AVANEX CORP Form SC 13D May 22, 2003

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington D.C. 20549

SCHEDULE 13D
Under the Securities Exchange Act of 1934
(Amendment No. ____)*

Corporation
of Issuer)
value \$.001 per share
ss of Securities)
48W109
P Number)
Denise A. Hauselt, Esq. cretary and Assistant General Counsel Corning Incorporated One Riverfront Plaza Corning, New York 14830-0001 Telephone: 607-974-9000
f Person Authorized to Receive Notices and
12, 2003
ires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition which is the subject of this Schedule 13D, and is filing this schedule because of ss.ss. 240.13d-1(e), 240.13d01(f) or 240.13d-1(g), check the following box $|_|$.

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See ss. 240.13d-7(b) for other parties to whom copies are to be sent.

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required on the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

SCHEDULE 13D

USIP No.	05348W109				
1	NAME OF REPORTING PERSONS Corning Incorporated I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS 16-0393470				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) (b) X				
3	SEC USE ONLY				
4	SOURCE OF FUNDS OO				
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) _				
6	CITIZENSHIP OR PLACE OF ORGANIZATION New York				
	NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH 7 SOLE VOTING POWER 0 SHARED VOTING POWER 5,466,564 5,466,564 0 SOLE DISPOSITIVE POWER 0 SHARED DISPOSITIVE POWER 0				
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,466,564				
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARE				
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.8%				
	TYPE OF REPORTING PERSON				

 $\,$ *Includes $\,$ 652,947 shares subject to immediately exercisable stock options or stock options which become exercisable within the next 60 days.

CUSIP No.	05348W109
1	NAME OF REPORTING PERSONS William D. Eggers ** I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (Intentionally Omitted)
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) (b) X
3	SEC USE ONLY
4	SOURCE OF FUNDS OO
5	CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) OR 2(e) _
6	CITIZENSHIP OR PLACE OF ORGANIZATION United States of America
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11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON 5,466,564
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11) 7.8%
14	TYPE OF REPORTING PERSON IN
4	ludes CE2 047 shows subject to immediately suspensionals stack actions

 $\star Includes~652,947$ shares subject to immediately exercisable stock options or stock options which become exercisable within the next 60 days.

** Reporting person is an officer of Corning and holds the proxy to vote the shares of Avanex Common Stock described herein on behalf of Corning. Reporting person disclaims beneficial ownership of the shares of Avanex Common Stock covered by this Schedule 13D.

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SCHEDULE 13D

	05348W109				
1	NAME OF REPORTING PERSONS Denise A. Hauselt ** I.R.S. IDENTIFICATION NO. OF ABOVE PERSONS (Intentionally Omitted)				
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP* (a) (b) X				
3	SEC USE ONLY				
4	SOURCE OF FUNDS OO				
5	CHECK BOX IF DISCLOS		PROCEEDINGS IS REQUIRED PURSUANT TO		
6	CITIZENSHIP OR PLACE United States of Ame		rion		
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 $\star Includes~652,947$ shares subject to immediately exercisable stock options or stock options which become exercisable within the next 60 days.

** Reporting person is an officer of Corning and holds the proxy to vote the shares of Avanex Common Stock described herein on behalf of Corning. Reporting person disclaims beneficial ownership of the shares of Avanex Common Stock covered by this Schedule 13D.

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SCHEDULE 13D

This Schedule 13D is filed by Corning Incorporated ("Corning"), a New York corporation, and two of its officers William D. Eggers, Senior Vice President and General Counsel and Denise A. Hauselt, Secretary, acting as proxies on behalf of Corning (together, the "Corning Officers") in connection with (i) a

Share Acquisition and Asset Purchase Agreement (the "Purchase Agreement"), dated as of May 12, 2003, between Avanex Corporation ("Avanex" or "Issuer"), a Delaware corporation with offices at 40919 Encyclopedia Circle, Fremont, California 94538, Corning and Alcatel ("Alcatel"), a corporation formed under the laws of France, with offices at 54, rue La Boetie, 75008 Paris, France, (ii) the Voting Agreements, each dated as of May 12, 2003, between Alcatel, Corning and each of the following stockholders (collectively, the "Voting Agreement Stockholders"): Walter Alessandrini, Giovanni Barbarossa, Vinton G. Cerf, Todd Brooks, Joel A. Smith and Susan Wang, and (iii) the Proxies, each dated May 12, 2003, signed by each Voting Agreement Stockholder naming the Corning Officers as proxy to vote the shares of Avanex Common Stock held by such Voting Agreement Stockholder in favor of the issuance of shares of Avanex Common Stock equal to 17% of the outstanding shares pursuant to the terms of the Purchase Agreement and against any action or agreement that would reasonably be expected to result in the failure to satisfy the conditions to the Corning Share Issuance (as defined in the Purchase Agreement). Upon the closing of the transactions contemplated by the Purchase Agreement, Corning and Alcatel will enter into a Stockholders' Agreement ("Stockholders' Agreement") with Avanex.

Item 1. Security and Issuer.

This Schedule 13D relates to shares of the Common Stock, par value \$.001 per share ("Common Stock") of Avanex Corporation (the "Issuer" or "Avanex"). The Issuer's principal executive office is located at 40919 Encyclopedia Circle, Fremont, California 94538. Avanex has informed the undersigned that 69,255,523 shares of Avanex Common Stock were issued and outstanding as of the close of business on May 9, 2003

Item 2. Identity and Background.

Corning is organized as a corporation under the laws of the State of New York, and its business address is One Riverfront Plaza, Corning, New York 14831. Corning manufactures optical fiber, cable, hardware and connector products in its Telecommunications segment. Corning's Technologies segment manufactures high-performance display glass, and products for the environmental, life sciences, and semiconductor markets.

The names, business addresses, principal occupations and citizenship of the directors and executive officers of Corning, including the Corning Officers, are set forth in Annex A hereto and are incorporated herein by reference.

None of Corning or its directors or executive officers, including the Corning Officers, has, during the last five years, been (i) convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors), or (ii) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which he, she or it is or was subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

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Item 3. Source and Amount of Funds or Other Consideration

In consideration of and as a condition to Corning entering into the Purchase Agreement, the Voting Agreement Stockholders have entered into the Voting Agreements with Corning and Alcatel and the Corning Officers have each been appointed, to act on behalf of Corning, as proxy and attorney-in-fact to vote the shares of Avanex Common Stock beneficially owned by the Voting Agreement Stockholders as of May 12, 2003 and which may thereafter be acquired

pursuant to options or otherwise.

At the closing of the transactions contemplated by the Purchase Agreement, Corning will deliver to Avanex certain assets and cash and Corning will acquire 17% of the outstanding shares of Avanex Common Stock (the precise number of shares of Avanex Common Stock will be determined as follows: 0.17 multiplied by the quotient of (a) the number of shares of Avanex Common Stock outstanding immediately prior to the closing of the transactions contemplated by the Purchase Agreement, divided by 0.55). Corning will not pay any consideration to Voting Agreement Stockholders.

Item 4. Purpose of the Transaction

Purchase Agreement

Pursuant to the terms of the Purchase Agreement, at closing Corning will transfer and assign to Avanex certain specified tangible and intangible assets, including intellectual property, relating to Corning's optical amplifier facility in Erwin, N.Y. and its optical components plant in Milan, Italy, along with certain liabilities related to the operations of those facilities. Avanex will also assume Corning's warranty and repair obligations with respect to OCM products. Corning expects Avanex to hire approximately 400 employees from Corning and its Italian subsidiary in this transaction. Corning will also pay Avanex \$20 million in cash at closing plus an amount equal to its warranty expenses for certain other warranty repairs. At closing, Avanex will issue to Corning a number of its shares of Common Stock equal to 17% of the outstanding shares of Common Stock (the "Corning Share Issuance").

Simultaneously with the Corning Share Issuance and pursuant to the terms of the Purchase Agreement, Alcatel will transfer the stock of its French subsidiary Optronics France to Avanex, together with certain specified additional intellectual property and cash in the amount of U.S.\$40 million, 15 million euros and certain additional amounts relating to restructuring costs. Avanex will assume the liabilities of the Optronics France subsidiary other than certain enumerated real property and other obligations which will be assigned to Alcatel or one of its remaining subsidiaries at the closing. At the closing under the Purchase Agreement, Avanex will deliver to Alcatel the number of shares of Avanex Common Stock equal to 28% of the outstanding shares of Common Stock (the "Alcatel Share Issuance").

This description is only a summary of the terms of the Purchase Agreement which is Exhibit 99.1 to this Schedule 13D and is incorporated herein by reference.

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Voting Agreements and Proxies

As a condition to Corning entering into the Purchase Agreement, Corning, Alcatel and each of the Avanex Voting Agreement Stockholders entered into a Voting Agreement and the Voting Agreement Stockholders have each granted an Irrevocable Proxy to the Corning Officers (the "Proxy"). Pursuant to the terms of the Voting Agreements, each of the Voting Agreement Stockholders has agreed that at any meeting of stockholders of Avanex, or any action by written consent of the stockholders of Avanex in lieu of a meeting, the Voting Agreement Stockholders will vote all of their shares of Avanex Common Stock: (i) in favor of approval of the Purchase Agreement and the transactions contemplated; (ii) against any action or agreement that would be reasonably likely to result in the failure to satisfy an conditions to the Corning Share Issuance or the Alcatel

Share Issuance, and to cause their shares of Common Stock to be present for the purposes of establishing a quorum at any such meeting. In addition, each Avanex Voting Agreement Stockholder has agreed not to engage in any solicitation (as defined in Regulation 14A promulgated by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended, the "Exchange Act") opposed to the Corning Share Issuance or the Alcatel Share Issuance or any solicitation against any action or agreement which would reasonably be expected to result in the failure to satisfy any conditions to the Corning Share Issuance or the Alcatel Share Issuance. Each Proxy empowers the Corning Officers to vote the Common Stock of the Voting Agreement Stockholders solely in that manner and with respect to those matters in the place of the Voting Agreement Stockholders. .. The names of the Voting Agreement Stockholders and the respective amounts of the shares of Common Stock beneficially owned by them are set forth on Annex B hereto. This description is only a summary of the terms of the Voting Agreement and Proxy, the forms of which are filed herewith as Exhibit 99.2 and incorporated herein by reference.

Form of Stockholders' Agreement

At the closing of the transactions contemplated by the Purchase Agreement, Corning and Alcatel will enter into a Stockholders' Agreement with Avanex. With respect to Corning, the Stockholders' Agreement will provide that for a period of three years after the closing under the Purchase Agreement with respect to the Corning Share issuance Corning will not, and will cause its affiliates not to, directly or indirectly, alone or in concert with any other person: (a) acquire record or beneficial ownership of any Avanex securities other than those acquired in the Corning Share Issuance, by way of stock split, dividend or other recapitalization, or any incidental indirect investment made by employee-benefit plan related trusts; (b) propose or seek a merger, consolidation, recapitalization, reorganization, restructuring, sale, lease, exchange or other disposition of substantially all of the assets of, or other business combination involving, or tender or exchange offer for securities of Avanex or any other transaction which would result in the stockholders of Avanex immediately prior to the transaction holding less that 50% of the equity securities of the surviving or resulting corporation or parent entity after the transaction; (c) publicly seek to exercise control or influence of the management of Avanex, provided that any Corning nominee who is a director of Avanex may take any action necessary to fulfill his fiduciary obligations to the stockholders of Avanex; (d) solicit or participate in the solicitation of any proxies in opposition to a recommendation of the Board of Directors of Avanex (as such terms are defined under the Exchange Act); or (e) form or join a group or act in concert with any person or take any similar action to acquire, hold, vote or dispose of any Avanex securities, other than an acquisition of up to 5% of the Avanex securities through an acquisition, business combination or merger with any entity owning such securities.

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In addition, the Stockholders' Agreement will provide that so long as Corning owns 5% or more of the outstanding voting securities of Avanex, Corning will vote, and cause any affiliate holding the shares of Common Stock to vote, the securities beneficially owned by Corning in the manner recommended by a majority of the Board of Directors of Avanex and will cause such securities to be present in person or by proxy at all meetings of Avanex stockholders for the purposes of establishing a quorum. For a period of one year and two business days following the date of the Stockholders' Agreement, Corning will agree not to sell or otherwise transfer record, beneficial or economic ownership of the shares of Common Stock it receives in the Corning Share Issuance. Thereafter, Corning will agree to dispose of no more than 10% of the shares issued upon the Corning Share Issuance during each calendar quarter thereafter, together with

any portion of the previous quarters' permitted dispositions not disposed of in the prior quarters. Avanex will agree to register the shares of Common Stock held by Corning in increments corresponding to the rights of disposition after the initial lock-up period. Corning will also have certain demand registration rights and piggy back rights and will agree to suspend any offering from time to time if requested by Avanex upon the occurrence of certain conditions when Avanex has material information which it would be detrimental to Avanex to disclose at such time, the prospectus is or becomes misleading, or the continued offering would materially interfere with a material corporate transaction or event involving Avanex. Corning will also agree to withhold its Common Stock from the market for 90 days upon the request of Avanex or its underwriters if Avanex is publicly offering its securities.

For a period of five years after the closing of the transactions under the Purchase Agreement and so long as it holds at least 5% of the outstanding Common Stock, Corning will have the contractual right under the Stockholders' Agreement to purchase new securities offered by Avanex for cash or, if the Avanex offering is for other than cash, the cash equivalent as determined by the Board of Directors of Avanex, that number of new securities of Avanex which will permit Corning to maintain its proportionate interest in Avanex. The terms and conditions of the sale to Corning upon the exercise of any such right would be on the same terms and conditions as other purchasers in the issuance, subject to Corning obtaining any required governmental approvals. Certain securities issuances by Avanex would not be subject to the right of purchase by Corning, including: issuances to officers, employees, directors and others pursuant to stock incentive or benefit plans or programs approved by the stockholders of Avanex, securities issued upon exercise of securities outstanding as of the closing of the transactions contemplated by the Purchase Agreement, securities issued by Avanex in the acquisition of another corporation or assets by Avanex, securities issued to financial institutions pursuant to commercial leasing or debt financing transactions approved by the Board of Directors, securities issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or similar agreements or strategic partnerships approved by the Board of Directors of Avanex, securities excluded from the right by unanimous vote of the Board of Directors, and any right, option or warrant to acquire any such securities.

Pursuant to the Stockholders' Agreement, Corning will, after the Corning Share Issuance and so long as it owns 5% or more of the outstanding shares of Avanex Common Stock, have the right to designate one individual reasonably acceptable to Avanex to be elected to the Board of Directors of Avanex and the Board will recommend to the Avanex stockholders the election of such designee for a term of not more than three years. Upon the request of Avanex made at a time when Corning holds less than 5% of the outstanding Common Stock, the Corning designee will resign from the Board of Directors within five days of such request.

This description is only a summary of the terms of the Stockholders' Agreement to be entered into at the closing of the transactions contemplated by the Purchase Agreement, the form of which is filed herewith as Exhibit 99.3 and incorporated herein by reference.

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Other Plans or Proposals

Except as provided in the Purchase Agreement, the Voting Agreements and Proxies and the form of Stockholders' Agreement, there are no other plans or proposals of the Reporting Persons with respect to any of the actions described in paragraphs (a) through (j) of Item 4 of Schedule 13D.

Item 5. Interest in Securities of the Issuer

The only interests of Corning and Corning Officers in the Avanex Common Stock reported on this Schedule 13D are the rights of Corning under the Voting Agreements and the power of the Corning Officers, acting on behalf of Corning, as proxies and attorneys-in-fact to vote the shares of Avanex Common Stock held by the Avanex Voting Agreement Stockholders as described above, totaling beneficial ownership in 5,466,564 shares of Common Stock, of which 652,947 are options held by the Voting Agreement Stockholders which are currently exercisable or will be exercisable within the next 60 days. The 7.8% ownership set forth in this Schedule 13D is based upon 69,255,523 shares of Avanex Common Stock outstanding as of May 9, 2003, as disclosed by Avanex in the Purchase Agreement, and the 652,947 shares of Common Stock covered by the options. The Voting Agreement Stockholders retain all rights in their shares of Common Stock, including the right to receive dividends, except the voting and other rights conveyed in the Voting Agreements and Proxies.

The filing of this Schedule 13D shall not be construed as an admission that Corning or either Corning Officer is, for the purposes of Section 13(d) of the Act, the beneficial owner of any Avanex Common Stock, and disclaims beneficial ownership of the shares of Avanex Common Stock reported herein.

The only transactions in the Avanex Common Stock by Corning, its executive officers (including the Corning Officers) and directors within the past 60 days except as described above was a sale by Dionis Trust, a revocable trust of a non-employee Director of Corning, Gordon Gund. Dionis Trust sold 40,000 shares of Avanex on April 14, 2003 for \$0.7137 per share in an open market transaction. The shares of Avanex were acquired by Dionis Trust in March of 2001, 20,000 shares at \$15.80 per share and 20,000 shares at \$11.07 per share, The sale resulted in a loss of approximately \$12.70 per share.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Other than the Purchase Agreement, the Voting Agreements and Proxies, and the form of the Stockholders' Agreement, each described above, and the transactions contemplated thereby, there are no contracts, arrangements, understandings or relationships among the persons named in Item 2 or between any such person and any other person with respect to the shares of Avanex Common Stock or, to the best knowledge of Corning and the Corning Officers, among any of Corning's executive officers and directors or, to their knowledge, between any of Corning's executive officers and directors and any other person, with respect to the shares of Avanex Common Stock. The above descriptions of the Purchase Agreement, the Voting Agreements and Proxies and the Stockholders' Agreement are incorporated herein by reference.

Item 7. Material to Be Filed as Exhibits. The following documents are filed as exhibits to this Schedule 13D:

99.1 Stock Acquisition and Asset Purchase Agreement , dated May 12, 2003, between Avanex, Corning and Alcatel which is incorporated by reference to Exhibit 2.1 to the Avanex Corporation Form 8-K Current Report for May 12, 2003, Commission File No. 000-29175.

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99.2 Form of Voting Agreement and Proxy, each dated May 12, 2003 between Corning, Alcatel and each of Walter Alessandrini, Giovanni Barbarossa, Vinton G. Cerf, Todd Brooks, Joel A. Smith III, and Susan Wang.

- 99.3 Form of Stockholders' Agreement to be entered into at the closing of the transactions contemplated by the Purchase Agreement between Avanex and Corning and Alcatel.
- 99.4 Agreement between Corning and the Corning Officers regarding joint filing of Schedule 13D and all amendments hereto.

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Signature

After reasonable inquiry and to the best of the undersigned's knowledge and belief I certify that the information set forth in this statement is true, complete and correct.

Dated: May 22, 2003 Corning Incorporated

By: /s/ Denise A. Hauselt

Denise A. Hauselt,

Secretary and Assistant General

Counsel

/s/ William D. Eggers

William D. Eggers

/s/ Denise A. Hauselt

Denise A. Hauselt

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CUSIP No. 05348W109

Annex A to Schedule 13D

Executive Officers of Corning Incorporated (all with business addresses at One Riverfront Plaza, Corning, New York 14831):

Name	Citizenship	Title
Larry Aiello	United States	President and Chief Executive Offi Corning Cable Systems
Katherine A. Asbeck	United States	Senior Vice President and Controll
Robert B. Brown	United States	Senior Vice President
Robert L. Ecklin	United States	Executive Vice President
William D. Eggers	United States	Senior Vice President and General
Gerald J. Fine	United States	Senior Vice President
James B. Flaws*	United States	Vice Chairman and Chief Financial

Kirk P. Gregg	United States	Executive Vice President and Chief Administrative Officer
James R. Houghton*	United States	Chairman of the Board and Chief Ex Officer
Donald B. McNaughton	United States	Senior Vice President
Joseph A. Miller	United States	Executive Vice President and Chief Technology Officer
Mark S. Rogus	United States	Vice President and Treasurer
Peter F. Volanakis*	United States	President, Corning Technologies
Wendell P. Weeks*	United States	President and Chief Operating Offi

^{*}Also a member of the Board of Directors

Non-Employee Directors of Corning Incorporated (all with business addresses at One Riverfront Plaza, Corning, New York 14831):

John Seely Brown	United States	Retired Chief Scientist, Xerox Cor
Gordon Gund	United States	Chairman & Chief Executive Officer Investment Corp.
Jeremy R. Knowles	United States	Amory Houghton Professor of Chemis Biochemistry, Harvard Universi
John M. Hennessy	United States	Senior Advisor, Credit Suisse Firs
James J. O'Connor	United States	Retired Chairman of the Board & Ch Executive Officer, Unicom Corp
Deborah Rieman	United States	Retired President & Chief Executiv Check Point Software Technologi
H. Onno Ruding	The Netherlands	Vice President, Citicorp & Citiban
William D. Smithburg	United States	Retired Chairman, President & Chie Executive Officer, The Quaker Company
Hansel E. Tookes II	United States	Retired Chairman & Chief Executive

Officer, Raytheon Aircraft Com

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Annex B to Schedule 13D

Voting Agreement Stockholders and Holdings of Common Stock

Name of Voting Agreement Stockholder	Number of Shares of Common Stock Owned	Number of Shares Subject to Options*
Walter Alessandrini	4,701,148	0
Giovanni Barbarossa	728	530,447
Vinton G. Cerf	2,292	67 , 500
Todd A. Brooks	58,249	27 , 500
Joel A. Smith III	51,200	27,500
Susan Wang	0	0

^{*}Stock options which were exercisable at or within 60 days after May 12, 2003.

Exhibit 99.2 to Schedule 13D

[Form of] VOTING AGREEMENT

THIS VOTING AGREEMENT (this "Voting Agreement") is made and entered into as of May 12, 2003 among Corning Incorporated, a New York corporation ("Corning"), Alcatel, a societe anonyme with a capital of 2,529,416,996 euros, its registered office at 54, rue La Boetie, 75008, Paris, France and registered in the Registry of Commerce and Companies under number 542019096 ("Alcatel"), and the undersigned stockholder (the "Stockholder") of Avanex Corporation, a Delaware corporation ("Avanex").

RECITALS

- A. Pursuant to the terms of a Share Acquisition and Asset Purchase Agreement, dated as of May 12, 2003 (the "Purchase Agreement"), by and among Avanex, Alcatel and Corning, (1) Avanex will acquire from Alcatel, and Alcatel will sell to Avanex, all of the issued and outstanding share capital of Alcatel Optronics France in consideration for which Avanex shall issue to Alcatel shares of Avanex Common Stock, upon the terms and subject to the conditions set forth in the Purchase Agreement (the "Alcatel Share Issuance"), and (2) Avanex will purchase from Corning, and Corning will sell to Avanex, certain assets of Corning, in consideration for which Avanex shall issue to Corning shares of Avanex Common Stock, upon the terms and subject to the conditions set forth in the Purchase Agreement (the "Corning Share Issuance").
- B. As a material condition to the execution and delivery of the Purchase Agreement by Alcatel and Corning, Stockholder has agreed to execute and deliver this Voting Agreement.
- C. Stockholder is the beneficial owner (as defined in Rule 13d-3 under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) of such number of shares of the outstanding Avanex Common Stock and shares of Avanex Common Stock subject to outstanding options as is indicated on the signature page of this Voting Agreement.
- D. In consideration of the execution of the Purchase Agreement by each of Corning and Alcatel, Stockholder (in his or her capacity as such) agrees to vote the Shares (as defined below) and such other shares of Avanex Common Stock over which Stockholder has voting power so as to facilitate consummation of the transactions contemplated by the Purchase Agreement and to approve the Alcatel Share Issuance and the Corning Share Issuance.

NOW, THEREFORE, $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

- 1. Certain Definitions. Capitalized terms not defined herein shall have the meanings ascribed to them in the Purchase Agreement. For purposes of this Voting Agreement:
 - (a) "Expiration Date" shall mean the earlier to occur of (i) such date and time as the Purchase Agreement shall have been terminated pursuant to Article XIII thereof, or (ii) such date and time: (A) as to Corning, the Asset Purchase shall become effective in accordance with the terms and provisions of the Purchase Agreement or (B) as to Alcatel, the Share Acquisition shall become effective in accordance with the terms and provisions of the Purchase Agreement.

- (b) "Person" shall mean any individual, corporation (including any non-profit corporation), general partnership, limited partnership, limited liability partnership, joint venture, estate, trust, company (including any limited liability company or joint stock company), firm or other enterprise, association, organization, entity or Governmental Entity.
- (c) "Shares" shall mean all shares of Avanex Common Stock, and all options, warrants and other rights to acquire shares of Avanex Common Stock, now or hereafter owned or held, directly or indirectly, including by way of stock dividend or distribution, split-up, recapitalization, combination, exchange of shares and the like, by Stockholder, from the date of this Voting Agreement through the Expiration Date.
- (d) "Transfer". A Person shall be deemed to have effected a "Transfer" of a security if such Person directly or indirectly: (i) sells, pledges, encumbers, assigns, grants an option with respect to, transfers or disposes of such security or any interest in such security; or (ii) enters into an agreement or commitment providing for the sale of, pledge of, encumbrance of, assignment of, grant of an option with respect to, transfer of or disposition of such security or any interest therein.

2. Transfer of Shares.

(a) Transfer Restrictions. Stockholder agrees that, during the period from the date of this Voting Agreement through the Expiration Date, Stockholder shall not cause or permit any Transfer of any of the Shares to be effected unless each Person to which any of such Shares, or any interest in any of such Shares, is or may be transferred shall have: (i) executed a counterpart of this Voting Agreement, executed a proxy to Corning in the form attached hereto as Exhibit A (the "Corning Proxy") and executed a proxy to Alcatel in the form attached hereto as Exhibit B (the "Alcatel Proxy, " and together with the Corning Proxy, the "Proxies") (each with such modifications as Corning or Alcatel, respectively, may reasonably request); and (ii) agreed in writing to hold such Shares (or interest in such Shares) subject to all of the terms and provisions of this Voting Agreement. Notwithstanding the foregoing or anything to the contrary set forth in this Voting Agreement, Stockholder may sell Shares for cash to the extent necessary to pay taxes incurred as a direct result of the exercise of options to purchase Avanex Common Stock after the date hereof. The Stockholder further agrees with, and covenants to, Alcatel and Corning that the Stockholder shall not request that Avanex or any agent of Avanex register the Transfer of any certificate or uncertificated interest representing any of the Shares, unless such Transfer is made in compliance with this Voting Agreement.

- (b) Transfer of Voting Rights. Stockholder agrees that, during the period from the date of this Voting Agreement through the Expiration Date, Stockholder shall not permit the deposit of any Shares in a voting trust or grant any proxy or enter into any voting agreement or similar agreement in contravention of the obligations of Stockholder under this Voting Agreement with respect to any of the Shares. The Stockholder hereby revokes all other proxies and powers of attorney with respect to the Shares that may have heretofore been appointed or granted in contravention of the obligations of Stockholder under this Voting Agreement.
- 3. Agreement to Vote Shares. At every meeting of the stockholders of Avanex

called, and at every adjournment or postponement thereof, and on every action or approval by written consent of the stockholders of Avanex, Stockholder (in its, his or her capacity as such) shall, or shall cause the holder of record on any applicable record date to, vote the Shares (i) in favor of approval of each of the Alcatel Share Issuance and the Corning Share Issuance and (ii) against any action or agreement that would reasonably be expected to result in the failure to satisfy any conditions to the Alcatel Share Issuance or the Corning Share Issuance. Stockholder further agrees that Stockholder shall, or shall cause the holder of record on any applicable record date to, appear at the Avanex Stockholders' Meeting or otherwise cause the Shares to be counted as present thereat for purposes of establishing a quorum. Prior to the Expiration Date, the Stockholder shall not take any action or enter into any agreement or understanding with any person to vote or give instructions in any manner inconsistent with the terms of this Section 3. Without limiting the generality of the foregoing, the Stockholder agrees that neither it, he or she nor any of its subsidiaries (if the Stockholder is not a natural person) nor any of the officers and directors (if the Stockholder is not a natural person) and representatives (including any investment banker, attorney or accountant retained by it or any of its subsidiaries (if the Stockholder is not a natural person)) of it, him or her or its subsidiaries (if the Stockholder is not a natural person) shall, and that it, he or she shall use its, his or her reasonable best efforts to cause its, his or her and its subsidiaries' (if the Stockholder is not a natural person) employees and other agents not (and shall not authorize any of them) directly or indirectly, to engage in any solicitation (as defined in Regulation 14A of the Rules and Regulations promulgated by the Securities and Exchange Commission pursuant to the Exchange Act) of other stockholders of Avanex against the Alcatel Share Issuance or the Corning Share Issuance or against any action or agreement that would reasonably be expected to result in the failure to satisfy any conditions to the Alcatel Share Issuance or the Corning Share Issuance.

- 4. Directors and Officers. Notwithstanding any provision of this Voting Agreement to the contrary, nothing in this Voting Agreement shall limit or restrict Stockholder from (a) acting in Stockholder's capacity as a director or officer of Avanex (it being understood that this Voting Agreement shall apply to Stockholder solely in Stockholder's capacity as a stockholder of Avanex) or (b) voting in such Stockholder's sole discretion on any matter other than those relating to the Alcatel Share Issuance, the Corning Share Issuance or the transactions contemplated by the Purchase Agreement.
- 5. Irrevocable Proxy. Concurrently with the execution of this Voting Agreement, Stockholder agrees to deliver (i) the Corning Proxy to Corning and (ii) the Alcatel Proxy to Alcatel, each of which shall be irrevocable to the fullest extent permissible by law, with respect to the Shares.

- 6. No Ownership Interest. Nothing contained in this Voting Agreement shall be deemed to vest in Corning or Alcatel any direct or indirect ownership or incidence of ownership of or with respect to any Shares. All rights, ownership and economic benefits of and relating to the Shares shall remain vested in and belong to Stockholder, and neither Corning nor Alcatel shall have any authority to manage, direct, superintend, restrict, regulate, govern, or administer any of the policies or operations of Avanex or exercise any power or authority to direct Stockholder in the voting of any of the Shares, except as otherwise provided herein.
 - 7. Representations and Warranties of Stockholder.
 - (a) Authorization. This Voting Agreement constitutes a legal, valid and binding agreement of Stockholder, enforceable against Stockholder in

accordance with its terms, except (i) as such enforcement is limited by bankruptcy, insolvency and other similar laws effecting the enforcement of creditors' rights generally and (ii) for limitations imposed by general principles of equity.

- (b) Compliance. The execution, delivery and performance of this Voting Agreement by Stockholder requires no action by or in respect of, or filing with, any governmental or non-governmental body, agency or official or any other Person other than as required by any applicable requirements of the Exchange Act and other filings or notifications that are immaterial to the consummation of the transactions contemplated hereby.
- (c) Non-contravention. The execution, delivery and performance of this Voting Agreement by Stockholder does not and will not (a) violate any applicable law, rule, regulation, judgment, injunction, order or decree binding upon Stockholder, except for any such violations which would be immaterial to the consummation of the transactions contemplated hereby, or (b) constitute a default under any agreement or other instrument binding upon Stockholder.
- (d) Ownership of Shares. Stockholder (i) is the beneficial owner of the shares of Avanex Common Stock and the options to purchase shares of Avanex Common Stock indicated on the signature page of this Voting Agreement, which are free and clear of any liens, adverse claims, charges, security interests, pledges or options, proxies, voting trusts or agreements, understandings or agreements, or any other rights or encumbrances whatsoever ("Encumbrances") (except any Encumbrances arising under securities laws, arising hereunder or that are not in contravention of the obligations of Stockholder hereunder); and (ii) does not beneficially own or otherwise have rights to acquire, whether or not currently exercisable, any securities of Avanex other than the shares of Avanex Common Stock and options to purchase shares of Avanex Common Stock indicated on the signature page of this Voting Agreement. Stockholder hereby agrees to promptly notify Alcatel and Corning in writing of any new Shares of Avanex Common Stock, any new options, warrants or other rights to purchase Avanex Common Stock, or any shares of Avanex Preferred Stock acquired after the date of this Voting Agreement.

- (e) Voting Power. Stockholder has or will have sole voting power, sole power of disposition, sole power to issue instructions with respect to the matters set forth herein, and sole power to agree to all of the matters set forth in this Voting Agreement, in each case with respect to all of Stockholder's Shares, with no limitations, qualifications or restrictions on such rights, subject to applicable federal securities laws and the terms of this Voting Agreement.
- 8. Representations and Warranties of Corning.
- (a) Existence and Power. Corning is a corporation duly organized, validly existing and in good standing under the laws of the State of New York.
- (b) Authorization. The execution, delivery and performance of this Voting Agreement by Corning are within Corning's powers and have been duly authorized by all necessary action on the part of Corning. This Voting Agreement constitutes a legal, valid and binding agreement of Corning, enforceable against Corning in accordance with its terms, except (i) as such enforcement is limited by bankruptcy, insolvency and other similar laws effecting the enforcement of creditors' rights generally and (ii) for

limitations imposed by general principles of equity.

- (c) Compliance. The execution, delivery and performance of this Voting Agreement by Corning requires no action by or in respect of, or filing with, any governmental or non-governmental body, agency or official or any other Person other than as required by any applicable requirements of the Exchange Act and other filings or notifications that are immaterial to the consummation of the transactions contemplated hereby.
- (d) Non-contravention. The execution, delivery and performance of this Voting Agreement by Corning does not and will not (a) violate the internal governance documents of Corning, (b) violate any applicable law, rule, regulation, judgment, injunction, order or decree binding upon Corning, except for any such violations which would be immaterial to the consummation of the transactions contemplated hereby, or (c) constitute a default under any agreement or other instrument binding upon Corning.
- 9. Representations and Warranties of Alcatel.
- (a) Existence and Power. Alcatel is a societe anonyme duly organized, validly existing and in good standing under the laws of the Republic of France.
- (b) Authorization. The execution, delivery and performance of this Voting Agreement by Alcatel are within Alcatel's powers and have been duly authorized by all necessary action on the part of Alcatel. This Voting Agreement constitutes a legal, valid and binding agreement of Alcatel, enforceable against Alcatel in accordance with its terms, except (i) as such enforcement is limited by bankruptcy, insolvency and other similar laws effecting the enforcement of creditors' rights generally and (ii) for limitations imposed by general principles of equity.

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- (c) Compliance. The execution, delivery and performance of this Voting Agreement by Alcatel requires no action by or in respect of, or filing with, any governmental or non-governmental body, agency or official or any other Person other than as required by any applicable requirements of the Exchange Act and other filings or notifications that are immaterial to the consummation of the transactions contemplated hereby.
- (d) Non-contravention. The execution, delivery and performance of this Voting Agreement by Alcatel does not and will not (a) violate the internal governance documents of Alcatel, (b) violate any applicable law, rule, regulation, judgment, injunction, order or decree binding upon Alcatel, except for any such violations which would be immaterial to the consummation of the transactions contemplated hereby, or (c) constitute a default under any agreement or other instrument binding upon Alcatel.
- 10. Legending of Shares. If so requested by Corning or Alcatel, Stockholder agrees that the certificates representing the Shares shall bear a legend stating that they are subject to this Voting Agreement and to the Proxies.
- 11. Termination. This Voting Agreement and the Proxies delivered in connection herewith shall terminate and shall have no further force or effect as of the Expiration Date. Nothing in this Section 11 shall relieve or otherwise limit the liability of any party for breach of this Voting Agreement.

12. Miscellaneous.

- (a) Amendments; Waiver. Neither this Voting Agreement nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by each beneficiary of the waiver, discharge, amendment or termination and the obligor under any such amendment, waiver, discharge or termination.
- (b) Notices. All notices and other communications hereunder shall be in writing and shall be deemed duly given (i) on the date of delivery if delivered personally, (ii) on the date of confirmation of receipt (or, the first business day following such receipt if the date is not a business day) of transmission by telecopy or telefacsimile or (iii) on the date of confirmation of receipt (or, the first business day following such receipt if the date is not a business day) if delivered by a nationally recognized courier service. All notices hereunder shall be delivered as set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

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(i) if to Avanex, to:

Avanex Corporation 40919 Encyclopedia Circle Fremont CA 94538 Attention: Chief Executive Officer Fax No.: 510-897-4189

with copies to:

Wilson Sonsini Goodrich & Rosati, Professional Corporation 650 Page Mill Road Palo Alto, CA 94304

Attention: Mark A. Bertelsen Steve L. Camahort

Fax: 650-493-6811

(ii) if to Alcatel, to:

Alcatel 54, rue La Boetie 75008, Paris, France ATTN: General Counsel Fax No.: 011-331-4076-1435

with a copy to: Proskauer Rose LLP 1585 Broadway New York, NY 10036

Attention: Ronald R. Papa Lauren K. Boglivi

Fax: 212-969-2900

(iii) if to Corning, to:

Corning Incorporated One Riverfront Plaza Corning, NY 14831 Attention: Secretary Fax No.: 607-974-6135

with a copy to:
Nixon Peabody LLP
Clinton Square
P.O. Box 31051
Rochester, NY 14803
Attention: Deborah McLean Quinn
Fax: 1-866-947-0724

- (iv) If to Stockholder: To the address for notice set forth on the signature page hereof.
- (c) Counterparts. This Voting Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties, it being understood that all parties need not sign the same counterpart.
- (d) Interpretation; Knowledge. When a reference is made in this Voting Agreement to Exhibits, such reference shall be to an Exhibit to this Voting Agreement unless otherwise indicated. When a reference is made in this Voting Agreement to Sections, such reference shall be to a section of this Voting Agreement unless otherwise indicated. For purposes of this Voting Agreement, the words "include," "includes" and "including," when used herein, shall be deemed in each case to be followed by the words "without limitation." The headings contained in this Voting Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Voting Agreement.
- (e) Entire Agreement; Third-Party Beneficiaries. This Voting Agreement and the Proxies (i) constitute the entire agreement among the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, both written and oral, among the parties with respect to the subject matter hereof, and (ii) are not intended to confer upon any other Person any rights or remedies hereunder.
- (f) Severability. In the event that any provision of this Voting Agreement or the application thereof, becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the remainder of this Voting Agreement will continue in full force and effect and the application of such provision to other Persons or circumstances will be interpreted so as reasonably to effect the intent of the parties hereto. The parties further agree to replace such void or unenforceable provision of this Voting Agreement with a valid and enforceable provision that will achieve, to the greatest extent possible, the economic, business and other purposes of such void or unenforceable provision.

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(g) Governing Law; Jurisdiction. This Voting Agreement shall be governed by and construed in accordance with the laws of the State of New York, regardless of the laws that might otherwise govern under applicable principles of conflicts of law thereof, except to the extent of any mandatory application of the Delaware General Corporation Law with respect to the Proxies. Each party hereby (a) irrevocably and unconditionally submits to the exclusive jurisdiction of the Delaware Court of Chancery, with respect to all actions and proceedings arising out of or relating to this Voting Agreement and the transaction contemplated hereby, (b) agrees that all claims with respect to any such action or proceeding shall be heard and determined in such courts and agrees not to commence an action or proceeding relating to this Voting Agreement or the transactions contemplated hereby except in such courts, (c) consents to service of

process upon him, her or it by mailing or delivering such service to the address set forth in Section 12(b) hereof, and (d) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each party hereby irrevocably and unconditionally waives, and agrees not to assert, by way of motion, as a defense, counterclaim or otherwise, in any action or proceeding with respect to this Voting Agreement, (i) the defense of sovereign immunity, (ii) any claim that it is not personally subject to the jurisdiction of the above-named courts for any reason other than the failure to serve process in accordance with this Section 12(q), (iii) that it or its property is exempt or immune from jurisdiction of any such court or from any legal process commenced in any such court (whether through service of notice, attachment prior to judgment, execution of judgment or otherwise), and, to the fullest extent permitted by applicable Law, that (A) the suit, action or proceeding in any such court is improper, (B) the venue of such suit, action or proceeding is improper and (C) this Voting Agreement, or the subject matter hereof, may not be enforced in or by such courts.

- (h) Rules of Construction. The parties hereto agree that they have been represented by counsel during the negotiation and execution of this Voting Agreement and, therefore, waive the application of any law, regulation, holding or rule of construction providing that ambiguities in an agreement or other document will be construed against the party drafting such agreement or document.
- (i) Assignment. Stockholder may not assign either this Voting Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of Corning and Alcatel, except as provided in Section 2. Neither Corning nor Alcatel may assign either this Voting Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of Stockholder. Any purported assignment in violation of this Section 12(i) shall be void. Subject to the preceding sentence, this Voting Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.
- (j) Waiver of Jury Trial. EACH PARTY HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS VOTING AGREEMENT OR THE ACTIONS OF ANY PARTY IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE AND ENFORCEMENT HEREOF.

- (k) Further Assurances. Each party hereto agrees to execute and deliver, by the proper exercise of its powers, all such other and additional instruments and documents and do all such other acts and things as may be necessary to more fully effectuate this Voting Agreement.
- (1) Expenses. All costs and expenses incurred in connection with this Voting Agreement and the transactions contemplated hereby shall be paid by the party incurring the expenses; provided, however, that if any action or other proceeding relating to the enforcement of any provision of this Voting Agreement is brought by any party hereto, the prevailing party shall be entitled to recover reasonable attorneys' fees, costs and disbursements (in addition to any other relief to which the prevailing party may be entitled).
- (m) No Obligation to Exercise Options. Notwithstanding any provision of this Voting Agreement to the contrary, nothing in this Voting Agreement

shall obligate Stockholder to exercise any option, warrant or other right to acquire shares of Avanex Common Stock.

- (n) Liability. The rights and obligations of each of Corning and Alcatel under this Voting Agreement shall be several and not joint. All references to actions to be taken by the Stockholders under this Voting Agreement refer to actions to be taken by Stockholders acting severally and not jointly.
- (o) Specific Performance. The parties hereto declare that it is impossible to measure in money the damages which will accrue to a party hereto or to their heirs, personal representatives, or assigns by reason of a failure to perform any of the obligations under this Voting Agreement and agree that the terms of this Voting Agreement shall be specifically enforceable. If any party hereto or his heirs, personal representatives, or assigns institutes any action or proceeding to specifically enforce the provisions hereof, any person against whom such action or proceeding is brought hereby waives the claim or defense therein that such party or such personal representative has an adequate remedy at law, and such person shall not offer in any such action or proceeding the claim or defense that such remedy at law exists.

[The remainder of this page has been intentionally left blank]

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CORNING, INCORPORATED

Name: Paul Wenzel

IN WITNESS WHEREOF, the parties have caused this Voting Agreement to be duly executed on the day and year first above written.

STOCKHOLDER

Shares beneficially owned:

/s/ Lawrence McRae By: * By: _____ -----Signature of Authorized Signatory Signature Name: Lawrence McRae Name: _____ Title: Senior Vice President Title: _____ _____ _____ Print Address ALCATEL _____ Telephone _____ By: /s/ Paul Wenzel Facsimile No. Signature of Authorized Signatory

Title:	Senior International Counsel		shares	of	Avanex	Common	Stock
		issuable options				Common outstar	
	[Signature Page to	Voting Ag	reement]			

 * See attached Schedule for list of signing stockholders and holdings of Avanex Common Stock and options to purchase Common Stock exercisable within 60 days of the Agreement

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EXHIBIT A

IRREVOCABLE PROXY

Capitalized terms not defined herein shall have the meanings ascribed to them in that certain Voting Agreement of even date herewith by and among Corning, Alcatel and the undersigned stockholder (the "Voting Agreement"). The undersigned stockholder (the "Stockholder") of Avanex Corporation, a Delaware corporation ("Avanex"), hereby irrevocably (to the fullest extent permitted by law) appoints Denise Hauselt and William D. Eggers of Corning Incorporated, a New York corporation ("Corning"), and each of them, as the sole and exclusive attorneys and proxies of the undersigned, with full power of substitution and resubstitution, to vote and exercise the Shares regarding the approval of the Corning Share Issuance in accordance with the terms of this Proxy until the Expiration Date. Upon the undersigned's execution of this Proxy, any and all prior proxies given by the undersigned in contravention of the obligations of Stockholder under the Voting Agreement with respect to any Shares are hereby revoked and the undersigned agrees not to grant any subsequent proxies in contravention of the obligations of Stockholder under the Voting Agreement with respect to the Shares until after the Expiration Date.

This Proxy is irrevocable (to the fullest extent permitted by law), is coupled with an interest, is granted pursuant to the Voting Agreement, and is granted in consideration of Corning and Alcatel entering into the Purchase Agreement.

The attorneys and proxies named above, and each of them, are hereby authorized and empowered by the undersigned, at any time prior to the Expiration Date, to act as the undersigned's attorney and proxy to vote the Shares, and to exercise all voting, consent and similar rights of the undersigned with respect to the Shares (including, without limitation, the power to execute and deliver written consents) at every annual, special or adjourned or postponed meeting of stockholders of Avanex and in every written consent in lieu of such meeting: (i) in favor of approval of the Corning Share Issuance and (ii) against any action or agreement that would reasonably be expected to result in the failure to satisfy any conditions to the Corning Share Issuance.

The attorneys and proxies named above may not exercise this Proxy on any other matter. The undersigned stockholder may vote the Shares on all other

matters.

Any obligation of the undersigned hereunder shall be binding upon the successors and assigns of the undersigned.

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This Proxy is irrevocable (to the fullest extent permitted by law). This Proxy shall terminate, and be of no further force and effect, automatically upon the Expiration Date.

Dated: May 12, 2003

Signature of Stockholder: *

Print Name of Stockholder:

* See attached Schedule for list of signing stockholders and holding sof Avanex Common Stock and options to purchase Common Stock exercisable within 60 days of the Agreement

[Signature Page to Irrevocable Proxy]

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EXHIBIT B

IRREVOCABLE PROXY

Capitalized terms not defined herein shall have the meanings ascribed to them in that certain Voting Agreement of even date herewith by and among Corning, Alcatel and the undersigned stockholder (the "Voting Agreement"). The undersigned stockholder (the "Stockholder") of Avanex Corporation, a Delaware corporation ("Avanex"), hereby irrevocably (to the fullest extent permitted by law) appoints Pascal Durand-Barthez and Paul Wensel of Alcatel, a societe anonyme with a capital of 2,529,416,996 euros, its registered office at 54, rue La Boetie, 75008, Paris, France and registered in the Registry of Commerce and Companies under number 542019096 ("Alcatel"), and each of them, as the sole and exclusive attorneys and proxies of the undersigned, with full power of substitution and resubstitution, to vote and exercise the Shares regarding the approval of the Alcatel Share Issuance in accordance with the terms of this Proxy until the Expiration Date. Upon the undersigned's execution of this Proxy, any and all prior proxies given by the undersigned in contravention of the obligations of Stockholder under the Voting Agreement with respect to any Shares are hereby revoked and the undersigned agrees not to grant any subsequent

proxies in contravention of the obligations of Stockholder under the Voting Agreement with respect to the Shares until after the Expiration Date.

This Proxy is irrevocable (to the fullest extent permitted by law), is coupled with an interest, is granted pursuant to the Voting Agreement, and is granted in consideration of Corning and Alcatel entering into the Purchase Agreement.

The attorneys and proxies named above, and each of them, are hereby authorized and empowered by the undersigned, at any time prior to the Expiration Date, to act as the undersigned's attorney and proxy to vote the Shares, and to exercise all voting, consent and similar rights of the undersigned with respect to the Shares (including, without limitation, the power to execute and deliver written consents) at every annual, special or adjourned or postponed meeting of stockholders of Avanex and in every written consent in lieu of such meeting: (i) in favor of approval of the Alcatel Share Issuance and (ii) against any action or agreement that would reasonably be expected to result in the failure to satisfy any conditions to the Alcatel Share Issuance.

The attorneys and proxies named above may not exercise this Proxy on any other matter. The undersigned stockholder may vote the Shares on all other matters.

Any obligation of the undersigned hereunder shall be binding upon the successors and assigns of the undersigned.

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This Proxy is irrevocable (to the fullest extent permitted by law). This Proxy shall terminate, and be of no further force and effect, automatically upon the Expiration Date.

Dated: May 12, 2003

Signature of Stockholder:	*
Print Name of Stockholder:	

 * See attached Schedule for list of signing stockholders and holdings of Avanex Common Stock and options to purchase Common Stock exercisable within 60 days of the Agreement

[Signature Page to Irrevocable Proxy]

Schedule to Voting Agreement and Irrevocable Proxy

Voting Agreement Signing Stockholders and Holdings of Common Stock

Name of Stockholder	Number of Shares of Common Stock Owned	Number of Shares Subject to Options*
Walter Alessandrini	4,701,148	0
Giovanni Barbarossa	728	530,447
Vinton G. Cerf	2,292	67,500
Todd A. Brooks	58,249	27,500
Joel A. Smith III	51,200	27,500
Susan Wang	0	0

^{*}Stock options which were exercisable at or within 60 days after May 12, 2003.

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Exhibit 99.3 to Schedule 13D

[Form to be signed at closing of Purchase Agreement]

STOCKHOLDERS' AGREEMENT

Between

AVANEX CORPORATION,

ALCATEL

and

CORNING INCORPORATED

Dated as of _____, 2003

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STOCKHOLDERS' AGREEMENT

THIS STOCKHOLDERS' AGREEMENT (the "Agreement") is made and entered into as of [_____], 2003, among Avanex Corporation, a Delaware corporation ("Avanex"), Alcatel, a societe anonyme with a capital of 2,529,416,996 euros, its registered office at 54, rue La Boetie 75008, Paris, France and registered in the Registry of Commerce and Companies under number 542019096 ("Alcatel"), and Corning

Incorporated, a New York corporation ("Corning"). Corning and Alcatel are together referred to herein as the "Stockholders," and each of them is referred to herein as a "Stockholder."

RECITALS

- A. Pursuant to the terms of a Share Acquisition and Asset Purchase Agreement, dated as of May 12, 2003 (the "Purchase Agreement"), by and among Avanex, Alcatel and Corning, (1) Avanex will acquire from Alcatel, and Alcatel will sell to Avanex, all of the issued and outstanding share capital of Alcatel Optronics SA in consideration for which Avanex shall issue to Alcatel shares of Avanex Common Stock (the "Alcatel Shares"), upon the terms and subject to the conditions set forth in the Purchase Agreement, and (2) Avanex will purchase from Corning, and Corning will sell to Avanex, certain assets of Corning, in consideration for which Avanex shall issue to Corning shares of Avanex Common Stock (the "Corning Shares," and together with the Alcatel Shares, the "Consideration Shares"), upon the terms and subject to the conditions set forth in the Purchase Agreement.
- B. The Purchase $% \left(A_{i}\right) =0$ Agreement provides for the execution and delivery of this Agreement.
- NOW, THEREFORE, in consideration of the representations, warranties, covenants and conditions herein and in the Purchase Agreement, the parties hereto hereby agree as follows:

ARTICLE 1

DEFINITIONS

- 1.1 Certain Definitions. As used in this Agreement:
- (a) "Affiliate" or "affiliate" shall have the meaning provided in Rule $144\,(a)\,(1)$ under the Securities Act.
 - (b) "Avanex" has the meaning set forth in the preamble hereto.
- (c) "Avanex Securities" means all shares of capital stock of Avanex, and all options, warrants, convertible securities or other rights to acquire any shares of capital stock of Avanex or securities or instruments exchangeable or exercisable for, or convertible into, shares of capital stock of Avanex.

- (d) "Avanex Transaction Proposal" has the meaning set forth in Section $2.1(b)\,.$
 - (e) "Board" means the Board of Directors of Avanex.
- (f) "Beneficial ownership" or "beneficial owner" has the meaning provided in Rule 13d-3 under the Exchange Act. References to ownership of Voting Securities hereunder mean record or beneficial ownership.
- (g) "Business Day" means any day except a Saturday, Sunday or other day on which commercial banks in New York, California or Paris, France are authorized by law to close.
- (h) "Corning" has the meaning set forth in the preamble hereto and includes any Person controlling Corning.

- (i) "Corning Designee" has the meaning set forth in Section 6.1.
- (j) "Corning Shares" has the meaning set forth in the recitals hereto.
- (k) "Consideration Shares" has the meaning set forth in the recitals hereto.
 - (1) "Cumulative Basis" has the meaning set forth in Section 3.1(b)(i).
- (m) "Demanding Stockholder" has the meaning set forth in Section 4.1(b).
- (n) "Demand Managing Underwriter" has the meaning set forth in Section 4.3(d).
- (o) "Demand Market Cut-Back" has the meaning set forth in Section $4.3\,(\mathrm{e})$.
- (p) "Demand Registrable Securities" has the meaning set forth in Section 4.1(b).
- (q) "Demand Registration Statement" has the meaning set forth in Section 4.1(b).
 - (r) "Demand Request" has the meaning set forth in Section 4.1(b).
- (s) Person shall be deemed to have effected a "Disposition" of a security if such Person, directly or indirectly, (i) offers to sell, contracts to sell, makes any short sale of, or otherwise sells, disposes of, loans, gifts, pledges, assigns, encumbers or grants any options or rights with respect to, such security or any interest therein or any security convertible into or exchangeable or exercisable for any such security, (ii) enters into any swap, hedge or other arrangement that transfers, in whole or in part, any of the economic consequences of ownership of such security, or (iii) enters into any agreement or understanding with respect to the foregoing.
- (t) "Exchange Act" means the United States Securities Exchange Act of 1934, as amended.
- (u) "Financial Arbitrator" shall mean a nationally recognized investment banking firm.

- (v) "First Quarter" has the meaning set forth in Section 3.1(b) (i).
- (w) "First Release Period" has the meaning set forth in Section 3.1(b)(i).
 - (x) "Fourth Quarter" has the meaning set forth in Section 3.1(b)(i).
- (y) "Group" or "group" shall have the meaning provided in Section 13(d)(3) of the Exchange Act and the rules and regulations promulgated thereunder, but shall exclude any institutional underwriter purchasing Voting Securities in connection with an underwritten registered offering for purposes of a distribution of such securities.
 - (z) "Indemnified Party" has the meaning set forth in Section 4.5(c).

- (aa) "Indemnifying Party" has the meaning set forth in Section 4.5(c).
- (bb) "Initial Lock-Up Period" means the period ending two Business Days prior to the first anniversary of the Share Acquisition Closing, in the case of Alcatel, and the Asset Purchase Closing, in the case of Corning.
- (cc) "Initial Registration Statement" has the meaning set forth in Section 4.1(a).
 - (dd) "Lock-Up Exceptions" has the meaning set forth in Section 3.1(a).
 - (ee) "New Securities" has the meaning set forth in Article 5.
- (ff) "Alcatel" has the meaning set forth in the preamble hereto and includes any Person controlling Alcatel.
- (gg) "Alcatel Shares" has the meaning set forth in the recitals hereto.
- (hh) "Participating Stockholder" has the meaning set forth in Section $4.2\,\mathrm{(b)}$.
- (ii) "Person" shall mean any Person, individual, corporation, partnership, trust, limited liability company or other non-governmental entity or any governmental agency, court, authority or other body (whether foreign, federal, state, local or otherwise).
- (jj) "Piggyback Registrable Securities" has the meaning set forth in Section $4.2\,\mathrm{(a)}$.
- (kk) "Piggyback Registration Statement" has the meaning set forth in Section $4.2\,\mathrm{(a)}$.
 - (11) "Piggyback Request" has the meaning set forth in Section 4.2(a).
- (mm) "Piggyback Underwriting Agreement" has the meaning set forth in Section $4.2\,\mathrm{(b)}$.
- (nn) "Public Offering Lock-Up" has the meaning set forth in Section 4.8.

- (oo) "Purchase Agreement" has the meaning set forth in the recitals hereto.
 - (pp) "Quarter" has the meaning set forth in Section 3.1(b)(i).
- (qq) "Register," "registered" and "registration" refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act, and the declaration or ordering of the effectiveness of such registration statement.
- (rr) "Registrable Securities" means (i) the Alcatel Shares, (ii) the Corning Shares and (iii) any securities issued in respect of the foregoing as a result of any stock split, stock dividend, recapitalization, or similar transaction.
- (ss) "Restricted Securities" has the meaning set forth in Section 3.2(a).

- (tt) "Securities Act" means the United States $\,$ Securities Act of 1933, as amended.
- (uu) "SEC" means the United States Securities and Exchange Commission or any other United States federal agency administering the Securities Act.
 - (vv) "Second Quarter" has the meaning set forth in Section 3.1(b)(i).
 - (ww) "Standstill Period" has the meaning set forth in Section 2.1.
- (\mbox{xx}) "Stockholders" and "Stockholder" have the meanings set forth in the preamble hereto.
 - (yy) "Substitute Director" has the meaning set forth in Section 6.2.
- (zz) "Suspension Condition" has the meaning set forth in Section 4.3(g).
 - (aaa) "Suspension Period" has the meaning set forth in Section 4.3(g).
 - (bbb) "Third Quarter" has the meaning set forth in Section 3.1(b)(i).
- (ccc) "Voting Securities" means all securities of Avanex entitled, in the ordinary course, to vote in the election of directors of Avanex, and all options, warrants, convertible securities or other rights to acquire any Securities of Avanex or securities or instruments exchangeable or exercisable for, or convertible into, Securities of Avanex; provided that Voting Securities shall not include stockholder rights or other comparable securities that acquire such voting rights only upon the happening of a trigger event or comparable contingency and which can only be transferred together with the Securities to which they attach. References herein to meetings of holders of Voting Securities shall include meetings of any class or type thereof.
- All capitalized terms used and not defined herein shall have the respective meanings assigned to such terms in the Purchase Agreement.

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ARTICLE 2

STANDSTILL AND RELATED COVENANTS

- 2.1 Standstill Provisions. Beginning on the date of this Agreement until the third anniversary of the Share Acquisition Closing, in the case of Alcatel, or the Asset Purchase Closing, in the case of Corning (in each case, as applicable to such Stockholder, the "Standstill Period"), without the prior written consent of the Board or approval by vote at a meeting of the Board (excluding, in the case of Corning, the Corning Designee), each Stockholder covenants and agrees not to, and that it shall not cause or permit its respective Affiliates to, directly or indirectly, alone or in concert with any other Affiliate, group or Person:
 - (a) except for the Alcatel Shares and the Corning Shares, acquire, offer or propose to acquire or agree to acquire, directly or indirectly, whether through market purchases, tender or exchange offer, acquisition of control (including by way of merger or consolidation) or otherwise, record or beneficial ownership of, or the right to vote, any Avanex Securities; provided, however, that the prior written consent of the Board shall not be required for (i) the acquisition of any Avanex Securities resulting from a stock split, stock dividend or similar recapitalization by Avanex, or (ii)

incidental indirect investments made by employee benefit plan-related trusts;

- (b) propose or seek to effect a merger, consolidation, recapitalization, reorganization, restructuring, sale, lease, exchange or other disposition of substantially all of the assets of, or other business combination involving, or a tender or exchange offer for securities of, Avanex or any of its subsidiaries or any material portion of Avanex's or such subsidiary's business or assets, or any other type of transaction that would result in the stockholders of Avanex immediately preceding such transaction holding, directly or indirectly, less than fifty percent (50%) of the equity interests in the surviving or resulting entity of such transaction or in any parent entity immediately following such transaction (any such action in this Section 2.1(b) being referred to herein as an "Avanex Transaction Proposal");
- (c) publicly seek to exercise any control or influence over the management of Avanex or the Board or any of the businesses, operations or policies of Avanex, provided, however, that the Corning Designee may take any action necessary in order for such designee to fulfill his or her fiduciary obligations to the stockholders of Avanex;
- (d) solicit proxies (or written consents) or assist or participate in any other way, directly or indirectly, in any solicitation of proxies (or written consents), or otherwise become a "participant" in a "solicitation," or assist any "participant" in a "solicitation" (as such terms are defined under the Exchange Act) in opposition to the recommendation or proposal of the Board; or

- (e) except as contemplated herein, form, join in or in any other way (including by deposit of Avanex Securities) participate in a "group" with unaffiliated Persons, or in a partnership, pooling agreement, syndicate or voting trust, with respect to any of Avanex Securities, or enter into any agreement or arrangement or otherwise act in concert with any other unaffiliated Person, for the purpose of acquiring, holding, voting or disposing of any of Avanex Securities; provided, however, that the provisions of this Section 2.1 shall not apply to any acquisition by Alcatel or any of its Affiliates, or by Corning or any of its Affiliates, of up to five percent (5%) in the aggregate of Avanex Securities pursuant to an acquisition, business combination or merger with an entity that holds Avanex Securities on the date of the closing of such acquisition, business combination or merger.
- 2.2 Voting. Without the prior written consent of the full Board:
- (a) For so long as Corning owns 5% or more of the outstanding Voting Securities, (i) Corning shall take such action (and shall cause each Affiliate of Corning that beneficially owns Voting Securities to take such action) as may be required so that all Voting Securities beneficially owned by Corning (or any such Affiliate of Corning) from time to time are voted on all matters to be voted on by holders of Voting Securities in the manner recommended by a majority of the Board, and (ii) Corning (or any Affiliate of Corning), as the holder of Voting Securities, shall be present, in Person or by proxy, at all meetings of the stockholders of Avanex so that all Voting Securities beneficially owned by Corning (or such Affiliate of Corning) from time to time may be counted for the purposes of determining the presence of a quorum at such meetings.
 - (b) For so long as Alcatel owns 5% or more of the outstanding Voting

- Securities, (i) Alcatel shall take such action (and shall cause each Affiliate of Alcatel that beneficially owns Voting Securities to take such action) as may be required so that all Voting Securities beneficially owned by Alcatel (or any such Affiliate of Alcatel) from time to time are voted on all matters to be voted on by holders of Voting Securities in the manner recommended by the Board; and (ii) Alcatel (or any Affiliate of Alcatel), as the holder of Voting Securities, shall be present, in Person or by proxy, at all meetings of the stockholders of Avanex so that all Voting Securities beneficially owned by Alcatel (or such Affiliate of Alcatel) from time to time may be counted for the purposes of determining the presence of a quorum at such meetings; provided that the foregoing voting obligations of Alcatel shall not apply with respect to any Avanex Transaction Proposal between Avanex and any competitor of Alcatel listed on Schedule I hereto.
- (c) The foregoing provisions shall also apply to the execution by Corning or Alcatel, as the case may be, of any written consent in lieu of a meeting of holders of Voting Securities.

ARTICLE 3

RESTRICTIONS ON TRANSFER OF SECURITIES; COMPLIANCE WITH SECURITIES LAWS

3.1 Restrictions on Transfer.

(a) During the Initial Lock-Up Period, each Stockholder covenants and agrees that it shall not, and shall not cause or permit any of its respective Affiliates to, effect any Disposition with respect to any Avanex Securities now owned or hereafter acquired, or with respect to which Corning or Alcatel (or any of their respective Affiliates) has or hereafter acquires the power of disposition, subject to the following exceptions for Dispositions (the "Lock-Up Exceptions"):

- (i) to any Person or group $% \left(1\right) =\left(1\right) +\left(1\right)$
- (ii) to its Affiliate, so long as such Affiliate agrees in writing (in form reasonably acceptable to Avanex) to hold such Avanex Securities subject to all the provisions of this Agreement, and so agrees to transfer such Avanex Securities to Corning or Alcatel, as the case may be, or another Affiliate of Corning or Alcatel, as the case may be, if it ceases to be an Affiliate of Corning or Alcatel, as the case may be; and
- (iii) in response to a tender offer or exchange offer made by Avanex or recommended by the Board, or pursuant to a merger, consolidation or other business combination involving Avanex approved by the Board.
- (b) Following the expiration of the Initial Lock-Up Period, the following restrictions on transfer shall apply:
 - (i) In each case subject to the continued application of the Lock-Up Exceptions: (A) from the expiration of the Initial Lock-Up Period until the end of the calendar quarter in which the Initial Lock-Up Period expires (the "First Release Period"), Corning may effect Dispositions of up to 10% of the Corning Shares, (B) in the first calendar quarter following the expiration of the First Release Period (the "First Quarter"), but in any event at least 30 calendar

days after the last Disposition effected by Corning during the First Release Period, Corning may effect Dispositions of up to an additional 10% of the Corning Shares on a Cumulative Basis (as defined below) such that, at the end of the First Quarter, Corning holds at least 80% of the Corning Shares, (C) in the second calendar quarter following the expiration of the First Release Period (the "Second Quarter"), Corning may effect Dispositions of up to an additional 10% of the Corning Shares on a Cumulative Basis such that, at the end of the Second Quarter, Corning holds at least 70% of the Corning Shares, (D) in the third calendar quarter following the expiration of the First Release Period (the "Third Quarter"), Corning may effect Dispositions of up to an additional 10% of the Corning Shares on a Cumulative Basis such that, at the end of the Third Quarter, Corning holds at least 60% of the Corning Shares, (E) in the fourth calendar quarter following the expiration of the First Release Period (the "Fourth Quarter," and each of the First Quarter, Second Quarter, Third Quarter and Fourth Quarter, a "Quarter"), Corning may effect Dispositions of up to an additional 10% of the Corning Shares on a Cumulative Basis such that, at the end of the Fourth Quarter, Corning holds at least 50% of the Corning Shares, and (F) following the expiration of the Fourth Quarter, there will be no further restrictions on Dispositions by Corning pursuant to this Agreement. For purposes of this Section 3.1, "Cumulative Basis" means that, in any given calendar quarter, the Stockholder may transfer the number of Consideration Shares permitted to be transferred in that calendar quarter plus a number of Consideration Shares equal to the difference between (x) the aggregate maximum number of Consideration Shares permitted to be transferred in the previous calendar quarter(s) and (y) the number of Consideration Shares actually transferred by the relevant Stockholder.

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(ii) In each case subject to the continued application of the Lock-Up Exceptions: (A) during the First Release Period, Alcatel may effect Dispositions of up to 10% of the Alcatel Shares, (B) in the First Quarter, but in any event at least 30 calendar days after the last Disposition effected by Alcatel during the First Release Period, Alcatel may effect Dispositions of up to an additional 10% of the Alcatel Shares on a Cumulative Basis such that, at the end of the First Quarter, Alcatel holds at least 80% of the Alcatel Shares, (C) in the Second Quarter, Alcatel may effect Dispositions of up to an additional 10% of the Alcatel Shares on a Cumulative Basis such that, at the end of the Second Quarter, Alcatel holds at least 70% of the Alcatel Shares, (D) in the Third Quarter, Alcatel may effect Dispositions of up to an additional 10% of the Alcatel Shares on a Cumulative Basis such that, at the end of the Third Quarter, Alcatel holds at least 60% of the Alcatel Shares, (E) in the Fourth Quarter, Alcatel may effect Dispositions of up to an additional 10% of the Alcatel Shares on a Cumulative Basis such that, at the end of the Fourth Quarter, Alcatel holds at least 50% of the Alcatel Shares, and (F) following the expiration of the Fourth Quarter, there will be no further restrictions on Dispositions by Alcatel pursuant to this Agreement. Notwithstanding the foregoing, during the Quarter ending December 31, 2004 (the "December Quarter") Alcatel may effect a Disposition or series of Dispositions of Alcatel Shares ("Significant Dispositions") which relate to, in the aggregate, greater than 10% of the Alcatel Shares, provided that, at the end of the December Quarter, Alcatel will continue to hold at least that number of Alcatel Shares equal to the product of (A) the lesser of (i) the actual number of shares of Avanex Common Stock outstanding at the end of the December Quarter or (ii) a mutually agreed upon reasonable estimate of the

minimum number of shares of Avanex Common Stock to be outstanding at the end of the December Quarter multiplied by (B) .199; provided, however, that in the event that, during the December Quarter, Alcatel intends to effect Significant Dispositions, not less than sixty (60) days prior to such Significant Disposition Alcatel and Avanex shall discuss, and agree to, reasonable measures to enable such Significant Dispositions to be made in an orderly manner and to minimize the effect of such Significant Disposition on the public market for Avanex Common Stock, which measures shall include block trades, privately negotiated transactions and underwritten offerings, or any combination thereof; provided, further, that in the event that Alcatel and Avanex do not agree to such measures within a reasonable period, Alcatel and Avanex shall refer the matter to a Financial Arbitrator. The Financial Arbitrator shall be instructed to select the most appropriate available measures to enable such Significant Disposition to be made in an orderly manner and to minimize the effect of such Significant Disposition on the public market for Avanex Common Stock. Following the determination of such measures, the Significant Disposition shall only be made in accordance with the manner(s) of sale selected by the Financial Arbitrator. In the event that Alcatel effects a Significant Disposition in the December Quarter, Alcatel may only effect Dispositions in the Quarter following the December Quarter to the extent that, at the end of such Quarter, Alcatel will hold at least 70% of the Alcatel Shares.

(c) Any Disposition by Corning or Alcatel or any of their respective Affiliates of any Avanex Securities shall be subject in each case to compliance with the Securities Act, including Rule 144 under the Securities Act, and, if applicable, the reasonable requirements of Avanex's transfer agent with respect to sales of securities pursuant to Rule 144.

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(d) Notwithstanding anything in this Agreement to the contrary, during the Standstill Period each Stockholder covenants and agrees that it shall not, and shall not cause or permit any of its respective Affiliates to, make any Disposition to: (A) any Person or group that has (1) announced or commenced an unsolicited offer for any Voting Securities, (2) publicly initiated, proposed or otherwise solicited Avanex stockholders for the approval of one or more stockholder proposals with respect to Avanex or (3) publicly made, or in any way participated in, any solicitation of proxies (or written consents), or otherwise become a "participant" in a "solicitation," or assist any "participant" in a "solicitation" (as such terms are defined under the Exchange Act) in opposition to the recommendation or proposal of the Board; or (B) any Person or group known to the Stockholder or its Affiliates at the time of the Disposition to be accumulating stock on behalf of or acting in concert with any Person or group contemplated by clause (A) of this Section 3.1(d).

3.2 Restrictive Legends.

(a) Any certificate or certificates representing the Consideration Shares and any securities issued in respect of the Consideration Shares as a result of any stock split, stock dividend, recapitalization, or similar transaction (collectively, the "Restricted Securities") shall be stamped or otherwise imprinted with a legend substantially in the following form (in addition to any legend required under applicable state securities laws):

THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE BEEN ACQUIRED FOR INVESTMENT AND HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933. SUCH SHARES MAY NOT BE SOLD OR TRANSFERRED IN THE ABSENCE OF SUCH REGISTRATION OR AN OPINION OF COUNSEL SATISFACTORY TO THE ISSUER AS TO THE AVAILABILITY OF AN EXEMPTION FROM REGISTRATION.

(b) In addition to the legend provided for in Section 3.2(a), any certificate or certificates representing the Restricted Securities and any other Avanex Securities hereafter acquired by the Stockholder shall be stamped or otherwise imprinted with a legend substantially in the following form:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFER, INCLUDING ANY SALE, PLEDGE OR OTHER HYPOTHECATION, WHICH RESTRICTIONS ARE SET FORTH IN A STOCKHOLDERS' AGREEMENT BETWEEN THE ISSUER, CASCADES INCORPORATED AND PARENT, A COPY OF WHICH MAY BE OBTAINED AT NO COST BY WRITTEN REQUEST MADE BY THE HOLDER OF RECORD OF THIS CERTIFICATE TO THE SECRETARY OF THE ISSUER AT THE ISSUER'S PRINCIPAL EXECUTIVE OFFICES.

Each Stockholder consents to Avanex making a notation on its records and giving instructions to any transfer agent of the Restricted Securities in order to implement the restrictions on transfer established in this Article 3.

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3.3 Procedures for Certain Transfers.

- (a) Prior to any proposed transfer of any Restricted Securities, a Stockholder shall give written notice to Avanex of its intention to effect such transfer; provided, however, that such notice shall not be required for transfers made to Affiliates pursuant to the terms of Section 3.1(a)(ii) or transfers made pursuant to a Piggyback Registration Statement. Except for a proposed transfer of Restricted Securities to be made pursuant to a Registration Statement, each such notice shall describe the manner and circumstances of the proposed transfer in sufficient detail, and shall be accompanied by either: (i) a written opinion of legal counsel (including in-house counsel) addressed to Avanex and reasonably satisfactory to Avanex, to the effect that the proposed transfer of Restricted Securities will not require registration of such Restricted Securities under the Securities Act; or (ii) a "no action" letter from the SEC and a copy of the request letter by such Stockholder (together with all supplements or amendments thereto), which shall have been provided to Avanex at or prior to the time of first delivery to the SEC's staff, to the effect that the transfer of such Securities without registration will not result in a recommendation by the staff of the SEC that action be taken with respect thereto, whereupon such Stockholder shall be entitled to transfer such Restricted Securities in accordance with the terms of the notice delivered by such Stockholder to Avanex.
- (b) Each certificate evidencing the Restricted Securities shall bear the appropriate restrictive legend set forth in Section 3.2(a) above, except that the legend and the stock transfer instructions and record notations with respect to such Restricted Securities shall be removed if: (i) in the opinion of outside or in-house counsel for

Avanex, such legend is not required in order to establish compliance with any provisions of the Securities Act; (ii) the Stockholder provides Avanex with an opinion of counsel reasonably acceptable to Avanex to the effect that a transfer of such Restricted Securities may be made without registration under the Securities Act, or (iii) the Stockholder provides Avanex with reasonable assurances, which may, at the option of Avanex, include an opinion of counsel satisfactory to Avanex, that such Restricted Securities can be sold pursuant to section (k) of Rule 144 under the Securities Act. Each certificate evidencing Restricted Securities shall bear the appropriate restrictive legend set forth in Section 3.2(b) above, except that the legend and the stock transfer instructions and record notations with respect to such Restricted Securities shall be removed upon the earlier to occur of (x) a transfer in accordance with the provisions of this Article 3 that does not require the transferee to be bound by this Article 3, and (y) expiration of the restrictions on transfer set forth in Section 3.1.

- 3.4 Covenant Regarding Exchange Act Filings.
 - (a) With a view to making available to the Stockholders the benefits of Rule 144 under the Securities Act and any other rule or regulation of the SEC that may at any time permit any Stockholder to sell securities of Avanex to the public without registration, Avanex agrees to:
 - (i) Make and keep public information available, as those terms are understood and defined in SEC Rule 144;
 - (ii) File with the SEC in a timely manner all reports and other documents required of Avanex under the Securities Act and the Exchange Act; and
 - (iii) Furnish to each Stockholder, so long as such Stockholder owns any Avanex Securities, forthwith upon request (A) a written statement by Avanex that it has complied with the reporting requirements of SEC Rule 144; (B) a copy of the most recent annual or quarterly report of Avanex and such other reports and documents so filed by Avanex; and (C) such other information as may be reasonably requested to allow such Stockholder to avail itself of any rule or regulation of the SEC which permits the selling of any such securities without registration.

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(b) For so long as Alcatel holds five percent (5%) or more of the outstanding shares of Avanex Common Stock, Avanex shall provide to Alcatel, in addition to any reports that may be filed with the SEC, periodic updates (but in no event less frequently than quarterly) as to the status and development of the business of Avanex, through meetings with the senior executives of Avanex if requested by Alcatel.

ARTICLE 4

REGISTRATION RIGHTS

- 4.1 Initial Registration; Demand Registration.
 - (a) Avanex shall use its commercially reasonable efforts to cause

ten percent (10%) of the Registrable Securities held by each Stockholder to be registered under the Securities Act, upon the expiration of the Initial Lock-Up Period, so as to permit the offering and sale thereof in compliance with the restrictions on transfer set forth in Section 3.1(b). Avanex shall use its commercially reasonable efforts to prepare and file with the SEC, prior to the expiration of the Initial Lock-Up Period, and shall use its commercially reasonable efforts to cause to become effective upon the expiration of the Initial Lock-Up Period, a registration statement on Form S-3 under the Securities Act (or if such form is not available, any registration statement form then available to Avanex) (the "Initial Registration Statement") to effect such registration. Each Stockholder shall provide all such reasonable information and materials and take all such reasonable actions as may be required under applicable laws in order to permit Avanex to comply with all applicable requirements of the Securities Act, the Exchange Act and the rules and regulations of the SEC thereunder, and to obtain any desired acceleration of the effective date of such Initial Registration Statement. No later than 45 days prior to the expiration of the Initial Lock-Up Period, each Stockholder shall provide notice to Avanex describing the nature or method of distribution of Registrable Securities pursuant to the Initial Registration Statement (including, in particular, whether the Stockholder plans to effect such distribution by means of an underwritten offering). Prior to the beginning of each Quarter, Avanex shall file such amendments or supplements to the Initial Registration Statement and each prospectus used in connection therewith as may be necessary to increase the number of Registrable Securities that may be offered and sold by each Stockholder pursuant to such Initial Registration Statement to the extent necessary to allow each Stockholder to offer and sell, pursuant to the Initial Registration Statement, the number of Registrable Securities permitted to be transferred by such Stockholder pursuant to Section 3.1(b) during such Quarter.

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(b) If at any time after the expiration of the Fourth Quarter and prior to the termination of the registration rights of a Stockholder pursuant to Section 4.10, Avanex shall receive from such Stockholder (a "Demanding Stockholder") a written request (a "Demand Request") that Avanex register on Form S-3 under the Securities Act (or if such form is not available, any registration statement form then available to Avanex) any Registrable Securities not already sold or transferred by such Stockholder, then Avanex shall use commercially reasonable efforts to cause the Registrable Securities specified in such Demand Request (the "Demand Registrable Securities") to be registered as soon as reasonably practicable after receipt of such Demand Request. In connection with any Demand Request, Avanex shall prepare and file with the SEC as soon as practicable after receipt of such Demand Request, and shall use its commercially reasonable efforts to cause to become effective as soon as practicable thereafter, a registration statement (a "Demand Registration Statement") to effect such registration; provided, that Avanex shall be permitted to consolidate into a single Demand Registration Statement the Demand Registrable Securities proposed to be offered and sold by each of Alcatel and Corning pursuant to any Demand Requests. Each Demand Request shall: (i) specify the number of Demand Registrable Securities intended to be offered and sold by the Stockholder pursuant thereto; (ii) express the present intention of the Demanding Stockholder to offer or cause the offering of such Demand Registrable Securities pursuant to such Demand Registration Statement, (iii) describe the nature or method of

distribution of such Demand Registrable Securities pursuant to such Demand Registration Statement (including, in particular, whether the Demanding Stockholder plans to effect such distribution by means of an underwritten offering); and (iv) contain the undertaking of the Demanding Stockholder to provide all such reasonable information and materials and take all such reasonable actions as may be required under applicable laws in order to permit Avanex to comply with all applicable requirements of the Securities Act, the Exchange Act and the rules and regulations of the SEC thereunder, and to obtain any desired acceleration of the effective date of such Demand Registration Statement.

(c) The procedures to be followed by Avanex and a Stockholder, and the respective rights and obligations of Avanex and a Stockholder, with respect to the preparation, filing and effectiveness of the Initial Registration Statement and Demand Registration Statements and the distribution of Registrable Securities pursuant to the Initial Registration Statement and Demand Registration Statements under this Section 4.1 are set forth in Section 4.3.

4.2 Piggyback Registration.

(a) If at any time after the date of this Agreement and prior to the termination of a Stockholder's registration rights pursuant to Section 4.10, Avanex shall determine to register any of its Common Stock under the Securities Act (other than (i) registration statements relating to employee, consultant or director compensation or incentive arrangements, including employee benefit plans, (ii) registration statements pursuant to Rule 415 under the Securities Act or any successor rule with similar effect (except that such registration statements shall be considered PiggyBack Registration Statements (as defined below) to the extent of any drawdown from such registration) or (iii) any registration statement on Form S-4 with respect to any merger, consolidation or acquisition), then Avanex will promptly give each Stockholder written notice thereof and include in such registration statement (a "Piggyback Registration Statement"), and in any underwriting involved therein, all Registrable Securities (the "Piggyback Registrable Securities") specified in a written request made by either Stockholder (a "Piggyback Request") within five (5) Business Days after receipt of such written notice from Avanex, subject to the restrictions on transfer set forth in Section 3.1.

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- (b) If the Piggyback Registration Statement of which Avanex gives notice is for an underwritten offering, Avanex shall so advise the Stockholders as a part of the written notice given pursuant to Section 4.2(a). In such event, the right of a Stockholder to registration pursuant to this Section 4.2 shall be conditioned upon the agreement of such Stockholder to participate in such underwriting and in the inclusion of such Piggyback Registrable Securities in the underwriting to the extent provided herein. Upon the request of the managing underwriter, the Stockholder making the Piggyback Request (the "Participating Stockholder") shall (together with Avanex and any other holders distributing Securities pursuant to such Piggyback Registration Statement, if any) enter into an underwriting agreement (the "Piggyback Underwriting Agreement") in customary form with the underwriter or underwriters selected for such underwriting by Avanex.
- (c) Notwithstanding any other provision of this Agreement, if the managing underwriters of any underwritten offering as to which a

Stockholder has made a Piggyback Registration Statement determine, in their sole discretion, that, after including all the shares proposed to be offered by Avanex and all the shares of any other Persons entitled to registration rights with respect to such Piggyback Registration Statement, marketing factors require a limitation of the number of Piggyback Registrable Securities to be underwritten, Avanex may exclude Piggyback Registrable Securities. The securities that are entitled to be included in the underwritten offering shall be allocated as follows: (i) first, to Avanex for securities being sold for its own account, (ii) second, to the Stockholders requesting to include Avanex Securities in such registration statement based on the pro rata percentage of Avanex Securities held by such holders and (iii) third, to the other holders of Avanex Securities requesting to include Avanex Securities in such registration statement based on the pro rata percentage of Avanex Securities held by such holders; provided, however, that prior to December 31, 2004, the securities that are entitled to be included in the underwritten offering shall be allocated as follows: (i) first, to the Stockholders requesting to include Avanex Securities in such registration statement based on the pro rata percentage of Avanex Securities held by such holders, (ii) second, to Avanex for securities being sold for its own account and (iii) third, to the other holders of Avanex Securities requesting to include Avanex Securities in such registration statement based on the pro rata percentage of Avanex Securities held by such holders.

- (d) If a Participating Stockholder does not agree to the terms of any such underwriting, such Stockholder shall be excluded from registering any of its Avanex Securities pursuant to the subject Piggyback Registration Statement by written notice from Avanex or the underwriter. Any Registrable Securities or other securities excluded or withdrawn from such underwriting shall be withdrawn from such registration.
- (e) Except to the extent specifically provided in this Section 4.2, the procedures to be followed by Avanex and the Stockholders, and the respective rights and obligations of Avanex and the Stockholders, with respect to the distribution of any Piggyback Registrable Securities by the Stockholders pursuant to any Piggyback Registration Statement filed by Avanex shall be as set forth in the Piggyback Underwriting Agreement, or any other agreement or agreements governing the distribution of such Piggyback Registrable Securities pursuant to such Piggyback Registration Statement.
- (f) Notwithstanding the foregoing (but subject to Section 4.2(c) hereof), nothing in this Section 4.2, or any other provision of this Agreement, shall be construed to limit the right of Avanex, in its reasonable discretion: (i) to delay, suspend or terminate the filing of any Piggyback Registration Statement; (ii) to delay the effectiveness of any Piggyback Registration Statement; (iii) to reduce the number of securities to be distributed pursuant to any Piggyback Registration Statement; or (iv) to withdraw such Piggyback Registration Statement.

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4.3 Registration Procedures, Rights and Obligations. The procedures to be followed by Avanex, Alcatel and Corning, and the respective rights and obligations of Avanex, Alcatel and Corning, with respect to the preparation, filing and effectiveness of the Initial Registration Statement and any Demand Registration Statements (collectively, the "Registration Statements") and the distribution of Registrable Securities pursuant

thereto, are as follows:

- (a) The Stockholders shall not be entitled to make any Demand Request until the expiration of the Fourth Quarter, and shall not be entitled to make more than one (1) Demand Request each; provided, however, that any Demand Request that: (A) does not result in the corresponding Demand Registration Statement being declared effective by the SEC; (B) is withdrawn by the Demanding Stockholder following the imposition of an order by the SEC with respect to the corresponding Demand Registration Statement; (C) is withdrawn by the Demanding Stockholder as a result of the exercise by Avanex of its suspension rights pursuant to Sections 4.3(f) or (g), or (D) is withdrawn by the Demanding Stockholder as a result of a Demand Market Cut-Back (as hereinafter defined), shall not count as a Demand Request. Any Demand Request that is withdrawn by the Demanding Stockholder for any reason other than as set forth in the previous sentence shall count as a Demand Request.
- (b) Avanex shall use commercially reasonable efforts to keep the Registration Statements continuously effective until the termination of the Stockholders' registration rights pursuant to Section 4.10 or until such time as all Registrable Securities registered pursuant to such Registration Statement have been sold. Avanex shall prepare and file with the SEC such amendments and supplements to each Registration Statement and each prospectus used in connection therewith as may be necessary to make and to keep such Registration Statement effective and to comply with the provisions of the Securities Act with respect to the sale or other disposition of all Registrable Securities proposed to be distributed pursuant to such Registration Statement until the termination of the Stockholders' registration rights pursuant to Section 4.10.
- (c) If Alcatel proposes to effect the Disposition of more than seven (7) million Registrable Securities or if Corning proposes to effect the Disposition of more than five (5) million Registrable Securities, in each case in any ninety (90) day period, then such Stockholder and Avanex shall discuss, and agree to, reasonable measures to enable such Disposition to be made in an orderly manner and to minimize the effect of such Disposition on the public market for Avanex Common Stock, which measures shall include block trades, privately negotiated transactions and underwritten offerings, or any combination thereof; provided, that in the event that such Stockholder and Avanex do not agree to such measures within a reasonable period, such Stockholder and Avanex shall refer the matter to a Financial Arbitrator. The Financial Arbitrator shall be instructed to select the most appropriate measures available to enable such Disposition to be made in an orderly manner and to minimize the effect of such Disposition on the public market for Avanex Common Stock. Following the determination of such measures, the Disposition shall only be made in accordance with the manner(s) of sale selected by the Financial Arbitrator.

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(d) In connection with any underwritten offering pursuant to a Demand Registration Statement, the Demanding Stockholder shall select, and Avanex shall approve, which approval shall not be unreasonably withheld, one investment banking firm to serve as manager of such offering. The manager is hereinafter referred to as the "Demand Managing Underwriter." Avanex shall, together with the Demanding Stockholder, enter into an underwriting agreement with the Demand

Managing Underwriter, which agreement may contain representations, warranties, indemnities and agreements then customarily included by an issuer in underwriting agreements with respect to secondary distributions under demand registration statements and may stipulate that the Demand Managing Underwriter will receive commissions and fees and other remuneration in connection with the distribution of any Demand Registrable Securities.

- (e) Notwithstanding any other provision of this Agreement, the number of Demand Registrable Securities proposed to be distributed by a Stockholder pursuant to any underwritten offering may be limited by and at the discretion of the Demand Managing Underwriter if, in the discretion of the Demand Managing Underwriter, marketing factors required a limitation of the number of shares to be underwritten (a "Demand Market Cut-Back"). The securities that are entitled to be included in the underwritten offering shall be allocated to the Stockholders and other holders of Avanex Securities requesting to include such Avanex Securities in such registration statement based on the pro rata percentage of Avanex Securities held by such holders.
- (f) Notwithstanding any other provisions of this Agreement, in the event that Avanex receives a Demand Request at a time when Avanex (i) shall have filed, or has a bona fide intention to file, a registration statement with respect to a proposed public offering of equity or equity-linked securities, or (ii) has commenced, or has a bona fide intention to commence, a public offering of equity or equity-linked securities pursuant to an existing effective shelf or other registration statement, then Avanex shall be entitled to suspend, for a period of up to ninety (90) days after the receipt by Avanex of such Demand Request, the filing of any Demand Registration Statement.
- (q) Notwithstanding any other provision of this Agreement, in the event that Avanex determines that: (i) non-public material information regarding Avanex exists, the immediate disclosure of which would be detrimental to Avanex; (ii) the prospectus constituting a part of any Registration Statement covering the distribution of any Registrable Securities contains an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; or (iii) an offering of Registrable Securities would materially interfere with any proposed material acquisition, disposition or other similar corporate transaction or event involving Avanex (each of the events or conditions referred to in clauses (i), (ii) and (iii) of this sentence is hereinafter referred to as a "Suspension Condition"), then Avanex shall have the right to suspend, for a maximum period of 30 days (the "Suspension Period"), (A) the filing or effectiveness of any Registration Statement or (B) any distribution of Registrable Securities pursuant to any effective Registration Statement. Avanex will as promptly as practicable provide written notice to a Stockholder when a Suspension Condition arises and when it ceases to exist. Upon receipt of notice from Avanex of the existence of any Suspension Condition, such Stockholder shall forthwith discontinue efforts during the Suspension Period to: (i) cause Avanex to file or cause any Registration Statement to be declared effective by the SEC (in the event that such Registration Statement has not been filed, or has been filed but not declared effective, at the time such Stockholder receives notice that a Suspension Condition has arisen); or (ii) offer or sell Registrable Securities (in the event that such Registration Statement has been declared effective at the time such Stockholder receives notice that a Suspension Condition has arisen).

In the event that a Stockholder had previously commenced or was about to commence the distribution of Registrable Securities pursuant to a prospectus under an effective Registration Statement, then Avanex shall, as promptly as practicable after the Suspension Condition ceases to exist, make available to such Stockholder (and to each underwriter, if any, participating in such distribution) an amendment or supplement to such prospectus. If so directed by Avanex, such Stockholder shall deliver to Avanex all copies, other than permanent file copies then in such Stockholder's possession, of the most recent prospectus covering such Registrable Securities at the time of receipt of such notice.

- (h) Notwithstanding any other provision of this Agreement, Avanex shall not be permitted to postpone the filing or effectiveness of any Registration Statement or the distribution of any Registrable Securities pursuant to an effective Registration Statement pursuant to Sections 4.2(f), 4.3(g) or 4.8(a): (i) more than two (2) times in any 365 day period, or (ii) (A) with respect to Section 4.2(f), for an aggregate of more than 180 days or (B) with respect to Section 4.3(g), for an aggregate of more than 120 days (in either case, excluding any market standoff periods applicable pursuant to Section 4.8) in any 365 day period.
- (i) Avanex shall promptly notify a Stockholder of any stop order issued or, to Avanex's knowledge, threatened to be issued by the SEC with respect to any Registration Statement, and will use its commercially reasonable efforts to prevent the entry of such stop order or to remove it if entered at the earliest possible date.
- (j) Avanex shall furnish to a Stockholder (and any underwriter in connection with any underwritten offering) such number of copies of any prospectus (including any preliminary prospectus and any amended or supplemented prospectus), in conformity with the requirements of the Securities Act, as such Stockholder (and such underwriters) shall reasonably request in order to effect the offering and sale of any Registrable Securities to be offered and sold, but only while Avanex shall be required under the provisions hereof to cause the Registration Statement pursuant to which such Registrable Securities are intended to be distributed to remain current.
- (k) Avanex shall use commercially reasonable efforts to register or qualify the Registrable Securities covered by each Registration Statement under the state securities or "blue sky" laws of such states as a Stockholder shall reasonably request, and maintain any such registration or qualification current, until the termination of the Stockholders' registration rights pursuant to Section 4.10; provided, however, that Avanex shall not be required to take any action that would subject it to the general jurisdiction of the courts of any jurisdiction in which it is not so subject or to qualify as a foreign corporation in any jurisdiction where Avanex is not so qualified.
- (1) Avanex shall furnish to a Stockholder and to each underwriter engaged in an underwritten offering of Registrable Securities, a signed counterpart, addressed to such Stockholder or such underwriter, of (i) an opinion or opinions of counsel to Avanex (with respect to Avanex and securities law compliance by Avanex) and (ii) a comfort letter or comfort letters from Avanex's independent public accountants, each in customary form and covering such matters of the type customarily covered by opinions or comfort letters, as the case

may be, as such Stockholder or the managing underwriters may reasonably request.

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- (m) Avanex shall use commercially reasonable efforts to cause all Registrable Securities to be listed on each securities exchange on which similar securities of Avanex are then listed.
- (n) Avanex shall take all such other actions reasonably necessary to permit the Registrable Securities held by the Stockholders to be registered and disposed of in accordance with the methods of disposition described herein.
- (o) Upon request from a Stockholder, Avanex shall use commercially reasonable efforts to assist in the marketing of the Registrable Securities, including, for example, by participating in roadshow presentations with potential investors, and such other methods as Avanex shall reasonably determine in its sole discretion, and the cost of such efforts shall be paid by the Stockholder requesting such assistance unless Avanex is also marketing Registrable Securities for its own account at such time.
- 4.4 Expenses. Subject to Section 4.5, Avanex shall pay all registration expenses, other than underwriting or selling discounts and commissions, incurred by Avanex in connection with any registration statements that are initiated pursuant to Sections 4.1 or 4.2 of this Agreement, including, without limitation, all SEC, National Association of Securities Dealers, Inc. and blue sky registration and filing fees, printing expenses, transfer agents' and registrars' fees. Subject to Section 4.5, each Stockholder shall pay (i) all expenses incurred by it with respect to any registration pursuant to Sections 4.1 or 4.2, including, without limitation, any counsel for such Stockholder, and (ii) all underwriting discounts and selling commissions with respect to the Registrable Securities sold by it pursuant to such registration statement.

4.5 Indemnification.

(a) In the case of any offering registered pursuant to this Section 4, to the extent permitted by law, Avanex will indemnify and hold harmless each Stockholder, its Affiliates and their respective officers and directors, any underwriter (as defined in the Securities Act) and each Person, if any, who controls such Persons within the meaning of Section 15 of the Securities Act against any losses, claims, damages or liabilities, joint or several, to which any such Persons may be subject, under the Securities Act or otherwise, and to reimburse any of such Persons for any legal or other expenses reasonably incurred by them in connection with investigating any claims or defending against any actions, insofar as such losses, claims, damages or liabilities arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the registration statement under which such Registrable Securities were registered under the Securities Act pursuant to this Section 4, the prospectus contained therein (during the period that Avanex is required to keep such prospectus current), or any amendment or supplement thereto, or the omission or alleged omission to state therein (if so used) a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances in which they were made, not misleading, except insofar as such losses, claims, damages or liabilities arise out of or are (i) based upon any such untrue statement or omission or alleged untrue

statement or omission made in reliance upon information furnished to Avanex in writing by the Stockholder or any underwriter for the Stockholder specifically for use therein, or (ii) made in any preliminary prospectus, and the prospectus contained in the registration statement as declared effective or in the form filed by Avanex with the SEC pursuant to Rule 424 under the Securities Act shall have corrected such statement or omission and a copy of such prospectus shall not have been sent or otherwise delivered to such Person at or prior to the confirmation of such sale to such Person.

- (b) By requesting registration under this Section 4, each Stockholder agrees, if Registrable Securities held by it are included in the securities as to which such registration is being effected, in the same manner and to the same extent as set forth in the preceding paragraph, to indemnify and to hold harmless Avanex, its Affiliates and their respective directors and officers and each Person, if any, who controls such Persons within the meaning of the Securities Act against any losses, claims, damages or liabilities, joint or several, to which any of such Persons may be subject under the Securities Act or otherwise, and to reimburse any of such Persons for any legal or other expenses incurred in connection with investigating or defending against any such losses, claims, damages or liabilities, but only to the extent it arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission of a material fact in any registration statement under which the Registrable Securities were registered under the Securities Act pursuant to this Section 4, any prospectus contained therein, or any amendment or supplement thereto, and which is information furnished to Avanex in writing by such Stockholder expressly for use therein.
- (c) Each party entitled to indemnification under this Section 4.5 (the "Indemnified Party") shall give notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party shall be approved by the Indemnified Party (whose approval shall not be unreasonably withheld), and the Indemnified Party may participate in such defense at its own expense, and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 4.5unless such failure is materially prejudicial to the Indemnifying Party's ability to defend such claim. No Indemnifying Party, (i) in the defense of any such claim or litigation, shall, except with the consent of each Indemnified Party, which consent shall not be unreasonably withheld, consent to entry of any judgment or enter into any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation, or (ii) shall be liable for amounts paid in any settlement if such settlement is effected without the consent of the Indemnifying Party, which consent shall not be unreasonably withheld.
- 4.6 Issuances by Avanex or Other Holders. As to each registration or distribution referred to in Section 4.1, additional shares of Avanex Securities to be sold for the account of Avanex or other holders may be included therein; provided that the inclusion of such Avanex Securities in such registration or distribution may be conditioned or restricted in

accordance with the allocation set forth in Section 4.3(e) if, in the opinion of the Demand Managing Underwriters, marketing factors require a limitation of the number of shares to be underwritten.

4.7 Information by the Stockholders. Each Stockholder shall furnish to Avanex such information regarding such Stockholder in the distribution of Registrable Securities proposed by such Stockholder as Avanex may reasonably request in writing and as shall be required in connection with any registration, qualification or compliance referred to in this Article 4.

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- 4.8 Market Standoff Agreement. For so long as any Stockholder (together with its Affiliates) owns five percent (5%) or more of the outstanding Avanex Securities, in connection with the public offering by Avanex of any Avanex Securities, such Stockholder agrees that, upon the request of Avanex or the underwriters managing any underwritten offering of Avanex's Securities, the Stockholder shall agree in writing (the "Public Offering Lock-Up") that neither such Stockholder (nor any Affiliate of such Stockholder) will effect any Disposition of any Avanex Securities (other than those included in such registration statement, if any) now or hereafter acquired by such Stockholder (or any Affiliate of such Stockholder) or with respect to which such Stockholder (or any Affiliate of such Stockholder) has or hereafter acquires the power of disposition without the prior written consent of Avanex and such underwriters for such period of time (ninety (90) days after the date of the final prospectus delivered to the underwriters for use in confirming sales in such offering) as may be requested by Avanex and the underwriters; provided, however, that neither such Stockholder nor any Affiliate of such Stockholder shall be bound by such Public Offering Lock-Up more than twice during any twelve month period. Each Stockholder agrees that Avanex may instruct its transfer agent to place stop-transfer notations in its records to enforce the provisions of the Public Offering Lock-Up contained in this Section 4.8. Notwithstanding the foregoing, during the December Quarter Alcatel shall be entitled to engage in Dispositions pursuant to the provisions of Section 3.1(b)(ii) to the extent necessary to enable Alcatel to reduce the number of Alcatel Shares held by Alcatel, as of the end of the December Quarter, to less than 20% of the outstanding shares of Avanex Common Stock.
- 4.9 Restrictions on Transfer. Notwithstanding anything in this Article 4, any Disposition by a Stockholder of Avanex Securities, whether by way of a registered offering or otherwise, shall comply with the restrictions on transfer set forth in Section 3.1.
- 4.10 Termination. The provisions of this Article 4 with respect to registration rights shall terminate as to each Stockholder on the date when all Registrable Securities held by such Stockholder may immediately be sold under Rule $144\,(k)$ during any ninety (90) day period.

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ARTICLE 5

RIGHT OF FIRST REFUSAL

Until the earlier to occur of: (i) five years after the date of the Share Acquisition Closing, in the case of Alcatel, or the Asset Purchase Closing, in the case of Corning; and (ii) such time as such Stockholder (and any Affiliates of such Stockholder) beneficially own in the aggregate less than five percent

(5%) of the Voting Securities, Avanex will give each Stockholder at least 30 days prior written notice of the issuance by Avanex of any Avanex Securities ("New Securities"). Such notice must set forth (a) the type of New Securities proposed to be issued and sold and the material rights and preferences of such New Securities, (b) the proposed price or range of prices at which such New Securities are proposed to be sold and the terms of payment, (c) the number of such New Securities to be offered for sale, and (d) the purpose of the offering, and any other material feature, term or condition relating to such New Securities or the proposed sale thereof. Upon receipt of such notice from Avanex, each Stockholder will have the right, but not the obligation, to purchase up to its pro-rata share of such New Securities. Such pro-rata share, for purposes of this Article 5, for any Stockholder is the ratio of (x) the total number of Avanex Securities held by such Stockholder prior to the issuance of New Securities to (y) the total number of Avanex Securities outstanding immediately prior to the issuance of New Securities held by all stockholders of Avanex. Each Stockholder's purchase must be on the same terms and conditions as the balance of such issuance of New Securities; provided, however, if the sale price at which Avanex proposes to issue, deliver or sell any New Securities is to be paid with consideration other than cash, then the purchase price at which Corning or Alcatel may acquire its portion of such New Securities will be equal in value (as determined in good faith by the Board or, at the request of Alcatel, an independent appraiser selected by Alcatel) but payable entirely in cash. The closing of each Stockholder's purchase of its portion of such New Securities will occur simultaneously with the closing of the balance of the issuance of such New Securities; provided, however, if as of the date of said closing all necessary approvals of governmental authorities required in connection with the issuance of such New Securities have not been obtained by Avanex and/or a Stockholder then (i) such Stockholder will not be required to effect the purchase of its portion of such New Securities until all necessary governmental authority approvals are obtained and (ii) Avanex may terminate such Stockholder's right to purchase its portion of such New Securities if such Stockholder fails to obtain any necessary governmental authority approvals applicable only to such Stockholder within 90 days of the closing of the balance of the issuance of such New Securities (unless such approval cannot reasonably be obtained within such 90 day period or the failure to obtain such approval is caused by any action or inaction by Avanex). If at any time the terms of a proposed issuance of New Securities are materially changed, altered or modified from those stated in Avanex's notice to the Stockholders of the proposed issuance thereof, then such proposed issuance will be treated as a new issuance of New Securities, subject to the notice obligation of Avanex set forth above and any election of a Stockholder to purchase its portion of such New Securities prior to such change, alteration or modification may, in the sole discretion of such Stockholder, be withdrawn.

Notwithstanding the foregoing, "New Securities" shall not include:

- (i) securities issued or issuable to officers, employees, directors, consultants, placement agents, and other service providers of Avanex (or any subsidiary of Avanex) pursuant to stock grants, option plans, purchase plans, agreements or other employee stock incentive programs or arrangements approved by the Board (including the Avanex Corporation 1999 Director Option Plan, the Avanex Corporation 1998 Stock Plan and the Avanex Corporation 1999 Employee Stock Purchase Plan);
- (ii) securities issued pursuant to the exercise of any exercisable securities outstanding as of the later to occur of the Asset Purchase Closing or the Share Acquisition Closing;

- (iii) securities issued or issuable pursuant to the acquisition of another corporation by Avanex by merger, purchase of securities, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are approved by the Board;
- (iv) securities issued or issuable to banks, equipment lessors or other financial institutions pursuant to a commercial leasing or debt financing transaction approved by the Board;
- (v) securities issued or issuable in connecting with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board;
- (vi) in the case of Corning, securities which are otherwise excluded by the affirmative unanimous vote of the Board; and
- (vii) any right, option or warrant to acquire any security convertible into the securities excluded from the definition of New Securities pursuant to subsections (i) through (vi) above.

ARTICLE 6

BOARD OF DIRECTORS

- 6.1 Election of Directors. At the Asset Purchase Closing and for so long as Corning owns five percent (5%) or more of the outstanding shares of Avanex Common Stock, Avanex will nominate and use its reasonable efforts to have one individual designated by Corning and reasonably acceptable to Avanex (the "Corning Designee") elected to the Board (including increasing the size of the Board as of the Asset Purchase Closing and appointing the Corning Designee to fill a new position on the Board resulting from such increase, and at each annual or special meeting of stockholders of Avanex at which directors are to be elected, causing the Board to recommend to the stockholders of Avanex that such Corning Designee be elected as a member of the Board and soliciting proxies and voting such proxies in favor of the election of such Corning Designee to the Board) to serve for a term of not more than three (3) years.
- 6.2 Replacement Directors. In the event that the Corning Designee designated in the manner set forth in Section 6.1 is unable to serve, or once having commenced to serve, is removed or withdraws from the Board, such withdrawing director's replacement (the "Substitute Director") will be designated by Corning; provided, however that such Substitute Director is reasonably acceptable to Avanex. Avanex agrees to nominate and use its reasonable efforts to cause the election of such Substitute Director, promptly following his or her nomination pursuant to this Section 6.2.
- 6.3 Resignation of Directors. In the event that Corning owns less than 5% of the outstanding shares of Avanex Common Stock, then Avanex may at such time request the Corning Designee to resign from the Avanex Board of Directors, and within five (5) days following such request, the Corning Designee shall resign from the Avanex Board of Directors.

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ARTICLE 7

REPRESENTATIONS AND WARRANTIES

- 7.1 Representations and Warranties of Avanex.
- (a) Existence and Power. Avanex is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware.
- (b) Authorization. The execution, delivery and performance of this Agreement by Avanex are within Avanex's powers and have been duly authorized by all necessary action on the part of Avanex. This Agreement constitutes a legal, valid and binding agreement of Avanex, enforceable against Avanex in accordance with its terms, except (i) as such enforcement is limited by bankruptcy, insolvency and other similar laws effecting the enforcement of creditors' rights generally and (ii) for limitations imposed by general principles of equity.
- (c) Compliance. The execution, delivery and performance of this Agreement by Avanex requires no action by or in respect of, or filing with, any governmental or non-governmental body, agency or official or any other Person other than as required by any applicable requirements of the Securities Act, the Exchange Act and other filings or notifications that are immaterial to the consummation of the transactions contemplated hereby.
- (d) Non-contravention. The execution, delivery and performance of this Agreement by Avanex does not and will not (a) violate the internal governance documents of Avanex, (b) violate any applicable law, rule, regulation, judgment, injunction, order or decree binding upon Avanex, except for any such violations which would be immaterial to Avanex, or (c) constitute a default under any agreement or other instrument binding upon Avanex.
- 7.2 Representations and Warranties of Corning.
- (a) Existence and Power. Corning is a corporation duly organized, validly existing and in good standing under the laws of the State of New York.
- (b) Authorization. The execution, delivery and performance of this Agreement by Corning are within Corning's powers and have been duly authorized by all necessary action on the part of Corning. This Agreement constitutes a legal, valid and binding agreement of Corning, enforceable against Corning in accordance with its terms, except (i) as such enforcement is limited by bankruptcy, insolvency and other similar laws effecting the enforcement of creditors' rights generally and (ii) for limitations imposed by general principles of equity.
- (c) Compliance. The execution, delivery and performance of this Agreement by Corning requires no action by or in respect of, or filing with, any governmental or non-governmental body, agency or official or any other Person other than as required by any applicable requirements of the Exchange Act and other filings or notifications that are immaterial to the consummation of the transactions contemplated hereby.

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(d) Non-contravention. The execution, delivery and performance of this Agreement by Corning does not and will not (a) violate the internal governance documents of Corning, (b) violate any applicable law, rule, regulation, judgment, injunction, order or decree binding upon Corning, except for any such violations which would be immaterial to Corning, or (c) constitute a default under any agreement or other instrument binding upon Corning.

- (e) Corning Ownership of Avanex Securities. On the date hereof and as of the Asset Purchase Closing, without giving effect to the transactions contemplated by the Purchase Agreement, neither Corning nor any Affiliate of Corning beneficially owns any Avanex Securities.
- 7.3 Representations and Warranties of Alcatel.
- (a) Existence and Power. Alcatel is a societe anonyme duly organized, validly existing and in good standing under the laws of the Republic of France. $\$
- (b) Authorization. The execution, delivery and performance of this Agreement by Alcatel are within Alcatel's powers and have been duly authorized by all necessary action on the part of Alcatel. This Agreement constitutes a legal, valid and binding agreement of Alcatel, enforceable against Alcatel in accordance with its terms, except (i) as such enforcement is limited by bankruptcy, insolvency and other similar laws effecting the enforcement of creditors' rights generally and (ii) for limitations imposed by general principles of equity.
- (c) Compliance. The execution, delivery and performance of this Agreement by Alcatel requires no action by or in respect of, or filing with, any governmental or non-governmental body, agency or official or any other Person other than as required by any applicable requirements of the Exchange Act and other filings or notifications that are immaterial to the consummation of the transactions contemplated hereby.
- (d) Non-contravention. The execution, delivery and performance of this Agreement by Alcatel does not and will not (a) violate the internal governance documents of Alcatel, (b) violate any applicable law, rule, regulation, judgment, injunction, order or decree binding upon Alcatel, except for any such violations which would be immaterial to Alcatel, or (c) constitute a default under any agreement or other instrument binding upon Alcatel.
- (e) Alcatel Ownership of Avanex Securities. On the date hereof and as of the Share Acquisition Closing, without giving effect to the transactions contemplated by the Purchase Agreement, neither Alcatel nor any Affiliate of Alcatel beneficially owns greater than one percent (1%), either individually or in the aggregate, of all outstanding Avanex Securities.

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ARTICLE 8

MISCELLANEOUS

- 8.1 Amendment; Waiver. Neither this Agreement nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by each beneficiary of the waiver, discharge, amendment or termination and the obligor under any such amendment, waiver, discharge or termination.
 - 8.2 Notices.

All notices and other communications hereunder shall be in writing and shall be deemed duly given (i) on the date of delivery if delivered personally, (ii) on the date of confirmation of receipt (or, the first Business Day following such receipt if the date is not a Business Day) of transmission by telecopy or telefacsimile or (iii) on the date of confirmation of receipt (or, the first Business Day following such receipt if the date is not a Business Day) if delivered by a nationally recognized courier service. All notices hereunder

shall be delivered as set forth below, or pursuant to such other instructions as may be designated in writing by the party to receive such notice:

(a) if to Avanex, to:

Avanex Corporation 40919 Encyclopedia Circle Fremont, CA 94538, USA

Attention: Chief Executive Officer

Fax: 510-897-4189

with copies to:

Wilson Sonsini Goodrich & Rosati, Professional Corporation 650 Page Mill Road Palo Alto, CA 94304 Attention: Mark A. Bertelsen Steve L. Camahort

Fax: 650-493-6811

(b) if to Alcatel, to:

Alcatel
54, rue la Boetie
75008 Paris, France
Attention: General Counsel
Fax: 011-331-4076-1435

with a copy to:
Proskauer Rose LLP
1585 Broadway
New York, NY 10036
Attention: Ronald R. Papa
Lauren K. Boglivi

Fax: 212-969-2900

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(c) if to Corning, to:

Corning Incorporated
One Riverfront Plaza
Corning, New York 14831-0001
Attention: Corporate Secretary
Fax: 607-974-6135

with a copy to:
Nixon Peabody LLP
Clinton Square
P.O. Box 31051
Rochester, NY 14803
Attention: Deborah McLean Quinn
Fax: 866-947-0724

8.3 Interpretation. When a reference is made in this Agreement to Schedules, such reference shall be to a Schedule to this Agreement unless otherwise indicated. When a reference is made in this Agreement to Articles or Sections, such reference shall be to an article or a section of this Agreement, as the case may be, unless otherwise indicated. For purposes of this Agreement, the words "include," "includes" and "including," when used herein, shall be deemed in each case to be followed by the words "without limitation." The table of contents and headings contained in this Agreement are for reference purposes

only and $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

- 8.4 Counterparts. This Agreement may be executed in one or more counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties, it being understood that all parties need not sign the same counterpart.
- 8.5 Entire Agreement; Third-Party Beneficiaries. This Agreement and the documents and instruments and other agreements among the parties hereto as contemplated by or referred to herein, (i) constitute the entire agreement among the parties with respect to the subject matter hereof and supersede all prior agreements and understandings, both written and oral, among the parties with respect to the subject matter hereof, and (ii) are not intended to confer upon any other Person any rights or remedies hereunder, except as specifically provided in Section 4.5.
- 8.6 Severability. In the event that any provision of this Agreement or the application thereof, becomes or is declared by a court of competent jurisdiction to be illegal, void or unenforceable, the remainder of this Agreement will continue in full force and effect and the application of such provision to other Persons or circumstances will be interpreted so as reasonably to effect the intent of the parties hereto. The parties further agree to replace such void or unenforceable provision of this Agreement with a valid and enforceable provision that will achieve, to the greatest extent possible, the economic, business and other purposes of such void or unenforceable provision.

- 8.7 Other Remedies; Specific Performance. Except as otherwise provided herein, any and all remedies herein expressly conferred upon a party will be deemed cumulative with and not exclusive of any other remedy conferred hereby, or by law or equity upon such party, and the exercise by a party of any one remedy will not preclude the exercise of any other remedy. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to seek an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions hereof in any court of the United States or any state having jurisdiction, this being in addition to any other remedy to which they are entitled at law or in equity.
- 8.8 Governing Law; Jurisdiction. This Agreement shall be governed by and construed in accordance with the laws of the State of New York, regardless of the laws that might otherwise govern under applicable principles of conflicts of law thereof. Each party hereby (a) irrevocably and unconditionally submits to the exclusive jurisdiction of the Delaware Court of Chancery, with respect to all actions and proceedings arising out of or relating to this Agreement and the transactions contemplated hereby, (b) agrees that all claims with respect to any such action or proceeding shall be heard and determined in such courts and agrees not to commence an action or proceeding relating to this Agreement or the transactions contemplated hereby except in such courts, (c) consents to service of process upon him, her or it by mailing or delivering such service to the address set forth in Section 8.2 hereof, and (d) agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Each party hereby irrevocably and unconditionally waives, and agrees not to assert, by way of motion, as a defense, counterclaim or otherwise, in any action or proceeding with respect to this Agreement, (i) the defense of sovereign

immunity, (ii) any claim that it is not personally subject to the jurisdiction of the above-named courts for any reason other than the failure to serve process in accordance with this Section 8.8, (iii) that it or its property is exempt or immune from jurisdiction of any such court or from any legal process commenced in any such court (whether through service of notice, attachment prior to judgment, execution of judgment or otherwise), and, to the fullest extent permitted by applicable law, that (A) the suit, action or proceeding in any such court is improper, (B) the venue of such suit, action or proceeding is improper and (C) this Agreement, or the subject matter hereof, may not be enforced in or by such courts.

- 8.9 Rules of Construction. The parties hereto agree that they have been represented by counsel during the negotiation and execution of this Agreement and, therefore, waive the application of any law, regulation, holding or rule of construction providing that ambiguities in an agreement or other document will be construed against the party drafting such agreement or document.
- 8.10 Assignment. No Stockholder may assign either this Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of Avanex, and Avanex may not assign either this Agreement or any of its rights, interests, or obligations hereunder without the prior written approval of the Stockholders; provided that, without the approval of Avanex, a Stockholder may assign this Agreement (and the rights and obligations hereunder) to any Affiliate in connection with a transfer of Avanex Securities to such subsidiary pursuant to Section 3.1(a)(ii), and without the approval of the Stockholders, Avanex may assign all or part of this Agreement (and the rights and obligations hereunder) to the successor or an assignee of all or

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substantially all of Avanex's business; provided further that, in each case, such assignee expressly assumes the relevant obligations of this Agreement (by a written instrument delivered to the other parties, in form and substance reasonably acceptable to them) and, notwithstanding such assignment, the parties hereto shall each continue to be bound by all of their respective obligations hereunder. Any purported assignment in violation of this Section 8.10 shall be void. Subject to the preceding sentence, this Agreement shall be binding upon and shall inure to the benefit of the parties hereto and their respective successors and permitted assigns.

- 8.11 Waiver of Jury Trial. EACH PARTY HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT OR THE ACTIONS OF ANY PARTY IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE AND ENFORCEMENT HEREOF.
- 8.12 Further Assurances. Each party hereto agrees to execute and deliver, by the proper exercise of its corporate or other powers, all such other and additional instruments and documents and do all such other acts and things as may be necessary to more fully effectuate this Agreement.
- 8.13 Automatic Adjustments to Share Numbers. All numbers regarding the number of shares of Avanex shall be appropriately and automatically adjusted to take into account any stock splits, stock dividend or combination or other reclassification occurring after the date hereof.
- 8.14 Liability. The right and obligations of each of Corning and Alcatel under this Agreement shall be several and not joint. All references to actions to be taken by the Stockholders under this Agreement refer to actions to be taken by Corning and Alcatel acting severally and not jointly.

[Signature page follows]

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

AVANEX CORPORATION

By:

Name:

Title:

ALCATEL

By:

Name:

Title:

CORNING INCORPORATED

By:

Name:

Title:

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Exhibit 99.4 To Schedule 13D

JOINT FILING AGREEMENT

The undersigned hereby agree that a Statement on Schedule 13D ("Schedule 13D") with respect to the shares of the common stock of Avanex Corporation (CUSIP No. 05348W 10 9) be executed and filed on behalf of each of the undersigned pursuant to and in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, and that this Agreement shall be included as an exhibit to the Schedule 13D, and may be included in any such amendment. Each of the undersigned agrees to be responsible for the timely filing of the Schedule 13D and any amendments thereto, and for the completeness and accuracy of the information concerning itself, himself or herself, jointly and not severally, contained therein. This Agreement may be executed in any

number of counterparts, all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the undersigned have executed this Agreement this 22nd day of May, 2003.

CORNING INCORPORATED

By: /s/ Denise A. Hauselt
----Denise A. Hauselt,
Secretary and Assistant General
Counsel

/s/ Denise A. Hauselt
----Denise A. Hauselt