Case Name: Brown 12-5-4-2

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HEET

To the Honorable Commissioner of Patents and Trademarks: Please record the attached documents or copy thereof. (1) Conveying Party(ies): John T. Brown Xiaodong Fu Mahendra K. Misra Frederic J-Y Ouan Title: METHOD TO DETERMINE THE IDENTITY OF A MATERIAL IN AN OBJECT Additional name(s) of conveying party(ies) attached? Yes \square No \square (2) Receiving Party: Corning Incorporated Patent Dept.; SP-TI-03-1 Corning, NY 14831 (3) Nature of conveyance: Assignment executed: 11/04/99, 11/05/99, 11/04/99, 11/03/99. (4) Application number(s) and/or patent number(s) against which this assignment is to be recorded: A. Patent Application No.(s): B. Patent No.(s): 09/434700 Filing date: Filing date: If this document is being filed together with a new application, this assignment is also to be recorded against said application, executed on 11/04/99, 11/05/99, 11/04/99, 11/03/99 (5) Name and address of party to whom correspondence concerning document should be mailed: Name: Timothy R. Krogh Reg. No. 40,688 Corning Incorporated Patent Department SP-TI-03-1 Corning, NY 14831 Phone No.: (607) 974-2743 (6) Total Number of applications and/or patents involved: one (7) Total Fee = \$40.00Enclosed (Check No.) Included with filing fee. Check No. ____. Authorization given by Corning Incorporated to charge deposit account number 03-3325 (attached is a triplicate copy of this page) To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Timothy R. Krogh

Total number of pages comprising cover sheet: three

11/17/1999 JSHABAZZ 00000138 033325 09434700

ACCOUNTENC COPY

ASSIGNMENT

FOR VALUE RECEIVED, I, as a below name inventor, hereby sell, assign and transfer unto Corning Incorporated, a corporation organized and existing under the laws of the State of New York, having its principal place of business at Corning, New York. (hereinafter CORNING), as assignee, and unto its successors, assigns and legal representatives, the entire right, title and interest, for all countries, in and to certain inventions relating to a **METHOD TO DETERMINE THE IDENTITY OF A MATERIAL IN AN OBJECT**, such inventions being generally described in an application for Letters Patent of the United States executed on

DATE	11-4-99
DATE	11-5-99
DATE	11 - 4 - 99
DATE	11-3-99

respectively, patent application Serial No. filed by us in the United States on, and in any future patent applications claiming the benefit of the filing date of that application, and all the rights and privileges under any and all Letters Patents that may be granted therefore.

I request that any and all patents for said inventions be issued to CORNING, its successors, assigns and legal representatives, or to such nominees as CORNING may designate.

I agree that, when requested, I will, without charge to CORNING and at CORNING's expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in CORNING, its successors, assigns and legal representatives or nominees.

I authorize and empower CORNING, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for said Convention or entered as a supplement to, and to invoke and claim such right of priority without further written or oral authorization.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of CORNING, or its successors, assigns and legal representatives or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it or entered as a supplement to it.

I covenant with CORNING, its successors, assigns and legal representatives or nominees, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Case Name: Brown 12-5-4-2

Signed at Corning, NY, this		\wedge .	Ouse Ivalie, Blown 12 5 4 2
11-4-39	1999	John J. Brown	nm'
11-6-89	1999	Xiaodong Fu	- The
11/4/99	1999	Mahendra K. Misra	<u>Li</u>
3 Nevember	1999	Frederic J-Y Quan	Liftuan
State of New York) : ss.			
County of Steuben)			
On the HT day of November and who executed the foregoing ins	1999, befor trument, and	e me personally came John T. acknowledged that they execu	Brown known to be the person described in ted the same.
	,	Sutlin Notary Public	M. Hynes
State of New York)			Susan M. Hynes Notary Public State of New York No. 01449023100
: ss. County of Steuben)			Qualified in Steuben County Commission Expires April 19, 20 0/
On the Sth day of Neverby	_ 1999, befo	re me personally came Xiaodo	ong Fu known to be the person described in
and who executed the foregoing ins	trument, and	A service and they exceed	ted the same. The Hypie o
		Notary Public	V
State of New York) : ss.			Susan M. Hynes Notary Public State of New York No. 01HY6023186 Qualified in Steuben County Commission Expires April 19, 20
County of Steuben)	i		
On the day of	held 1999, beforegoing ins	trument, and acknowledged tha	•
		Notary Public	M. Hynes
State of New York)		Colory Lucine	Susan M. Hynes Notary Public State of New York No. 01HY6023186
: ss. County of Steuben)			Qualified in Steuben County Commission Expires April 19, 20
On the $\frac{3}{2}$ day of Novemble described in and who executed the f	<u>⊬€√</u> 1999, be foregoing inst	trument, and acknowledged that	
		Notary Public	M. Hognes
			Susan M. Hynes Notary Public State of New York No. 01HY6023186 Qualified in Steuben County Commission Expires April 19, 20 01

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I request that any and all patents for said inventions be issued to CORNING, its successors, assigns and legal representatives, or to such nominees as CORNING may designate.

I agree that, when requested, I will, without charge to CORNING and at CORNING's expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in CORNING, its successors, assigns and legal representatives or nominees.

I authorize and empower CORNING, its successors, assigns and legal representatives or nominees, to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for said Convention or entered as a supplement to, and to invoke and claim such right of priority without further written or oral authorization.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of CORNING, or its successors, assigns and legal representatives or nominees to claim the aforesaid benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it or entered as a supplement to it.

I covenant with CORNING, its successors, assigns and legal representatives or nominees, that the rights and property herein conveyed are free and clear of any encumbrance, and that I have full right to convey the same as herein expressed.

Case Name: Brown 12-5-4-2 Signed at Corning, NY, this 11-4-99 1999 John. 11-6-29 1999 Xiaodong Fu 1999 1999 Frederic J-Y State of New York) County of Steuben) On the Handay of November 1999, before me personally came John T. Brown known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same. Susan M. Hyrres Notary Public State of New York No. 01HY6023186 State of New York) Qualified in Steuben County Commission Expires April 19, 20 O County of Steuben) On the Same day of November 1999, before me personally came Xiaodong Fu known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same. Notary Public Susan M. Hynes Notary Public State of New York No. 01HY6023186 State of New York) Qualified in Steuben County Commission Expires April 19, 20 County of Steuben) On the day of Novembar999, before me personally came Mahendra K. Misra known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

State of New York)

County of Steuben)

Notary Public State of New York No. 01HY6023186 Qualified in Steuben County

Commission Expires April 19, 200

On the 3 day of November 1999, before me personally came Frederic J-Y Quan known to be the person described in and who executed the foregoing instrument, and acknowledged that they executed the same.

Susan M. Hynes Notary Public State of New York No. 01HY6023186 Qualified in Steuben County

Commission Expires April 19, 20 Q

RECORDED: 11/05/1999