FORM PTO-1619A Expires 06/30/99 OMB 0651-0027

01-03-2002



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Name (line 1)	Atsushi			12 12 01
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Name	Millen, White, Zelano & Branigan,	P.C.		
Address (line 1)	2200 Clarendon Boulevard			
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Address (line 3)	Arlington, VA 22201			
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Correspondent	Name and Address	Area Code and Telephone Number	(703) 243-6333	
Name	Millen, White, Zelano &	Branigan, P.C.		
Address (line 1)	2200 Clarendon Boulev	/ard		
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		June Comer	December 27, 2001	
June Comer Name of Pers	son Signing	Signature	Date	

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rianie (mie 2)	10010AINO10			 Executio	n Date
				Month Da	ny Year
Name (line 1)	Yukio			12	12 01
Name (line 2)	SHIBANO				
			- 102	Executio	n Date
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Application Num	ber(s) or Patent Numb	er(s) [Mark if addition	al numbers attached	
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PATENT REEL: 012405 FRAME: 0969

ASSIGNMENT

WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to

Silica Glass Substrates and Their Selection

for which an application for Letters Patent to be filed in the United States Patent and Trademark	Office was execute	fice was executed on	
even date. for which U.S. Application Serial Nofor Letters Pate	ant was filed in the	u.s.	
 Patent and Trademark Office on	/	,	
AND WHEREAS Shin-Etsu Chemical Co., Ltd. of 6-1, Otemachi, 2-chome, Chiyoda-ku, Tokyo, Japan			

hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof.

NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged. ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made.

AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representatives and to execute any other papers that may be needed in connection with filling said applications and securing Letters Patents thereon.

AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.

The undersigned hereby grant(s) the law firm of Millen, White, Zelano & Branigan, P.C. the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR.

201 FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
	49 D 7 XI	12/12/2001
Masaki TAKEUCHI	INVENTOR'S SIGNATURE	DATE
202 FULL NAME OF SECOND JOINT INVENTOR, IF ANY	Ya wa Tin	12/12/200/
Atsushi WATABE	3/3 OY 18	DATE
203 FULL NAME OF THIRD JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	1 1 2
	松平 哲义	
Tetsushi TSUKAMOTO 204 FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
	Y Stobar	12/12/200/
Yukio SHIBANO	INVENTOR'S SIGNATURE	DATE
205 FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	HATELY COLORS	
	INVENTOR'S SIGNATURE	DATE
206 FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATORE	
200 FOLL HAME S. S.		DATE
207 FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE) Bare
207 FULL NAME OF SEVENTH SOME		
The state of the s	INVENTOR'S SIGNATURE	DATE
208 FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY		
	INVENTOR'S SIGNATURE	DATE
209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATIONS	
209 FOLL HOME 31		DATE
210 FULL NAME OF TENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	37.1.2
210 FULL NAME OF TENTH JOHN INVESTIGATION		
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211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY		
	INVENTOR'S SIGNATURE	DATE
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