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To the Honorable Commissioner of ratents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):	2. Name and address of receiving party(ies):		
Takeshi KINSHO; Tsunehiro NISHI; Hideshi KURIHARA; Koji HASEGAWA; Takeru WATANABE; Osamu WATANABE; Mutsuo NAKASHIMA; Takanobu TAKEDA & Jun HATAKEYAMA	Shin-Etsu Chemical Co., Ltd. Tokyo, Japan		
No additional names attached Mov 2 4 1999	No additional names(s) or address(es) attached		
3. Nature of Conveyance:  ■ assignment □ merger			
□ security agreement □ change of name			
□ other			
XECUTION DATE: October 15, 1999			
4. Application number(s) or patent number(s): THIS DOCUMENT IS NOT BEING FILED WITH A NEW APPLICATION.			
A. Patent Application Number(s) 09/431,139	B. Patent Number(s)		
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1 7. Total fee (37CFR 3.41) \$40.00  Check enclosed		
Name: MILLEN, WHITE, ZELANO & BRANIGAN, P.C. Address: Arlington Court Plaza I	■ Charge any deficiencies in the payment of fees associated with this		
Suite 1400 2200 Clarendon BLVD.	communication or credit any overpayment to		
Arlington, VA 22201	8. DEPOSIT ACCOUNT NO. 13-3402		
DO NOT USE THIS SPACE			
9. Statement and Signature.	ief, the foregoing information is true a true copy of the original document.  November 24, 1999  Date		
To the best of my knowledge and bel and correct and any attached copy is	ief, the foregoing information is true a true copy of the original document.		
////			
Tracy A. Luke	November 24, 1999 <b>S</b>		

## 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

Novel Ester Compounds, Polymers, Resist Compositions

and Patterning Process

for which an application for Letters Patent to be filed in the United States Patent and Trademark Office was executed on even date.

for which U.S. Application Serial No. 09/431,139 for Letters Patent was filed in the U.S. Patent and Trademark Office on November 1, 1999 for which an International Application was filed on PCT/// designating the United States.

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, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as 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 filing 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.

TSUNCHIO NISHI  TSUNCHIO NISHI  TSUNCHIO NISHI  TSUNCHIO NISHI  TSUNCHIO NISHI  TSUNCHIO NISHI  TOCTOBER 15, 19  INVENTOR'S SIGNATURE  DATE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  DATE	201	FULL NAME OF SOLE OR FIRST NAMED INVENTOR	INVENTOR'S SIGNATURE	DATE
TSUNCHITO NISHI  203 FULL NAME OF THIRD JOINT INVENTOR, IF ANY  Hideshi KURIHARA  204 FULL NAME OF FOURTH JOINT INVENTOR, IF ANY  KO ji HASEGAWA  205 FULL NAME OF FIFTH JOINT INVENTOR, IF ANY  TAKERU WATANABE  206 FULL NAME OF SIXTH JOINT INVENTOR, IF ANY  MUSUN NAKASHIMA  207 FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY  MUSUN NAKASHIMA  208 FULL NAME OF FIRTH JOINT INVENTOR, IF ANY  TAKADOBU TAKEDA  209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY  TO SIGNATURE  DATE  October 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  I		Takeshi KINSHO	Takashi Kingho	October 15, 199
PILL NAME OF THIRD JOINT INVENTOR, IF ANY Hideshi KURIHARA  204 FULL NAME OF FOURTH JOINT INVENTOR, IF ANY EVALUATION  RO 11 HASEGAWA  205 FULL NAME OF FIFTH JOINT INVENTOR, IF ANY TAKETU WATANABE  206 FULL NAME OF SIXTH JOINT INVENTOR, IF ANY  207 FULL NAME OF SIZTH JOINT INVENTOR, IF ANY  208 FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY  209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY  209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY  210 FULL NAME OF TENTH JOINT INVENTOR, IF ANY  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  212 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  213 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  214 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  215 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  216 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  217 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  218 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  219 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  212 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  213 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  214 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  215 INVENTOR'S SIGNATURE  216 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  217 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  218 INVENTOR'S SIGNATURE  219 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  212 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  213 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  214 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  215 INVENTOR'S SIGNATURE  216 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  217 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  218 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  219 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVEN	202	FULL NAME OF SECOND JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	
Hideshi KURIHARA  204 FULL NAME OF FOURTH JOINT INVENTOR, IF ANY  KO ji HASEGAWA  205 FULL NAME OF FIFTH JOINT INVENTOR, IF ANY  Takeru WATANABE  206 FULL NAME OF SIXTH JOINT INVENTOR, IF ANY  October 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SI		Tsunehiro NISHI	Trunding Nisha	October 15, 199
Inventor's signature   Date	203	FULL NAME OF THIRD JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
KOji HASEGAWA  205 FULL NAME OF FIFTH JOINT INVENTOR, IF ANY  Takeru WATANABE  206 FULL NAME OF SIXTH JOINT INVENTOR, IF ANY  Osamu WATANABE  207 FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY  Mutsuo NAKASHIMA  208 FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY  Takanobu TAKEDA  209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY  Jun HATAKEYAMA  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  TO SUMMER OF ELEVENTH JOINT INVENTOR, IF ANY  DATE  JUN HATAKEYAMA  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  INVENTOR'S SIGNATURE  DATE  October 15, 19  INVENTOR'S SIGNATURE  DATE		Hideshi KURIHARA	Hideshi Marchan	October 15, 199
Takeru WATANABE  Takeru WATANABE  October 15, 19  NVENTOR'S SIGNATURE  OCTOBER 15, 19	204	FULL NAME OF FOURTH JOINT INVENTOR, IF ANY	1 1	DATE
Takeru WATANABE  206 FULL NAME OF SIXTH JOINT INVENTOR, IF ANY  Osamu WATANABE  207 FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY  Mutsuo NAKASHIMA  208 FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY  Takanobu TAKEDA  209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY  Jun HATAKEYAMA  210 FULL NAME OF TENTH JOINT INVENTOR, IF ANY  INVENTOR'S SIGNATURE  JUN HATAKEYAMA  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  INVENTOR'S SIGNATURE  October 15, 19  INVENTOR'S SIGNATURE  October 15, 19  INVENTOR'S SIGNATURE  October 15, 19  INVENTOR'S SIGNATURE  DATE		Koji HASEGAWA	Koji Nasegaina	October 15, 199
OSAMU WATANABE  OSAMU WATANABE  OSAMU WATANABE  OSAMU WATANABE  OSAMU WATANABE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  OCTOBER 15, 19  OCTOBER 15, 19  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  OCTOBER 15, 19  INVENTOR'S SIGNATURE  DATE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  DATE	205	FULL NAME OF FIFTH JOINT INVENTOR, IF ANY	"INVENTOR'S SIGNATURE	DATE
OSAMU WATANABE  OSAMU WATANABE  OSAMU WATANABE  OSAMU WATANABE  OSAMU WATANABE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  OCTOBER 15, 19  OCTOBER 15, 19  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  OCTOBER 15, 19  INVENTOR'S SIGNATURE  DATE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  OCTOBER 15, 19  INVENTOR'S SIGNATURE  DATE	ĺ	Takeru WATANABE	Treken Watanabe	October 15, 199
Nutsuo Nakashima   Nakashima   October 15, 19	206	FULL NAME OF SIXTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	
Nutsuo Nakashima   Nakashima   October 15, 19		Osamu WATANABE	Coamu Watanale	October 15, 199
208 FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY  TAKANOBU TAKEDA  209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY  JUN HATAKEYAMA  210 FULL NAME OF TENTH JOINT INVENTOR, IF ANY  INVENTOR'S SIGNATURE  October 15, 194  October 15, 194  INVENTOR'S SIGNATURE  October 15, 194  INVENTOR'S SIGNATURE  DATE  Ontakeyama  October 15, 194  INVENTOR'S SIGNATURE  DATE  DATE	207	FULL NAME OF SEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
Takanobu TAKEDA  209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY  100 FULL NAME OF TENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  212 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  213 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  214 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  215 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  216 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  217 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  218 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  219 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  212 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  213 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  214 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  215 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  216 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  217 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  218 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  219 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  210 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY		Mutsuo NAKASHIMA	Mutsua Nahanhuma	October 15, 199
209 FULL NAME OF NINTH JOINT INVENTOR, IF ANY INVENTOR'S SIGNATURE DATE  JUN HATAKEYAMA OCTOBER 15, 19  210 FULL NAME OF TENTH JOINT INVENTOR, IF ANY INVENTOR'S SIGNATURE DATE  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY INVENTOR'S SIGNATURE DATE	208	FULL NAME OF EIGHTH JOINT INVENTOR, IF ANY	1 ~ .	DATE
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210 FULL NAME OF TENTH JOINT INVENTOR, IF ANY INVENTOR'S SIGNATURE DATE  211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY INVENTOR'S SIGNATURE DATE	209	FULL NAME OF NINTH JOINT INVENTOR, IF ANY	1	
211 FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY INVENTOR'S SIGNATURE DATE		Jun HATAKEYAMA	Tun Hatakaja mac	October 15, 199
	210		INVENTOR'S SIGNATURE	DATE
212 FULL NAME OF TWELFTH JOINT INVENTOR, IF ANY INVENTOR'S SIGNATURE DATE	211	FULL NAME OF ELEVENTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE
212 FULL NAME OF TWELFTH JOINT INVENTOR, IF ANY INVENTOR'S SIGNATURE DATE				
	212	FULL NAME OF TWELFTH JOINT INVENTOR, IF ANY	INVENTOR'S SIGNATURE	DATE

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PATENT REEL: 010397 FRAME: 0875