

ASSIGNMENT

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

THERMALLY MANAGED PACKAGE FOR FIBER OPTIC BRAGG GRATINGS

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. 09/524,862, filed March 14, 2000;

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 3M INNOVATIVE PROPERTIES COMPANY, a wholly owned subsidiary of MINNESOTA MINING AND MANUFACTURING COMPANY, and 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 Minnesota Mining and Manufacturing Company and any of its existing or future subsidiaries 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;

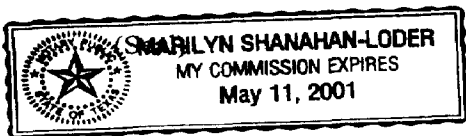
And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to the said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

James R. Bylander
James R. Bylander
Residence: Austin, Texas USA
Citizenship: United States of America

STATE OF TEXAS)
) ss.
COUNTY OF TRAVIS

On this 22nd day of May, 2000, before me personally appeared the above-named James R. Bylander, personally known by me, and known by me to be the person described in and who executed the foregoing instrument, and who acknowledged that said person executed the same as said person's free act and deed, on the day and year aforesaid.

Marilyn Shanahan-Loder
Marilyn Shanahan-Loder
Notary Public

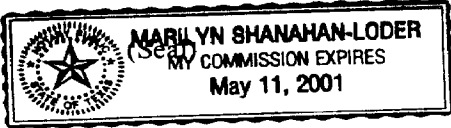


Grieg A. Olson

Grieg A. Olson
Residence: Austin, Texas USA
Citizenship: United States of America

STATE OF TEXAS)
) ss.
COUNTY OF TRAVIS)

On this 23rd day of May, 2000, before me personally appeared the above-named Grieg A. Olson, personally known by me, and known by me to be the person described in and who executed the foregoing instrument, and who acknowledged that said person executed the same as said person's free act and deed, on the day and year aforesaid.



Marilyn Shanahan-Loder

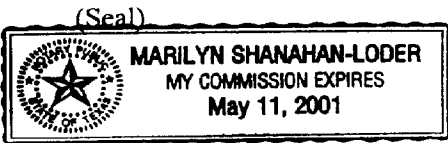
Notary Public

Martin G. Afflerbaugh

Martin G. Afflerbaugh
Residence: Austin, Texas USA
Citizenship: United States of America

STATE OF TEXAS)
) ss.
COUNTY OF TRAVIS)

On this 17th day of May, 2000, before me personally appeared the above-named Martin G. Afflerbaugh, personally known by me, and known by me to be the person described in and who executed the foregoing instrument, and who acknowledged that said person executed the same as said person's free act and deed, on the day and year aforesaid.



Marilyn Shanahan-Loder

Notary Public