Assi Dire 4 P.O Ale:	ector and T . Box xand	p: ent Recordation Services of the U.S. Patent PATENTS  rademark Office x 1450 lria, VA 22313-1450  cord the attached document.  mber of pages including cover sheet, attachments, and document	TS ONLY Patent and Trademark  Attorney Docket No. 157941		
1,	A. B.	Name of conveying parties:  [1] Tetsuya SHINJO  [2] Hiroaki OKUYAMA  [3] Keisuke HASHIMOTO  [4] Yasunobu SOMEYA  [5] Ryo KARASAWA  [6] Masakazu KATO  Additional name(s) of conveying party(ies) attached?  ☐ Yes ☒ No	2. A. Name and address of receiving party:  NISSAN CHEMICAL INDUSTRIES, LTD.  7-1, KANDA-NISHIKI-CHO 3-CHOME, CHIYODA-KU, TOKYO 1010 JAPAN  B. Additional name(s) & address(es) attached?	054,	
3.	A.	Nature of conveyance:  Assignment	☐Yes 🎑 No		
4. A. Patent Application No. 13/992,864			B. Patent No.(s)		
	C.	Additional numbers atta  Title of Application: COMPOSITION FOR FORM	iched? Yes No  MING A RESIST UNDERLAYER FILM INCLUDING		
	· ·		NTAINING CARBAZOLE NOVOLAC RESIN		
5,		ne and address of party to whom correspondence cerning document should be mailed:	6. Total number of applications and patents involved:	1	
	Name: James A. Oliff  Address: OLIFF & BERRIDGE, PLC P.O. Box 320850  Alexandria, VA 22320-4850 Phone Number: 703-836-6400 Fax Number: 703-836-2787 Email: email@oliff.com	7. Please charge Deposit Account No. 15-04 total fee (37 CFR 3.41) in the amount of \$40			
		Phone Number: 703-836-6400 Fax Number: 703-836-2787	Credit any overpayment or charge any underpaymen deposit account number 15-0461.	t to	
9.	To to original Jam	tement and signature. The best of my knowledge and belief, the foregoing informational document.  The A. Oliff, Registration No. 27,075 The T. Noel, Registration No. 63,004 Ind M. Guise, Registration No. 46,748	non is true and correct and any attached copy is a true copy of  Date: <u>June 10, 2013</u>	the	

该数次废金工

## ASSIGNMENT

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- 英剛者サイン	
(19F - 1972)	A STATE OF

			"			
(1-8) Insert Name(s)	(1) Tetsuya SHINJO	(5) Ryo KARASAWA				
of Inventor(s)	(2) Hiroaki OKUYAMA	(6) Masakazu KATO				
	(3) Keisuke HASHIMOTO	(7)				
	(4) Yasunobu SOMEYA	(8)				
(6) 7	In consideration of the sum of one dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, each undersigned agrees to assign, and hereby does assign, transfer and set over to					
(9) Insert Name of Assignee (10) Insert Address of	(9) NISSAN CHEMICAL INDUSTRIES, I (10) 7-1. Kanda-Nishiki cho 3-chome. Chiv.	the san standard that the standard of the stan	****			
Assignee	(10) 7-1, Kanda-Nishiki cho 3-chome, Chiv	104'-Kit. 10KV0 1010004, 34H4A	March			
(11) Insert Identification,	(hereinafter designated as the Assignee) and A legal representatives, the entire right, title America as defined in 35 U.S.C. § 100, in the patent including any and all provisional, no substitute, and reissue application(s), and all I reexamination certificates that may be granted (11) COMPOSITION FOR FORMING	and interest for the United States of invention, and in all applications for provisional, divisional, continuation etters Patent, extensions, reissues an on the invention known as	of or n, id			
such as Title, Case Number		3	/			
or Foreign Application	FILM INCLUDING HYDROXYL GROUP-CONTAINING CARBAZOLE NOVOLAC RESIN					
Number	(Attorney Docket No. 157941	)				
	for which the undersigned has (have) executed	an application for pate it in the Unite	d			
(12) Insert Date of Signing of	States of America on even date herewith or (12) on	, e				
Application	A STATE OF THE STA		3000			
(13) Alternative Identification		13/992,864	_			
for filed applications  1) Each undersigned agrees	filed June 10, 2013	ad the highest final still shall be the sealer determination of the season of the seas				
	s to execute all papers necessary in connection was for the invention, and any patent(s) issuing					
assignments in connection with a	such applications and patents as the Assignee m	ay deem necessary.				
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	ition or continuation or division thereof, or an to cooperate with the Assignee in every way po					
forward with such interference.		į.	۵			
_	s to execute all papers and documents and perfo					
agreements.	ction of Industrial Property or simila	ı.				
<u> </u>	s to perform all affirmative acts which may be no	ecessary to obtain, maintain or confirm	n			
- · ·	ant of a valid United States patent to the Assign	É.				
	rizes and requests the Director of Patents to is					
United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest; that he has full right to convey the entire interest herein assigned, and that he has not executed, and w						
any agreements in conflict horowith, and agrees that this assignment is binding on him and his heirs, suc						
assigns and legal representatives 6) Each undersigned hereb		the name of investors this agricumon	. 4			
	y grants the firm of OLIFF & BERRIDGE, PLC may be necessary or desirable in order to comp	7				
Patent and Trademark Office for	recordation of this document.					
In witness whereof, executed by	y the undersigned on the date(s) opposite the	undersigned name(s).				
	ground.	A. 22.				
17-17-17-17-17-17-17-17-17-17-17-17-17-1	entor Signature	Sharje (SEAL)				
Date Jun. 5, 2013 Inv	entor Signature	Ofeingames (SEAL)				
Date Jun. 5, 2013 Inv	entor Signature <u>Acidelle Hi</u>	Whom to (SEAL)				
Date Jun. 5, 2013 Inv		Sonige (SEAL)				
	entor Signature Reservices Station Sta	WA (SEAL)				
	entor Signature <u>Mada haya 1</u>	Kate (SEAL)				
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Date		(SEAL)				
	ly be signed before: (a) a Notary Public if within be signed before at least two witnesses who also	k.	e			
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PATENT REEL: 030620 FRAME: 0593

**RECORDED: 06/10/2013**