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FORM PTO-1595
(Rev. 6-93)
OMB No. 0651-0011 (exp. 4/94)

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
Boston Optical Fiber, Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☐ Assignment ☐ Merger
☒ Security Agreement ☐ Change of Name
☐ Other _____

Execution Date: April 22, 1996

2. Name and address of receiving party(ies)

Name: Wang Laboratories, Inc.

Internal Address:

Street Address: 600 Technology Park Drive,
Billerica, MA 01821-4130

Additional name(s) & addresses(es) attached? ☐ Yes ☒ No

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is

A. Patent Application No.(s)

PCT Application designating, *inter alia*, U.S. filed June 12, 1998, entitled Polymeric Optical Articles; inventor: Victor Ilyashenko claiming priority to U.S. Serial No. 08/873,952, filed on June 12, 1997.

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence
Concerning document should be mailed:

Name: Edward R. Gates
Address: WOLF, GREENFIELD & SACKS, P.C.
Federal Reserve Plaza
600 Atlantic Avenue
Boston, MA 02210

6. Total number of applications and patents involved: **[1]**

7. Total fee (37 CFR 3.41).....\$ 40.00

☒ Enclosed

☐ Authorized to be charged to deposit account

The Commissioner is authorized to charge:
any deficiencies in fees to our Deposit Account.

8. Deposit Account No: 23/2825

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9. Statement and signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Edward R. Gates

July 2, 1998

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and document: **[31]**

Mail documents to be recorded with required cover sheet information to:
Box Assignment, Commissioner of Patents and Trademarks,
Washington, D.C. 20231

PATENT

REEL: 9278 FRAME: 0041

AMENDED AND RESTATED REVOLVING CREDIT,
TERM LOAN AND SECURITY AGREEMENT

Dated as of April 22, 1996

THIS AMENDED AND RESTATED REVOLVING CREDIT, TERM LOAN AND SECURITY AGREEMENT is made as of April 22, 1996, by and between Boston Optical Fiber, Inc. (the "Company"), a Massachusetts corporation having its chief executive office at 155 Flanders Road, Westborough, MA 01581, and WANG LABORATORIES, INC. (the "Lender"), a Delaware Corporation, having its head office at 600 Technology Park Drive, Billerica, Massachusetts 01821-4130.

SECTION 1

DEFINITIONS

1.1 Definitions.

All capitalized terms used in this Agreement or in the Note or in any certificate, report or other document made or delivered pursuant to this Agreement (unless otherwise defined therein) shall have the meanings assigned to them below:

Account and Account Receivable. All rights to payment for goods sold or leased or for services rendered, all sums of money or other proceeds due or becoming due thereon, all instruments pertaining thereto, all guaranties and security therefor, and all goods giving rise thereto and the rights pertaining to such goods, including the right of stoppage in transit, and all related insurance.

Agreement. This Agreement, as the same may be supplemented or amended from time to time.

Lender Authorized Officer. The Lender's Treasurer or Senior Vice President and General Counsel and such other officer as the Lender may designate in writing.

Business Day. Any day, other than a Saturday, Sunday or legal holiday, on which banks in Boston, Massachusetts or New York, New York are open for the conduct of a substantial part of their commercial banking business.

Capital Expenditures. Capital expenditures as determined in accordance with GAAP, but including capital leases as defined under GAAP.

Code. The Internal Revenue Code of 1986 and the rules and regulations thereunder, collectively, as the same may from time to time be supplemented or amended and remain in effect.

Collateral. See Section 7.

Company. See Preamble.

Company Authorized Officer. I. Edward Berman or Michael Kerr, but only as long as they hold the offices of President of the Company, in the case of Mr. Berman, and Chief Financial Officer of the Company, in the case of Mr. Kerr, or such other person as may be so designated by the Company and accepted by the Lender in writing.

Controlled Group. All trades or businesses (whether or not incorporated) under common control that, together with the Company, are treated as a single employer under Section 414(b) or 414(c) of the Code or Section 4001 of ERISA.

Default. An Event of Default or event or condition that, but for the requirement that time elapse or notice be given, or both, would constitute an Event of Default.

Encumbrances. See Section 6.5.

ERISA. The Employee Retirement Income Security Act of 1974 and the rules and regulations thereunder, collectively, as the same may from time to time be supplemented or amended and remain in effect.

Environmental Laws. Any and all applicable foreign, federal, state and local environmental, health or safety statutes, laws, regulations, rules, ordinances, policies and rules or common law (whether now existing or hereafter enacted or promulgated), of all governmental agencies, bureaus or departments which may now or hereafter have jurisdiction over the Company or any of its Subsidiaries and all applicable judicial and administrative and regulatory decrees, judgments and orders, including common law rulings and determinations, relating to injury to, or the protection of, real or personal property or human health or the environment, including, without limitation, all requirements pertaining to reporting, licensing, permitting, investigation, remediation and removal of emissions, discharges, releases or threatened releases of Hazardous Materials, chemical substances, pollutants or contaminants whether solid, liquid or gaseous in nature, into the environment or relating to the manufacture, processing, distribution, use, treatment, storage, disposal, transport or handling of such Hazardous Materials, chemical substances, pollutants or contaminants.

Event of Default. Any event described in Section 8.1.

Guarantees. As applied to the Company and its Subsidiaries, all guarantees, endorsements or other contingent or surety obligations with respect to obligations of others whether or not reflected on the consolidated balance sheet of the Company and its Subsidiaries, including any obligation to furnish funds, directly or indirectly (whether by virtue of partnership arrangements, by agreement to keep-well or otherwise), through the purchase of goods, supplies or services, or by way of stock purchase, capital contribution, advance or loan, or to enter into a contract for any of the foregoing, for the purpose of payment of obligations of any other person or entity.

Hazardous Material. Any substance (i) the presence of which requires or may hereafter require notification, investigation or remediation under any Environmental Law; (ii) which is or becomes defined as a "hazardous waste", "hazardous material" or "hazardous substance" or "controlled industrial waste" or "pollutant" or "contaminant" under any present or future Environmental Law or amendments thereto including, without limitation, the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. Section 9601 *et seq.*) and any applicable local statutes and the regulations promulgated thereunder; (iii) which is toxic, explosive, corrosive, flammable, infectious, radioactive, carcinogenic, mutagenic or otherwise hazardous and is or becomes regulated by any governmental authority, agency, department, commission, board, agency or instrumentality of any foreign country, the United States, any state of the United States, or any political subdivision thereof to the extent any of the foregoing has or had jurisdiction over the Company; or (iv) without limitation, which contains gasoline, diesel fuel or other petroleum products, asbestos or polychlorinated biphenyls ("PCB's").

Indebtedness. As applied to the Company and its Subsidiaries, (i) all obligations for borrowed money or other extensions of credit whether or not secured or unsecured, absolute or contingent, including, without limitation, unmatured reimbursement obligations with respect to letters of credit or guarantees issued for the account of or on behalf of the Company and its Subsidiaries and all obligations representing the deferred purchase price of property, other than accounts payable arising in the ordinary course of business, (ii) all obligations evidenced by bonds, notes, debentures or other similar instruments, (iii) all obligations secured by any mortgage, pledge, security interest or other lien on property owned or acquired by the Company or any of its Subsidiaries whether or not the obligations secured thereby shall have been assumed, (iv) that portion of all obligations arising under capital leases that is required to be capitalized on the consolidated balance sheet of the Company and its Subsidiaries, (v) all Guarantees and (vi) all obligations that are immediately due and payable out of the proceeds of or production from property now or hereafter owned or acquired by the Company or any of its Subsidiaries.

Inventory. Goods, merchandise and other personal property, now owned or hereafter acquired by the Company, which are held for sale or lease or are furnished or to be furnished under a contract of service or are raw materials, work in process or materials used or consumed or to be used or consumed in the Company's business.

Investment. As applied to the Company and its Subsidiaries, the purchase or acquisition of any share of capital stock, partnership interest, evidence of indebtedness or other equity security of any other person or entity, any loan, advance or extension of credit to, or contribution to the capital of, any other person or entity, any real estate held for sale or investment, any commodities futures contracts held other than in connection with bona fide hedging transactions, any other investment in any other person or entity and the making of any commitment or acquisition of any option to make an Investment.

Lender. See Preamble.

Letter of Credit. Any letter of credit whether standby or documentary issued for the account of Company by Fleet National Bank or such other bank as the Lender may approve in writing.

Letter of Credit Availability. The Letter of Credit Availability as set forth on Schedule 1 for the then current quarter.

Loan. A loan made to the Company by the Lender pursuant to Section 2 of this Agreement, and "Loans" means all of such loans, collectively.

Loan Account. The book entries maintained by the Lender noting the Revolving Loans, Payments thereon and other amounts related thereto.

Machinery and Equipment. Any personal property used by the Company in its trade or business which is not Inventory or is equipment as that term is used in the Uniform Commercial Code.

Notes. Amended and Restated Promissory notes of the Company, substantially in the form of Exhibits A-1 and A-2 hereto, evidencing the obligation of the Company to the Lender to repay the Loans.

Obligations. Any and all obligations of the Company to the Lender of every kind and description, direct or indirect, absolute or contingent, primary or secondary, due or to become due, now existing or hereafter arising, regardless of how they arise or by what agreement or instrument, if any, and including obligations to perform acts and refrain from taking action as well as obligations to pay money.

PBGC. The Pension Benefit Guaranty Corporation or any entity succeeding to any or all of its functions under ERISA.

Permitted Encumbrances. See Section 6.5.

Plan. At any time, an employee pension or other benefit plan that is subject to Title IV of ERISA or subject to the minimum funding standards under Section 412 of the Code and is either (i) maintained by the Company or any member of the Controlled Group for employees of the Company or any member of the Controlled Group or (ii) if such Plan is established, maintained pursuant to a collective bargaining agreement or any other arrangement under which more than one employer makes contributions and to which the Company or any member of the Controlled Group is then making or accruing an obligation to make contributions or has within the preceding five Plan years made contributions.

Prime Rate. The greater of the rate of interest announced from time to time by Bankers Trust Company at its head office as its Prime Rate or such alternative rate as Bankers Trust Company may be charging its borrowers as the Prime Rate from time to time.

Qualified Investments. As applied to the Company and its Subsidiaries, investments in (i) notes, bonds or other obligations of the United States of America or any agency thereof

that as to principal and interest constitute direct obligations of or are guaranteed by the United States of America; (ii) certificates of deposit or other deposit instruments or accounts of banks or trust companies organized under the laws of the United States or any state thereof that have capital and surplus of at least \$100,000,000, (iii) commercial paper that is rated not less than P-1 or A-1 or their equivalents by Moody's Investors Service, Inc. or Standard & Poor's Corporation, respectively, or their successors, and (iv) any repurchase agreement secured by any one or more of the foregoing.

Revolving Loan Availability. The amount set forth as the Revolving Loan Availability on Schedule 1 hereto for the then current fiscal quarter.

Revolving Loan Period. The period beginning on the date of this Agreement and extending through and including the Revolving Loan Termination Date or such earlier date on which the commitment to make Revolving Loans is terminated .

Revolving Loan Termination Date. March 31, 1997.

Revolving Loans. The Loans made to the Company pursuant to Section 2.1.1 of this Agreement.

Subordinated Note. Note in the principal amount of \$50,000 due to Paul Chambers, as Trustee of Life Trust.

Subsidiary. Any corporation, association, joint stock company, business trust or other similar organization of which 50% or more of the ordinary voting power for the election of a majority of the members of the board of directors or other governing body of such entity is held or controlled by the Company or a Subsidiary of the Company; or any other such organization the management of which is directly or indirectly controlled by the Company or a Subsidiary of the Company through the exercise of voting power or otherwise; or any joint venture, whether incorporated or not, in which the Company has a 50% ownership interest.

Term Loan. The loans made to the Company pursuant to Section 2.1.3 of this Agreement.

Term Loan Availability. Term Loan Availability as set forth on Schedule 1 for the then current quarter.

Term Loan Maturity Date. September 1, 1997 or such earlier date as provided elsewhere in this Agreement.

Term Loan Period. The period beginning on the date hereof and extending through and including March 31, 1997.

Trip Wire Amounts. The trip wire amounts set forth for each fiscal quarter on Schedule 1 for the Revolving Loans, Term Loans or Letters of Credit, respectively.

1.2 Accounting Terms. All terms of an accounting character shall have the meanings assigned thereto by generally accepted accounting principles applied on a basis consistent with the financial statements referred to in Section 4.6 of this Agreement, modified to the extent, but only to the extent, that such meanings are specifically modified herein.

SECTION 2

DESCRIPTION OF CREDIT

2.1 The Loans.

2.1.1 Upon the terms and subject to the conditions of this Agreement, in reliance upon the representations, warranties and covenants of the Company made herein and, if no Default exists and is continuing, the Lender agrees to make loans ("Revolving Loans") to the Company at the Company's request from time to time, from and after the date hereof and prior to the Revolving Loan Termination Date, provided that the principal amount of Revolving Loans outstanding at any time shall not exceed the then applicable Trip Wire Amount. In the event that a Lender Authorized Officer consents in writing, the Revolving Loans may equal but not exceed the then applicable Revolving Loan Availability. It shall be a Default if at any time the debit balance of the Loan Account reflecting Revolving Loans shall exceed the Revolving Loan Availability and, in the absence of the appropriate written approval by a Lender Authorized Officer, the then applicable Trip Wire Amount. The Revolving Loans shall be evidenced by an Amended and Restated Revolving Credit Note (the "Revolving Credit Note") in the form of Exhibit A-1 attached hereto.

2.1.2 The Lender shall enter Revolving Loans as debits in the Loan Account. The Lender shall also record in the Loan Account all payments made by the Company on account of Revolving Loans, and may also record therein, in accordance with customary accounting practices, other debits and credits, including customary banking charges and all interest, fees, charges and expenses chargeable to the Company under this Agreement. The debit balance of the Loan Account shall reflect the amount of the Company's Obligations to the Lender from time to time by reason of Revolving Loans and other appropriate charges hereunder. In seven Business Days following the end of each calendar month, the Lender shall render a statement of account showing as of its date the debit balance of the Loan Account which, unless within thirty (30) days of such date notice to the contrary is received by the Lender from the Company, shall be considered correct and accepted by Company and conclusively binding upon it.

2.1.3 Upon the terms and subject to the conditions of this Agreement, in reliance upon the representations, warranties and covenants of the Company made herein and if no Default exists and is continuing, the Lender shall make term loans ("Term Loans") during the Term Loan Period; provided that the aggregate of such Term Loans shall not exceed the applicable Trip Wire Amount. In the event that a Lender Authorized Officer consents in writing, the Term Loans may equal but not exceed the then applicable Term Loan Availability. It shall be a Default if the outstanding principal balance of Term Loans shall exceed the Term Loan Availability and, in the absence of the appropriate written approval a

Lender Authorized Officer, the then applicable Trip Wire Amount. The Term Loans shall be evidenced by an Amended and Restated Term Note in the form appended hereto as Exhibit A-2.

2.2 Requests for Revolving and Term Loans.

2.2.1 All requests for Revolving Loans and Term Loans shall be made by a Company Authorized Officer in such form as may be agreed to by the Lender from time to time.

2.2.2 Subject to the terms and conditions hereof, the Lender shall make each Loan on the effective date specified therefor by crediting the amount of such Loan to the Company's demand deposit account with Fleet National Bank.

2.3 The Notes. The Lender shall, and is hereby irrevocably authorized by the Company to, enter on the schedule forming a part of the Notes or otherwise in its records appropriate notations evidencing the date and the amount of each Loan and the date and amount of each payment of principal made by the Company with respect thereto; and in the absence of manifest error, such notations shall constitute conclusive evidence thereof. The Lender is hereby irrevocably authorized by the Company to attach to and make a part of the Notes a continuation of any such schedule as and when required. No failure on the part of the Lender to make any notation as provided in this Section 2.3 shall in any way affect any Loan or the rights or obligations of the Lender or the Company with respect thereto.

2.4 Interest Rates and Payments of Interest. Each Loan shall bear interest on the outstanding principal amount thereof at a rate per annum equal to the Prime Rate plus two and one half percent (2.5%), which rate shall change contemporaneously with any change in the Prime Rate. Such interest not paid through April 1, 1996 shall accrue from April 1, 1996 through March 31, 1997 on the outstanding principal balance of the Revolving and Term Loans and shall be payable thereafter as provided in Section 2.5.

2.5 Payments and Prepayments of the Loans.

2.5.1 During the Revolving Loan Period, the Company shall pay outstanding Revolving Loans from collections of Accounts Receivable of the Company into the lock box provided for in Section 7.4. Such amounts may be reborrowed during the Revolving Loan Period.

2.5.2 The Company may prepay amounts due under the Term Loans but may not reborrow any amounts so repaid.

2.5.3 On or about March 31, 1997, the Lender shall deliver to the Company a statement of the principal balance of all Loans (including Revolving Loans, Term Loans, accrued but unpaid interest on all Loans and all related fees and charges not yet paid) (the "Aggregate Principal"). The Lender shall further provide a six installment amortization schedule for the Aggregate Principal, with applicable interest, payable over six months commencing on April 1, 1997 and ending with a final payment on September 1, 1997. The

amortization schedule shall be deemed correct absent manifest error and shall be incorporated into the Notes by reference.

2.5.4 The Company shall continue to comply with the provisions of Section 7.4 on and after the Revolving Loan Period and the Term Loan Period and authorizes the Lender to retain from collections in the lock box up to the full amount of the principal payment next due under Section 2.5.3 and, if no Default exists and is continuing, remit the balance to the Company as provided in Section 7.4.

2.6 Charging Company's Accounts. The Company authorizes the Lender to charge to the Loan Account or to any deposit account which the Company may maintain with Fleet National Bank the interest, fees, charges, taxes and expenses when due, as provided for in this Agreement or any other document executed or delivered in connection herewith. To that end the Company shall execute instructions to Fleet National Bank that the Lender shall have the right to withdraw funds from the Company's deposit account in order to make the aforementioned payments.

2.7 Overdue Payments.

2.7.1 Overdue principal (whether at maturity, by reason of acceleration or otherwise) and, to the extent permitted by applicable law, overdue interest and fees or after an Event of Default any other amounts payable hereunder or under the Notes shall bear interest from and including the due date thereof until paid, compounded daily and payable on demand, at a rate per annum equal to three percent (3%) above the rate then applicable to the Loans.

2.7.2 If a payment of principal or interest hereunder is not made within 10 days of its due date, the Company will also pay on demand a late payment charge equal to five percent (5%) of the amount of such payment. Nothing in the preceding sentence shall affect the Lender's right to exercise any of its rights or remedies, including those provided in Section 8.2, if an Event of Default has occurred.

2.8 Computation of Interest and Fees. Interest and all fees payable hereunder shall be computed daily on the basis of a year of 360 days and paid for the actual number of days for which due. If the due date for any payment of principal is extended by operation of law, interest shall be payable for such extended time. If any payment required by this Agreement becomes due on a day that is not a Business Day such payment may be made on the next succeeding Business Day, and such extension shall be included in computing interest in connection with such payment.

2.9 Letters of Credit

2.9.1 A Company Authorized Officer may request Revolving Loans (as provided in Section 2.1.1 and subject to the limitation thereunder) to be used solely to cash collateralize Letters of Credit; provided that in any such request the requesting Company Authorized Officer shall set forth in writing the purpose of such Revolving Loan. If the Revolving Loan is to cash collateralize a Letter of Credit, then such Revolving Loan when

added to the outstanding amount of all prior Revolving Loans to cash collateralize Letters of Credit may not exceed the then applicable Trip Wire Amount for Letters of Credit. In the event that a Lender Authorized Officer consents in writing, such Revolving Loan when added to the outstanding amount of all prior Revolving Loans to cash collateralize Letters of Credit may not exceed then applicable Letter of Credit Availability.

2.9.2 The Company shall only request or be entitled to receive Letters of Credit which are used for the purpose of acquiring Inventory in the ordinary and customary course of the Company's business.

SECTION 3

CONDITIONS OF LOANS

3.1 Conditions Precedent to Initial Loan. The obligation of the Lender to make its initial Loan is subject to the condition precedent that the Lender shall have received, in form and substance satisfactory to the Lender and its counsel, the following:

3.1.1 this Agreement and the Note, duly executed by the Company;

3.1.2 a certificate of the Clerk or an Assistant Clerk of the Company with respect to resolutions of the Board of Directors authorizing the execution and delivery of this Agreement and the Note and identifying the officer(s) authorized to execute, deliver and take all other actions required under this Agreement, and providing specimen signatures of such officers;

3.1.3 the Article of Organization of the Company and all amendments and supplements thereto, filed in the office of the Secretary of the Commonwealth of Massachusetts, each certified by said Secretary of the Commonwealth as being a true and correct copy thereof;

3.1.4 the By-laws of the Company and all amendments and supplements thereto, certified by the Clerk or an Assistant Clerk as being a true and correct copy thereof;

3.1.5 a certificate of the Secretary of the Commonwealth of Massachusetts, as to legal existence and good standing in such Commonwealth and listing all documents on file in the office of said Secretary of the Commonwealth;

3.1.6 a collateral assignment of certain licenses and supply contracts as may be determined by the Lender and in such form as may be acceptable to the Lender;

3.1.7 evidence of the subordination of the Subordinated Note to the satisfaction of Lender and a renegotiation of the Subordinated Note to provide for an amortization schedule.

3.1.8 an opinion addressed to the Lender from Richard Vita, Esq, counsel to the Company, substantially in the form previously submitted to Lender;

3.1.9 evidence that the Company has executed and delivered the First Amendment to the Stock Purchase Agreement to the Lender and there is no default thereunder; and

3.1.10 such other documents, and completion of such other matters, as counsel for the Lender may deem necessary or appropriate.

3.2 Conditions Precedent to all Loans. The obligation of the Lender to make each Loan, including the initial Loan, is further subject to the following conditions:

3.2.1 timely receipt by the Lender of a notice of borrowing signed by a Company Authorized Officer which sets forth in writing that the Loan is in conformity with the limitations of this Agreement and Schedule 1 hereto and, if the Loan would exceed the applicable Trip Wire Amount, the appropriate written consent of a Lender Authorized Officer;

3.2.2 the representations and warranties contained in Section 4 shall be true and accurate in all material respects on and as of the date of such Notice of Borrowing and on the effective date of the making, continuation or conversion of each Loan as though made at and as of each such date (except to the extent that such representations and warranties expressly relate to an earlier date), and no Default shall have occurred and be continuing, or would result from such Loan;

3.2.3 the resolutions referred to in Section 3.1.2 shall remain in full force and effect; and

3.2.4 no change shall have occurred in any law or regulation or interpretation thereof that, in the opinion of counsel for the Lender, would make it illegal or against the policy of any governmental agency or authority for the Lender to make Loans hereunder.

The request for each Loan shall be deemed to be a representation and warranty by the Company on the date of the request of such Loan as to the accuracy of the facts referred to in Section 3.2.2 and 3.2.3.

SECTION 4

REPRESENTATIONS AND WARRANTIES

In order to induce the Lender to enter into this Agreement and to make Loans hereunder, the Company represents and warrants to the Lender that:

4.1 Organization and Qualification. Each of the Company and its Subsidiaries (a) is a corporation duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation, (b) has all requisite corporate power to own its property and conduct its business as now conducted and as presently contemplated and (c) is duly qualified and in good standing as a foreign corporation and is duly authorized to do business in each jurisdiction where the nature of its properties or business requires such qualification.

4.2 Corporate Authority. The execution, delivery and performance of this Agreement and the Notes and the transactions contemplated hereby are within the corporate power and authority of the Company and have been authorized by all necessary corporate proceedings and do not and will not (a) require any consent or approval of the stockholders of the Company, (b) contravene any provision of the charter documents or by-laws of the Company or any law, rule or regulation applicable to the Company, (c) contravene any provision of, or constitute an event of default or event that, but for the requirement that time elapse or notice be given, or both, would constitute an event of default under, any other agreement, instrument, order or undertaking binding on the Company or (d) result in or require the imposition of any Encumbrance on any of the properties, assets or rights of the Company.

4.3 Valid Obligations. This Agreement and the Notes and all of their respective terms and provisions are the legal, valid and binding obligations of the Company, enforceable in accordance with their respective terms except as limited by bankruptcy, insolvency, reorganization, moratorium or other laws affecting the enforcement of creditors' rights generally, and except as the remedy of specific performance or of injunctive relief is subject to the discretion of the court before which any proceeding therefor may be brought.

4.4 Consents or Approvals. The execution, delivery and performance of this Agreement and the Note and the transactions contemplated herein do not require any approval or consent of, or filing or registration with, any governmental or other agency or authority, or any other party.

4.5 Title to Properties: Absence of Encumbrances. Each of the Company and its Subsidiaries has good and marketable title to all of the properties, assets and rights of every name and nature now purported to be owned by it, including, without limitation, such properties, assets and rights as are reflected in the financial statements referred to in Section 4.6 (except such properties, assets or rights as have been disposed of in the ordinary course of business since the date thereof), free from all Encumbrances except Permitted Encumbrances or those Encumbrances disclosed in Exhibit B hereto, and, except as so disclosed, free from all defects of title that might materially adversely affect such properties, assets or rights, taken as a whole.

4.6 Financial Statements. The Company has furnished the Lender periodically its consolidated balance sheet and its consolidated statements of income, changes in stockholders' equity and cash flow for the quarter or fiscal year. All such financial statements were prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods specified and present fairly the financial position of the Company and its Subsidiaries as of such dates and the results of the operations of the Company and its Subsidiaries for such periods. There are no liabilities, contingent or otherwise, not disclosed in such financial statements that involve a material amount.

4.7 Changes. Since the date of the most recent financial statements referred to in Section 4.6, there have been no changes in the assets, liabilities, financial condition, business or prospects of the Company or any of its Subsidiaries other than changes in the ordinary course of business, the effect of which has not, in the aggregate, been materially adverse.

4.8 Defaults. As of the date of this Agreement, no Default exists.

4.9 Taxes. The Company and each Subsidiary have filed all federal, state and other tax returns required to be filed, and all taxes, assessments and other governmental charges due from the Company and each Subsidiary have been fully paid. The Company and each Subsidiary have established on their books reserves adequate for the payment of all federal, state and other tax liabilities.

4.10 Litigation. Except as set forth on Exhibit C hereto, there is no litigation, arbitration, proceeding or investigation pending, or, to the knowledge of the Company's or any Subsidiary's officers, threatened, against the Company or any Subsidiary that, if adversely determined, could result in a material judgment not fully covered by insurance, could result in a forfeiture of all or any substantial part of the property of the Company or its Subsidiaries, or could otherwise have a material adverse effect on the assets, business or prospects of the Company or any Subsidiary.

4.11 Use of Proceeds. No portion of any Loan is to be used for the "purpose of purchasing or carrying" any "margin stock" as such terms are used in Regulations U and X of the Board of Governors of the Federal Reserve System, 12 C.F.R. 221 and 224, as amended.

4.12 Subsidiaries. As of the date of this Agreement, all the Subsidiaries of the Company are listed on Exhibit D hereto. The Company or a Subsidiary of the Company is the owner, free and clear of all liens and encumbrances, of all of the issued and outstanding stock of each Subsidiary. All shares of such stock have been validly issued and are fully paid and nonassessable, and no rights to subscribe to any additional shares have been granted, and no options, warrants or similar rights are outstanding.

4.13 Investment Company Act. Neither the Company nor any of its Subsidiaries is subject to regulation under the Investment Company Act of 1940, as amended.

4.14 Compliance with ERISA. The Company and each member of the Controlled Group have fulfilled their obligations under the minimum funding standards of ERISA and the Code with respect to each Plan and are in compliance in all material respects with the applicable provisions of ERISA and the Code, and have not incurred any liability to the PBGC or a Plan under Title IV of ERISA; and no "prohibited transaction" or "reportable event" (as such terms are defined in ERISA) has occurred with respect to any Plan.

4.15 Environmental Matters.

4.15.1 The Company and each of its Subsidiaries have obtained all permits, licenses and other authorizations which are required under all Environmental Laws, except to the extent failure to have any such permit, license or authorization would not have a material adverse effect on the business, financial condition or operations of the Company and its Subsidiaries. The Company and each of its Subsidiaries are in compliance with the terms and conditions of all such permits, licenses and authorizations, and are also in compliance with all other limitations, restrictions, conditions, standards, prohibitions, requirements,

obligations, schedules and timetables contained in any applicable Environmental Law or in any regulation, code, plan, order, decree, judgment, injunction, notice or demand letter issued, entered, promulgated or approved thereunder, except to the extent failure to comply would not have a material adverse effect on the business, financial condition or operations of the Company and its Subsidiaries.

4.15.2 No notice, notification, demand, request for information, citation, summons or order has been issued, no complaint has been filed, no penalty has been assessed and no investigation or review is pending or threatened by any governmental or other entity with respect to any alleged failure by the Company or any of its Subsidiaries to have any permit, license or authorization required in connection with the conduct of its business or with respect to any Environmental Laws, including, without limitation, Environmental Laws relating to the generation, treatment, storage, recycling, transportation, disposal or release of any Hazardous Materials, except to the extent that such notice, complaint, penalty or investigation did not or could not result in the remediation of any property owned or used by the Company or any of its Subsidiaries costing in excess of five thousand dollars (\$5,000) per occurrence or five thousand dollars (\$5,000) in the aggregate.

4.15.3 To the best of the Company's knowledge no material oral or written notification of a release of a Hazardous Material has been filed by or on behalf of the Company or any of its Subsidiaries and no property now or previously owned, leased or used by the Company or any of its Subsidiaries is listed or proposed for listing on the National Priorities List under the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, or on any similar state list of sites requiring investigation or clean-up.

4.15.4 There are no liens or encumbrances arising under or pursuant to any Environmental Laws on any of the real property or properties owned, leased or used by the Company or any of its Subsidiaries and no governmental actions have been taken or are in process which could subject any of such properties to such liens or encumbrances or, as a result of which the Company or any of its Subsidiaries would be required to place any notice or restriction relating to the presence of Hazardous Materials at any property owned by it in any deed to such property.

4.15.5 Neither Company nor any of its Subsidiaries nor, to the best knowledge of the Company, any previous owner, tenant, occupant or user of any property owned, leased or used by the Company or any of its Subsidiaries has (i) engaged in or permitted any operations or activities upon or any use or occupancy of such property, or any portion thereof, for the purpose of or in any way involving the handling, manufacture, treatment, storage, use, generation, release, discharge, refining, dumping or disposal (whether legal or illegal, accidental or intentional) of any Hazardous Materials on, under, in or about such property, except to the extent commonly used in day-to-day operations of such property and in such case only in compliance with all Environmental Laws, or (ii) transported any Hazardous Materials to, from or across such property except to the extent commonly used in day-to-day operations of such property and, in such case, in compliance with, all Environmental Laws; nor to the best knowledge of the Company have any Hazardous Materials migrated from other properties upon, about or beneath such property, nor, to the

best knowledge of the Company, are any Hazardous Materials presently constructed, deposited, stored or otherwise located on, under, in or about such property except to the extent commonly used in day-to-day operations of such property and, in such case, in compliance with, all Environmental Laws.

4.16 Transactions with Affiliates and Employment Contracts. Except as set forth on Schedule 4.16, the Company has no employment contracts or any agreement with any person with a ownership interest in the Company or in which the Company has an ownership interest.

SECTION 5

AFFIRMATIVE COVENANTS

So long as the Lender has any commitment to lend hereunder or any Loan or other Obligation remains outstanding, the Company covenants as follows:

5.1 Financial Statements and other Reporting Requirements. The Company shall furnish to the Lender:

5.1.1 as soon as available to the Company, but in any event within 90 days after the end of each of its fiscal years, a consolidated and consolidating balance sheet as of the end of, and a related consolidated and consolidating statement of income, changes in stockholders' equity and cash flow for, such year, audited and certified by Kieliszak & Eggert (or other independent certified public accountants acceptable to the Lender) in the case of such consolidated statements, and certified by the chief financial officer in the case of such consolidating statements; and, concurrently with such financial statements, a copy of said certified public accountants' management report and a written statement by such accountants that, in the making of the audit necessary for their report and opinion upon such financial statements they have obtained no knowledge of any Default or, if in the opinion of such accountants any such Default exists, they shall disclose in such written statement the nature and status thereof;

5.1.2 as soon as available to the Company, but in any event within 30 days after the end of each of its fiscal quarters, a consolidated and consolidating balance sheet as of the end of such quarter, and a related consolidated and consolidating statement of income and cash flow for the immediately preceding fiscal quarter and fiscal year to date, certified by the chief financial officer of the Company. In addition, the Company shall deliver not later than 30 days after the end of each fiscal quarter a statement showing performance for the month and the year to date against the plan submitted to the Lender on February 27, 1996 as to revenue and cash flow for the Company.

5.1.3 as soon as available to the Company, but in any event within 15 days after the end of each of calendar month, a profit and loss statement and statement of funds flow and balance sheet for the month then ended for the Company.

5.1.4 On June 15, 1996, September 15, 1996, December 15, 1996 and March 15, 1997 the Company's chief financial officer, president and such other officers and employees as the Lender may request shall meet with the Lender to discuss the performance for the current fiscal quarter. The Company shall make available to the Lender, prior to such meeting, such books and records as the Lender may request.

5.1.5 concurrently with the delivery of each financial statement pursuant to subsections 5.1.1, 5.1.2 and 5.1.3, a report in substantially the form of Exhibit E hereto signed on behalf of the Company by its chief financial officer setting forth compliance with all covenants contained in this Agreement;

5.1.6 promptly after the receipt thereof by the Company, copies of any reports submitted to the Company by independent public accountants in connection with any interim review of the accounts of the Company made by such accountants;

5.1.7 promptly after the same are available, copies of all proxy statements, financial statements and reports as the Company shall send to its stockholders or as the Company may file with the Securities and Exchange Commission or any governmental authority at any time having jurisdiction over the Company or its Subsidiaries;

5.1.8 if and when the Company gives or is required to give notice to the PBGC of any "Reportable Event" (as defined in Section 4043 of ERISA) with respect to any Plan that might constitute grounds for a termination of such Plan under Title IV of ERISA, or knows that any member of the Controlled Group or the plan administrator of any Plan has given or is required to give notice of any such Reportable Event, a copy of the notice of such Reportable Event given or required to be given to the PBGC;

5.1.9 immediately upon becoming aware of the existence of any condition or event that constitutes a Default, written notice thereof specifying the nature and duration thereof and the action being or proposed to be taken with respect thereto;

5.1.10 promptly upon becoming aware of any litigation or of any investigative proceedings by a governmental agency or authority commenced or threatened against the Company or any of its Subsidiaries of which it has notice, the outcome of which would or might have a materially adverse effect on the assets, business or prospects of the Company or the Company and its Subsidiaries on a consolidated basis, written notice thereof and the action being or proposed to be taken with respect thereto;

5.1.11 promptly upon becoming aware of any investigative proceedings by a governmental agency or authority commenced or threatened against the Company or any of its Subsidiaries regarding any potential violation of Environmental Laws or any spill, release, discharge or disposal of any Hazardous Material, written notice thereof and the action being or proposed to be taken with respect thereto; and

5.1.12 from time to time, such other financial data and information about the Company or its Subsidiaries as the Lender may reasonably request.

5.2 Conduct of Business. Each of the Company and its Subsidiaries shall:

5.2.1 duly observe and comply in all material respects with all applicable laws and valid requirements of any governmental authorities relative to its corporate existence, rights and franchises, to the conduct of its business and to its property and assets (including without limitation all Environmental Laws and ERISA), and shall maintain and keep in full force and effect all licenses and permits necessary in any material respect to the proper conduct of its business;

5.2.2 maintain its corporate existence;

5.2.3 remain engaged substantially in the business of processing and distributing step index plastic optical fiber, illumination grade plastic optical fiber and producing and selling graded index plastic optical fiber and cabling;

5.2.4 maintain and keep its properties in good repair, working order and condition, and from time to time make all needful improvements thereto so that its business may be properly and advantageously conducted at all times. The Company shall have and maintain at all times with respect to Collateral insurance against risks of fire, so-called extended coverage, sprinkler, leakage and other risks customarily insured against by companies engaged in businesses similar to that of the Company, in amounts, containing such terms, in such form, for such periods and written by such companies as may be reasonably satisfactory to the Lender, such insurance to be payable to the Lender as loss payee and additional insured, as its interests may appear. All policies of insurance shall provide for thirty (30) days' minimum written cancellation notice to the Lender. In the event of failure to provide and maintain insurance as herein provided the Lender may, at its option, provide such insurance and notify the Company of the charge and demand repayment immediately. The Company shall furnish to the Lender certificates or other evidence satisfactory to the Lender of compliance with the foregoing insurance provisions.

5.3 Taxes. The Company shall pay or cause to be paid all taxes, assessments or governmental charges on or against it or any of its Subsidiaries or its or their properties on or prior to the time when they become due; provided that this covenant shall not apply to any tax, assessment or charge that is being contested in good faith by appropriate proceedings and with respect to which adequate reserves have been established and are being maintained in accordance with generally accepted accounting principles if no proceedings shall have been commenced to foreclose any lien securing such tax, assessment or charge.

5.4 Inspection by the Lender. The Company shall permit the Lender or its designees, at any reasonable time, and upon reasonable notice (or if a Default shall have occurred and is continuing, at any time and without prior notice), to (i) visit and inspect the properties of the Company and its Subsidiaries, (ii) examine and make copies of and take abstracts from the books and records of the Company and its Subsidiaries, (iii) discuss the affairs, finances and accounts of the Company and its Subsidiaries with their appropriate officers, employees and accountants, and (iv) to arrange for verification of Accounts Receivable, under reasonable procedures, directly with account debtors or by other methods; and the Company shall do, make, execute and deliver all such additional and further acts,

things, deeds, assurances and instruments as the Lender may reasonably require more completely to vest in and assure to the Lender its rights hereunder or in any Collateral and to carry into effect the provisions and intent of this Agreement. In handling such information the Lender shall exercise the same degree of care that it exercises with respect to its own proprietary information of the same types to maintain the confidentiality of any non-public information thereby received or received pursuant to subsections 5.1.1, 5.1.2 or 5.1.3 except that disclosure of such information may be made (i) to the subsidiaries or affiliates of the Lender in connection with their present or prospective business relations with the Company, (ii) to prospective transferees or purchasers of an interest in the Loans, (iii) as required by law, regulation, rule or order, subpoena, judicial order or similar order and (iv) as may be required in connection with any examination, audit or similar investigation of the Lender.

5.5 Maintenance of Books and Records. Each of the Company and its Subsidiaries shall keep adequate books and records of account, in which true and complete entries will be made reflecting all of its business and financial transactions, and such entries will be made in accordance with generally accepted accounting principles consistently applied and applicable law.

5.6 Required Financial and Operational Milestones. The Company shall meet or exceed each of the Financial and Operational Milestones set forth on Schedules 2 and 3.

5.7 Further Assurances. At any time and from time to time the Company shall, and shall cause each of its Subsidiaries to, execute and deliver such further instruments and take such further action as may reasonably be requested by the Lender to effect the purposes of this Agreement and the Note.

SECTION 6

NEGATIVE COVENANTS

So long as the Lender has any commitment to lend hereunder or any Loan or other Obligation remains outstanding, the Company covenants as follows:

6.1 Indebtedness. Neither the Company nor any of its Subsidiaries shall create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness other than the following:

6.1.1 Indebtedness of the Company or any of its Subsidiaries to the Lender or any of its affiliates;

6.1.2 Indebtedness existing as of the date of this Agreement and disclosed on Exhibit B hereto or in the financial statements referred to in Section 4.6;

6.1.3 Indebtedness, not to exceed \$130,000 in the aggregate, to Richard J. Vita and Wellington Enterprises, Inc.;

6.1.4 Indebtedness secured by Permitted Encumbrances; and

6.1.5 other Indebtedness of the Company in an aggregate outstanding principal amount not exceeding ten thousand dollars (\$10,000).

6.2 Contingent Liabilities. Neither the Company nor any of its Subsidiaries shall create, incur, assume or remain liable with respect to any Guarantees other than the following:

6.2.1 Guarantees in favor of the Lender or any of its affiliates;

6.2.2 Guarantees existing on the date of this Agreement and disclosed on Exhibit B hereto or in the financial statements referred to in Section 4.6;

6.2.3 Guarantees resulting from the endorsement of negotiable instruments for collection in the ordinary course of business;

6.2.4 Guarantees with respect to surety, appeal performance and return-of-money and other similar obligations incurred in the ordinary course of business (exclusive of obligations for the payment of borrowed money) not exceeding in the aggregate at any time five thousand dollars (\$5,000); and

6.2.5 Guarantees of normal trade debt relating to the acquisition of goods and supplies.

6.3 Leases. Neither the Company nor any of its Subsidiaries shall during any fiscal year enter into any leases of real or personal property as lessee, except for capital leases or leases providing for payments in any one fiscal year (whether or not such payments are termed rent) in the aggregate of less than fifty thousand dollars (\$50,000).

6.4 Sale and Leaseback. Neither the Company nor any of its Subsidiaries shall enter into any arrangement, directly or indirectly, whereby it shall sell or transfer any property owned by it in order to lease such property or lease other property that the Company or any such Subsidiary intends to use for substantially the same purpose as the property being sold or transferred.

6.5 Encumbrances. Neither the Company nor any of its Subsidiaries shall create, incur, assume or suffer to exist any mortgage, pledge, security interest, lien or other charge or encumbrance, including the lien or retained security title of a conditional vendor upon or with respect to any of its property or assets ("Encumbrances"), or assign or otherwise convey any right to receive income, including the sale or discount of accounts receivable with or without recourse, except the following ("Permitted Encumbrances"):

6.5.1 Encumbrances in favor of the Lender or any of its affiliates;

6.5.2 Encumbrances existing as of the date of this Agreement and disclosed in Exhibit B hereto;

6.5.3 liens for taxes, fees, assessments and other governmental charges to the extent that payment of the same may be postponed or is not required in accordance with the provisions of Section 5.3;

6.5.4 landlords' and lessors' liens in respect of rent not in default or liens in respect of pledges or deposits under workmen's compensation, unemployment insurance, social security laws, or similar legislation (other than ERISA) or in connection with appeal and similar bonds incidental to litigation; mechanics', laborers' and materialmen's and similar liens, if the obligations secured by such liens are not then delinquent; liens securing the performance of bids, tenders, contracts (other than for the payment of money); and statutory obligations incidental to the conduct of its business and that do not in the aggregate materially detract from the value of its property or materially impair the use thereof in the operation of its business;

6.5.5 judgment liens that shall not have been in existence for a period longer than 30 days after the creation thereof or, if a stay of execution shall have been obtained, for a period longer than 30 days after the expiration of such stay;

6.5.6 rights of lessors under capital leases;

6.5.7 easements, rights of way, restrictions and other similar charges or Encumbrances relating to real property and not interfering in a material way with the ordinary conduct of its business; and

6.5.8 Encumbrances on its property or assets created in connection with the refinancing of Indebtedness secured by Permitted Encumbrances on such property, provided that the amount of Indebtedness secured by any such Encumbrance shall not be increased as a result of such refinancing and no such Encumbrance shall extend to property and assets of the Company or any such Subsidiary not encumbered prior to any such refinancing.

6.6 Merger; Consolidation; Sale or Lease of Assets. Neither the Company nor any of its Subsidiaries shall sell, lease or otherwise dispose of assets or properties or stock of the Company, other than sales or leases of inventory in the ordinary course of business; or liquidate, merge or consolidate into or with any other person or entity, provided that any wholly-owned Subsidiary of the Company may merge or consolidate into or with (i) the Company if no Event of Default has occurred and is continuing or would result from such merger and if the Company is the surviving company or (ii) any other wholly-owned Subsidiary of the Company.

6.7 Additional Stock Issuance. The Company shall not and shall permit any of its Subsidiaries to issue any additional shares of its capital stock or other equity securities, any options therefor or any securities convertible thereto other than to the Lender or approved in writing by Lender prior to any such issuance. Neither the Company nor any of its Subsidiaries shall sell, transfer or otherwise dispose of any of the capital stock or other equity securities of the Company or any Subsidiary, except as provided in a Stock Purchase Agreement of even date between the Lender and the Company.

6.8 Equity Distributions. The Company shall not pay any dividends on any class of its capital stock or make any other distribution or payment on account of or in redemption, retirement or purchase of such capital stock.

6.9 Capital Expenditures. Neither the Company nor any of its Subsidiaries shall purchase or agree to purchase, or incur any obligations (including that portion of the obligations arising under capital leases that is required to be capitalized on the consolidated balance sheet of the Company and its Subsidiaries) for any equipment or other property constituting fixed assets in any fiscal year in excess of twenty-five thousand dollars (\$25,000), except capital expenditures financed by Term Loans.

6.10 Investments. Neither the Company nor any of its Subsidiaries shall make or maintain any Investments other than (i) existing Investments in Subsidiaries, and (ii) Qualified Investments.

6.11 ERISA. Neither the Company nor any member of the Controlled Group shall permit any Plan maintained by it to (i) engage in any "prohibited transaction" (as defined in Section 4975 of the Code, (ii) incur any "accumulated funding deficiency" (as defined in Section 302 of ERISA) whether or not waived or (iii) terminate any Plan in a manner that could result in the imposition of a lien or encumbrance on the assets of the Company or any of its Subsidiaries pursuant to Section 4068 of ERISA.

6.12 Employment Contract. The Company shall not enter into any employment contract of any length of time without the prior written consent of the Lender.

6.13 Subsidiaries. The Company shall not form any Subsidiary without the written consent of the Lender.

SECTION 7

SECURITY

7.1 Security Interest. As security for the payment and performance of all Obligations (including, without limitation, the Company's Obligations hereunder), the Lender shall have and the Company hereby grants to the Lender a continuing security interest in all personal property of the Company of every kind and description, tangible or intangible, whether now or hereafter existing, whether now owned or hereafter acquired, and wherever located, including but not limited to the following: all Inventory of the Company; all furniture, fixtures, Machinery and Equipment and similar property of the Company; all Accounts of the Company; all contract rights of the Company; all other rights of the Company, including, without limitation, amounts due from affiliates, tax refunds, and insurance proceeds; all interest of the Company in goods as to which an Account Receivable shall have arisen; all files, records (including, without limitation, computer programs, tapes and related electronic data processing software) and writings of the Company or in which it has an interest in any way relating to the foregoing property; all goods, instruments, documents of title, policies and certificates of insurance, securities, chattel paper, deposits,

cash or other property owned by the Company or in which it has an interest which are now or may hereafter be in the possession of the Lender or as to which the Lender may now or hereafter control possession by documents of title or otherwise; all general intangibles of the Company (including, without limitation, all patents, trademarks, trade names, service marks, copyrights and applications for any of the foregoing; all rights to use patents, trademarks, trade names, service marks, and copyrights of any person; and any rights of the Company to retrieval from third parties of electronically processed and recorded information pertaining to any of the types of collateral referred to in this Section 7.1); any other property of the Company, real or personal, tangible or intangible, in which the Lender now has or hereafter acquires a security interest or which is now or may hereafter be in the possession of the Lender; any sums at any time credited by or due from the Lender to the Company, including deposits; and proceeds and products of all of the foregoing.

7.2 Location of Records and Collateral: Name Change. The Company shall give the Lender written notice of each location at which Collateral is or will be kept and of each office of the Company at which the records of Company pertaining to Accounts Receivable and contract rights are kept. landlord waiver or bailment agreement at all storage or inventory locations. Except as such notice is given, all Collateral is and shall be kept, and all records of the Company pertaining to Accounts and contract rights are and shall be kept at the Company's chief executive offices at 155 Flanders Road, Westborough, MA 01581. The Company shall give the Lender thirty (30) days' prior written notice of any change in the name or corporate form of the Company or any change in the name under which the Company's business is transacted.

7.3 Status of Collateral. As of the date of this Agreement, the Company has good and marketable title to all of its properties, assets and rights of every name and nature now purported to be owned by it, including, without limitation, the Collateral, free from all liens, charges and encumbrances whatsoever, except as disclosed on Exhibit B hereof. At the time the Company pledges, sells, assigns or transfers to the Lender any instrument, document of title, security, chattel paper or other property (including Inventory, contract rights and Accounts) or any proceeds or products thereof, or any interest therein, the Company shall be the lawful owner thereof and shall have good right to pledge, sell, assign or transfer the same; none of such property shall have been pledged, sold, assigned or transferred to any person other than the Lender or in any way encumbered, except as disclosed in Exhibit B hereof; and the Company shall defend the same against the claims and demands of all persons.

7.4 Collection of Accounts Receivable.

7.4.1 The Company shall continue to direct its account debtors to pay directly to a lock box account at Fleet National Bank. The Lender shall have the sole right to all sums in such lock box account. The Company shall execute all documents necessary to allow the Lender to endorse all checks received in the lock box and deposit them into an account of the Lender.

7.4.2 The Company shall hold proceeds which it may receive from collections as trustee for the Lender without commingling the same with other funds of the Company and

shall turn the same over to the Lender, or to such bank as may be approved by the Lender, immediately upon receipt in the identical form received.

7.4.3 The Company shall, at the request of the Lender (whether or not an Event of Default has occurred), notify the account debtors of the security interest of the Lender in any Account and that payment thereof is to be made directly to the Lender, and the Lender may itself, upon the occurrence of an Event of Default, without notice to or demand upon the Company, so notify account debtors. The making of such a request or the giving of any such notification shall not affect the duties of the Company described above with respect to proceeds of collection of Accounts Receivable received by the Company.

7.4.4 The Lender shall credit the proceeds of Accounts Receivable collections received by the Lender to the Loan Account in respect to outstanding Revolving Loans and other amounts due the Lender and if there is no debit balance in the Loan Account, the Lender shall then credit such amounts due against outstanding interest and fees due under the Term Loan and then against the principal amount due under the Term Loan, such credits to be entered as of the second Business Day after receipt thereof by the Lender.

7.4.5 Credits applied against the Loan Account shall be conditional upon final payment in cash or solvent credits of the items giving rise to them. If any item is not so paid, the Lender, in its discretion, whether or not the item is returned, may either reverse any credit given for the item or charge the amount of the item against the deposits or other sums which may be due to the Company from the Lender.

7.4.6 On and after March 31, 1997 all amounts received hereunder shall be applied as provided in Section 2.5.4 or held by the Lender as provided in Section 8.2 hereof.

7.4.7 Proceeds of collection and other receipts not held or applied as provided in this Section 7 or under Section 8.2 shall be credited to any deposit account which the Company may maintain with the Fleet National Bank or, if there is no such account, held pending instructions from the Company.

SECTION 8

DEFAULTS

8.1 Events of Default. There shall be an Event of Default hereunder if any of the following events occurs:

8.1.1 the Company shall fail to pay when due (i) any amount of principal of any Loans or (ii) any amount of interest thereon or any fees or expenses payable hereunder or under the Notes within three (3) days of the due date therefor; or

8.1.2 The outstanding amount of Revolving Loans, Term Loans or Revolving Loans supporting Letters of Credit exceeds the then applicable Trip Wire Amount or, in the event that written consent is delivered by a Lender Authorized Officer, the then applicable

Revolving Credit, Term Loan or Letter of Credit Availability, all as set forth on Schedule 1;
or

8.1.3 The Company shall fail to perform any term, covenant or agreement contained in Sections 5.1 through 5.6 or 6.1 through 6.13 or shall fail to meet the Financial or Operation Milestones set forth on Schedules 2 or 3; or

8.1.4 the Company shall fail to perform any covenant contained in Section 5.7, and such failure shall continue for five (5) Business Days; or

8.1.5 the Company shall fail to perform any term, covenant or agreement (other than in respect of subsections 8.1.1 through 8.1.4 hereof) contained in this Agreement and such default shall continue for 30 days after notice thereof has been sent to the Company by the Lender; or

8.1.6 any representation or warranty of the Company made in this Agreement or in either Note or any other documents or agreements executed in connection with the transactions contemplated by this Agreement or in any certificate delivered hereunder shall prove to have been false in any material respect upon the date when made or deemed to have been made; or

8.1.7 there shall occur any material adverse change in the assets, liabilities, financial condition, business or prospects of the Company or the Company and its Subsidiaries, taken as a whole, as determined by the Lender acting in good faith; or

8.1.8 the Company or any of its Subsidiaries shall fail to pay at maturity, or within any applicable period of grace, any obligations for borrowed monies or advances, or for the use of real or personal property, or fail to observe or perform any term, covenant or agreement evidencing or securing such obligations for borrowed monies or advances, or relating to such use of real or personal property, the result of which failure is to permit the holder or holders of such Indebtedness to cause such Indebtedness to become due prior to its stated maturity upon delivery of required notice, if any; or

8.1.9 the Company shall default or fail to perform under any other agreement between the Company and the Lender of any kind; including without limitation, the Stock Purchase Agreement dated October 16, 1995 as amended this date; or

8.1.10 I. Edward Berman shall no longer hold an executive position with the Company; or

8.1.11 the Company shall be in default under its license with Kabushiki Kaisha YK Laboratory; or

8.1.12 the Company or any of its Subsidiaries shall (i) apply for or consent to the appointment of, or the taking of possession by, a receiver, custodian, trustee, liquidator or similar official of itself or of all or a substantial part of its property, (ii) be generally not paying its debts as such debts become due, (iii) make a general assignment for the benefit of

its creditors, (iv) commence a voluntary case under the Federal Bankruptcy Code (as now or hereafter in effect), (v) take any action or commence any case or proceeding under any law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts, or any other law providing for the relief of debtors, (vi) fail to contest in a timely or appropriate manner, or acquiesce in writing to, any petition filed against it in an involuntary case under the Federal Bankruptcy Code or other law, (vii) take any action under the laws of its jurisdiction of incorporation or organization similar to any of the foregoing, or (viii) take any corporate action for the purpose of effecting any of the foregoing; or

8.1.13 a proceeding or case shall be commenced, without the application or consent of the Company or any of its Subsidiaries, in any court of competent jurisdiction, seeking (i) the liquidation, reorganization, dissolution, winding up, or composition or readjustment of its debts, (ii) the appointment of a trustee, receiver, custodian, liquidator or the like of it or of all or any substantial part of its assets, or (iii) similar relief in respect of it, under any law relating to bankruptcy, insolvency, reorganization, winding-up or composition or adjustment of debts or any other law providing for the relief of debtors, and such proceeding or case shall continue undismissed, or unstayed and in effect, for a period of 30 days; or an order for relief shall be entered in an involuntary case under the Federal Bankruptcy Code against the Company or such Subsidiary; or action under the laws of the jurisdiction of incorporation or organization of the Company or any of its Subsidiaries similar to any of the foregoing shall be taken with respect to the Company or such Subsidiary and shall continue unstayed and in effect for any period of 30 days; or

8.1.14 a judgment or order for the payment of money shall be entered against the Company or any of its Subsidiaries by any court, or a warrant of attachment or execution or similar process shall be issued or levied against property of the Company or such Subsidiary, that in the aggregate exceeds ten thousand dollars (\$10,000) in value and such judgment, order, warrant or process shall continue undischarged or unstayed for 30 days; or

8.1.15 the Company or any member of the Controlled Group shall fail to pay when due an amount or amounts aggregating in excess of five thousand dollars (\$5,000) that it shall have become liable to pay to the PBGC or to a Plan under Title IV of ERISA; or notice of intent to terminate a Plan or Plans shall be filed under Title IV of ERISA by the Company, any member of the Controlled Group, any plan administrator or any combination of the foregoing; or the PBGC shall institute proceedings under Title IV of ERISA to terminate or to cause a trustee to be appointed to administer any such Plan or Plans or a proceeding shall be instituted by a fiduciary of any such Plan or Plans against the Company and such proceedings shall not have been dismissed within 30 days thereafter; or a condition shall exist by reason of which the PBGC would be entitled to obtain a decree adjudicating that any such Plan or Plans must be terminated.

8.2 Remedies. Upon the occurrence of an Event of Default described in subsections 8.1.12 and 8.1.13, immediately and automatically, and upon the occurrence of any other Event of Default, at any time thereafter while such Event of Default is continuing, at the Lender's option and upon the Lender's declaration:

8.2.1 the Lender's commitment to make any further Loans hereunder shall terminate;

8.2.2 the unpaid principal amount of the Loans together with accrued interest and all other Obligations shall become immediately due and payable without presentment, demand, protest or further notice of any kind, all of which are hereby expressly waived; and

8.2.3 the Lender may exercise any and all rights it has under this Agreement, the Notes or any other documents or agreements executed in connection herewith, or at law or in equity, and proceed to protect and enforce the Lender's rights by any action at law, in equity or other appropriate proceeding.

8.2.4 Without limiting the rights of the Company set forth in Section 8 above, upon the occurrence of any Event of Default and at any time thereafter (such default not having been cured), the Lender shall have the right to take immediate possession of the Collateral, and for that purpose the Lender may, so far as the Company can give authority therefor, enter upon any premises on which Collateral may be situated and remove the same therefrom. The Company waives demand and notice with respect to and assents to any repossession of Collateral. The Lender may dispose of Collateral in any order and in any manner it chooses and may refrain from the sale of any real property, held as Collateral, until the sale of personal property. Except for Collateral which is perishable or threatens to decline speedily in value or which is of a type customarily sold on a recognized market, the Lender shall give to the Company at least five (5) days' prior written notice of the time and place of any public sale of Collateral or of the time after which any private sale or any other intended disposition is to be made. The residue of any proceeds of collection or sale, after satisfying all Obligations in such order of preference as the Lender may determine and making proper allowance for interest on Obligations not then due, shall be credited to any deposit account which the Company may maintain with the Lender, or, if there is no such account, held pending instructions from the Company. The Company shall remain liable for any deficiency.

8.2.5 The Lender may at any time in its sole discretion (after an Event of Default has occurred) transfer any securities or other property constituting Collateral into its own name or that of its nominee and receive the income thereon and hold the same as security for Obligations or apply it on principal or interest due on Obligations. Insofar as Collateral shall consist of Accounts or instruments, the Lender may, upon the occurrence of an Event of Default, without notice to or demand on the Company, demand and collect such Collateral as the Lender may determine. For the purpose of realizing the Lender's rights therein, the Lender may receive, open and dispose of mail addressed to a Company and endorse notes, checks, drafts, money orders, documents of title or other evidences of payment, shipment or storage or any form of Collateral on behalf of and in the name of the Company. The powers conferred on the Lender by this Section are solely to protect the interest of the Lender and shall not impose any duties on the Lender to exercise any powers.

8.2.6 In addition to all other rights and remedies provided hereunder or by law, the Lender shall have in any jurisdiction where enforcement hereof is sought the rights and remedies of a secured party under the Uniform Commercial Code of Massachusetts.

SECTION 9MISCELLANEOUS

9.1 Notices. Unless otherwise specified herein, all notices hereunder to any party hereto shall be in writing and shall be deemed to have been given when delivered by hand, when properly deposited in the mails postage prepaid, when sent by telex, answerback received, or electronic facsimile transmission, or when delivered to the telegraph company or overnight courier, addressed to such party at its address indicated below:

If to the Company, at

Boston Optical Fiber, Inc.
155 Flanders Road
Westborough, Massachusetts 01581
Attention: I. Edward Berman
Fax No.: 508-836-2722

If to the Lender, at

Wang Laboratories, Inc.
600 Technology Park Drive
Billerica, Massachusetts 01821-4130
Attention: A.A. Notini
Fax No.: 508-967-0598

With a Copy to: Richard L. Buckingham at the same address

or at any other address specified by such party in writing.

9.2 Expenses. The Company will pay on demand all expenses of the Lender in connection with the preparation, waiver or amendment of this Agreement, either Note or other documents executed in connection therewith, or the administration, default or collection of the Loans or other Obligations or administration, default, collection in connection with the Lender's exercise, preservation or enforcement of any of its rights, remedies or options thereunder, including, without limitation, fees of outside legal counsel or the allocated costs of in-house legal counsel, accounting, consulting, brokerage or other similar professional fees or expenses, and any fees or expenses associated with any travel or other costs relating to any appraisals or examinations conducted in connection with the Obligations or any collateral therefor, and the amount of all such expenses shall, until paid, bear interest at the rate applicable to principal hereunder (including any default rate).

9.3 Set-Off. Regardless of the adequacy of any collateral or other means of obtaining repayment of the Obligations, any balances or other sums credited by or due from the Lender to the Company may, at any time and from time to time after the occurrence of an Event of Default hereunder, without notice to the Company or compliance with any other

condition precedent now or hereafter imposed by statute, rule of law, or otherwise (all of which are hereby expressly waived) be set off, appropriated, and applied by the Lender against any and all obligations of the Company to the Lender or any of its affiliates as the Lender in its sole discretion may determine, and the Company hereby grants the Lender a continuing security interest in such balances or other sums for the payment and performance of all such obligations. In addition, the Company shall deliver to its bank irrevocable instructions to permit the Lender to withdraw such sums from the designated accounts of the Company as the Lender may request.

9.4 Term of Agreement. This Agreement shall continue in force and effect so long as the Lender has any commitment to make Loans hereunder or any Loan or any Obligation shall be outstanding.

9.5 No Waivers. No failure or delay by the Lender in exercising any right, power or privilege hereunder or under either Note or under any other documents or agreements executed in connection herewith shall operate as a waiver thereof; nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies herein and in the Notes provided are cumulative and not exclusive of any rights or remedies otherwise provided by agreement or law.

9.6 Governing Law. This Agreement and the Notes shall be deemed to be contracts made under seal and shall be construed in accordance with and governed by the laws of Massachusetts (without giving effect to any conflicts of laws provisions contained therein).

9.7 Amendments. Neither this Agreement nor either Note nor any provision hereof or thereof may be amended, waived, discharged or terminated except by a written instrument signed by the Lender and, in the case of amendments, by the Company.

9.8 Binding Effect of Agreement. This Agreement shall be binding upon and inure to the benefit of the Company and the Lender and their respective successors and assigns; provided that the Company may not assign or transfer its rights or obligations hereunder. The Lender may sell, transfer or grant participations in either Note without the prior written consent of the Company, and the Company agrees that any transferee or participant shall be entitled to the benefits of this Agreement to the same extent as if such transferee or participant were the Lender hereunder; provided that notwithstanding any such transfer or participation, the Company may, for all purposes of this Agreement, treat the Lender as the person entitled to exercise all rights hereunder and under each Note and to receive all payments with respect thereto.

9.9 Counterparts. This Agreement may be signed in any number of counterparts with the same effect as if the signatures hereto and thereto were upon the same instrument.

9.10 Partial Invalidity. The invalidity or unenforceability of any one or more phrases, clauses or sections of this Agreement shall not affect the validity or enforceability of the remaining portions of it.

9.11 Captions. The captions and headings of the various sections and subsections of this Agreement are provided for convenience only and shall not be construed to modify the meaning of such sections or subsections.

9.12 Prior Agreement. This agreement amends and restates in its entirety that certain Revolving Credit, Term Loan and Security Agreement between the Company and the Lender dated as of October 16, 1996 ("Prior Agreement"). All amounts outstanding under the Prior Agreement continue to be Obligations hereunder and under the Notes.

9.13 WAIVER OF JURY TRIAL. THE LENDER AND THE COMPANY AGREE THAT NEITHER OF THEM NOR ANY ASSIGNEE OR SUCCESSOR SHALL (A) SEEK A JURY TRIAL IN ANY LAWSUIT, PROCEEDING, COUNTERCLAIM OR ANY OTHER ACTION BASED UPON, OR ARISING OUT OF, THIS AGREEMENT, ANY RELATED INSTRUMENTS, ANY COLLATERAL OR THE DEALINGS OR THE RELATIONSHIP BETWEEN THEM, OR (B) SEEK TO CONSOLIDATE ANY SUCH ACTION WITH ANY OTHER ACTION IN WHICH A JURY TRIAL CANNOT BE OR HAS NOT BEEN WAIVED. THE PROVISIONS OF THIS PARAGRAPH HAVE BEEN FULLY DISCUSSED BY THE LENDER AND THE COMPANY, AND THESE PROVISIONS SHALL BE SUBJECT TO NO EXCEPTIONS. NEITHER THE Lender NOR THE COMPANY HAS AGREED WITH OR REPRESENTED TO THE OTHER THAT THE PROVISIONS OF THIS PARAGRAPH WILL NOT BE FULLY ENFORCED IN ALL INSTANCES.

9.14 Entire Agreement. This Agreement, the Notes and the documents and agreements executed in connection herewith constitute the final agreement of the parties hereto and supersede any prior agreement or understanding, written or oral, with respect to the matters contained herein and therein.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers as of the day and year first above written.

Attest

Richard G. [Signature]

BOSTON OPTICAL FIBER, INC.

By: [Signature]
Title: president

WANG LABORATORIES, INC.

By: _____
Title: _____

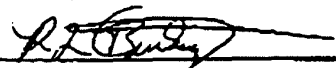
IN WITNESS WHEREOF, the parties have caused this Agreement to be executed by their duly authorized officers as of the day and year first above written.

Attest

BOSTON OPTICAL FIBER, INC.

By: _____
Title:

WANG LABORATORIES, INC.

By: 
Title: Vice President and Treasurer