| 06-01-19   | Docket No. 53335USA2A  |
|--|--|
| PAIENIA  | <b>ON COVER SHEET</b>  |
| To the Honorable Commissione   |  |
| Please record the attached origi 1007235   | 32   |
| <ol> <li>Name of conveying party(ies):<br/>Charles W. Haggans, Wayne F. Varner<br/>and Jau-Sheng Wang</li> </ol> | 2. Name and address of receiving party(ies)  |
|  | Minnesota Mining and Manufacturing Company<br>P.O. Box 33427<br>St. Paul, Minnesota 55133-3427       |
| Additional names of conveying party(ies) attached?   |  |
| 3. Nature of conveyance: 🛛 Assignment  |  |
| Execution Date(s): April 3, 1998 and April 8, 1998   |  |
| 4. Application number or patent number:  |  |
| This document is being filed with a new patent a   |  |
| This document is to be recorded against the follo  | owing patent application or patent: <u>09/023,626</u>  |
| 5. Name and address of party to whom correspondence concerning document should be mailed:                        | 6. Total number of applications and patents involved:  |
| Néstor F. Ho<br>Minnesota Mining and Manufacturing Company   | 1  |
| Office of Intellectual Property Counsel<br>P.O. Box 33427  | x \$40.00  |
| St. Paul, Minnesota 55133-3427   | 40.00<br>7. Total fee (37 CFR 3.41) \$ <u>40</u> . Please charg<br>it to Deposit Account No. 13-3723 |
| DO NOT USE   | E THIS SPACE   |
|  |  |
| 8. Statement and signature.  |  |
| To the best of my knowledge and belief, the foregoing<br>is a true copy of the original document.                |  |
| Néstor F. Ho   | May 12, 1998   |
| Printed Name of Attorney Signature   | Date   |
| Total number of pages including cover  |  |
| Form Rec-Asn.doc Rev. 6/11/96 Mail documents to be recorded with   |  |
| /1998 TTOH11 00000088 133723 09023626  | 27.2538610100115, Tr 65111182011, 12-C. 292-31   |
| 1:581 40.00 CH   |  |
|  | PATENT   |

## ASSIGNMENT

Whereas we, the below named inventors, with residences and citizenships as indicated below; have made an invention in

## **BORON-DOPED OPTICAL FIBER**

and have executed an application for Letters Patent of the United States of America based thereon; which application is identified in the United States Patent and Trademark Office as U.S. Application Serial No. 09/023,626, filed February 13, 1998;

Now, therefore, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto the MINNESOTA MINING AND MANUFACTURING COMPANY (sometimes designated as the Minnesota Mining & Manufacturing Company), a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by the said Company of whichever of us, solely or jointly with one or more others, has made the same), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made,

We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by the said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to the said Minnesota Mining and Manufacturing Company, as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

Witness

Witness

Vitness

Witness

- 98 Date Charles W. Haggans

Residence: Woodbury, Minnesota, U.S.A. Citizenship: United States of America

Warnet Vaine 4/3/98

Wayne B. Varner Residence: Woodbury, Minnesota, U.S.A. Citizenship: United States of America

Witness

Jau-Sheng Wang Residence: West Haven, Connecticut, U.S.A. Citizenship: Taiwan, Republic of China

Date

Date

Witness

3M Office of Intellectual Property Counsel, P.O. Box 33427, St. Paul, Minnesota 55133-3427U.S.A. m-j/020998 REEL: 9196 FRAME: 0184

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And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to the said Minnesota Mining and Manufacturing Company, as the assignee of the entire right, title, and interest therein.

In witness whereof, we have hereunto signed our names on the days and years set forth below.

| Witness                  | Charles W. Haggans<br>Residence: Woodbury, Minnesota, U.S.A.   | Date  |
|--------------------------|--|-------|
| Witness                  | Citizenship: United States of America  |       |
| Witness                  | Wayne F. Varner<br>Residence: Woodbury, Minnesota, U.S.A.<br>Citizenship: United States of America     | Date  |
| Witness                  | . 1  |       |
| William Tweedie          | Jui Shangitung April   | 8,199 |
| Witness<br>Mahanud Ahmed | Jau-Sheng Wang<br>Residence: West Haven, Connecticut, U.S.A.<br>Citizenship: Taiwan, Republic of China | Date  |
| Witness                  |  |       |
|                          | PATENIT  |       |