance (EXHIBIT D):	See Section 5 of the Tenant Work Letter.

The foregoing terms of this Summary are hereby agreed to by Landlord and Tenant.

"LANDLORD" 15015 AVENUE OF SCIENCE ASSOCIATES LLC,
a Delaware limited liability company

By: PV 15015 Avenue of Science LLC,
a Delaware limited liability company,
its managing member

By: _____,
a _____,
Its _____

By: _____,
a _____,
Its _____

By: _____
Name: _____
Title: _____

"TENANT" PDF SOLUTIONS, INC., a Delaware corporation

By: _____
Name: _____
Its: _____

By: _____
Name: _____
Its: _____

CARMEL CORPORATE PLAZA

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CARMEL CORPORATE PLAZA

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EXHIBIT 99.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of PDF Solutions, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John K. Kibarian, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ John K. Kibarian

John K. Kibarian
President and Chief Executive Officer
May 14, 2003

EXHIBIT 99.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report of PDF Solutions, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2003 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, P. Steven Melman, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

/s/ P. Steven Melman

P. Steven Melman
Chief Financial Officer
May 14, 2003