To the Homorable Commissione or copy thereof.  I. Name of conveying party(ies)  LOUIS L. HSU; RAJIV V. JOSH; CARL RADENS; JACK A. MANDELMAN; AND TSORNG-DIH YUAN  Additional name(s) of conveying party(ies)  Additional name(s) of conveying party income the conveying party income the conveyance:  X. Assignment  Security Agreement Morgor  Change of Name Other  To this document is being filed together with a new application, the execution is:  If this document is being filed together with a new application, the execution is party in the application is:  A Patent Application No. (s) 09/769,080 Filed on January 25, 2001  B. Fatent No. (s)  Additional numbers attached?  Yes X No  S. Name and address of party to whom correspondence concerning document should be madele!  Mane:  Faul J. Fartsil. Eag.  DILMOKTH 4 DARRESE, LLP  To the best of my knowledge and belief, the foregoing information is true and correct and attached copy is a true copy of the original document.  Do not use this space  9. Statement and signature  To the best of my knowledge and belief, the foregoing information is true and correct and attached copy is a true copy of the original document.  Do not detach this portion  Neil documents to be recorded with required cover sheet information to:  Commissioner of Patents and Tademarks  Box Assignments  Recover sheet, attached counts and Tademarks  Recover sheet information to:  Commissioner of Patents and Tademarks  Recover sheet information to:		CET U.S. DEPARTMENT OF CO	2001	06-26-	TO 1595	Form PTO 1595
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Treet Address:  DILWORTH & BARRESE, LLP  DILWORTH & BARRESE, LLP  333 Earle Ovington Boulevard  City: Uniondale State: New York Zip: 11553  Do not use this space  Do not use this space  C. Statement and signature.  To the best of my knowledge and belief, the foregoing information is true and correct and attached copy is a true copy of the original document.  Reg. No. 33,494  Paul J. Farrell, Esg. Name of Person Signing  Do not detach this portion  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents and Trademarks  Box Assignments  Washington, D.C. 20231	1_	er of applications and volved	6. Total i	hom ment should be	respondence concerning docum	correspon
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## ASSIGNMENT OF INVENTION

LOUIS L. HSU; RAJIV V. JOSHI; CARL RADENS;

In consideration of the payment by ASSIGNEE to ASSIGNOR of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIGNOR(S):

JACK A. MANDELMAN; and TSORNG-DIH YUAN			
(Inventor(s) or person(s) or entity(es) who own the invention)			
(If assignment is by person or entity to who was recorded in PTO ad	om invention was previously assigned and this d the following)		
Recorded on			
Reel			
Frame			
hereby sells, assigns and transfers to			
ASSIGNEE:			
	International Business Machines Corporation (Type or print name of ASSIGNEE)		
	New Orchard Road Address		
	Armonk, New York 10504		
	U.S.A. Nationality		
	(Assignment of Invention [16-3]	page	1 of 32

and the s	successor	rs, assigns and legal representatives of the ASSIGNEE (complete one of the following)
[x] the e	entire rig	ht, title and interest
[] an ur	ndivided	percent (%) interest for the United States and its territorial possessions
	(check t	he following box if foreign rights are also to be assigned)
		eign countries, including all rights to claim priority, in and to any and all s which are disclosed in the invention entitled:
MET	HOD A	ND APPARATUS FOR ALIGNING THE FRONT AND BACK SIDES OF A SUBSTRATE
(b) (c) (d) (e) (f)	[ ] [X] [ ] filed on _	(check and complete (a), (b), (c) or (d)  d in  U.S. patent application executed on even date herewith  U.S. patent application executed on  U.S. application Serial No. 0 9/769,080 filed on January 25, 2001  U.S. provisional application No. 60/  U.S. Patent No issued  PCT application No.  A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.
		(also check (e) if foreign application(s) is also being assigned)
(g)	[x]	and any legal equivalent thereof in a foreign country, including the right to claim priority
		Letters Patent to be obtained for said invention by the above application or any continuation, art, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination

ASSIGNOR hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

(Assignment of Invention [16-3]-- page 2 of 3)

ASSIGNOR further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, I/we have nereunto set	TTNESS WHEREOF, I/We have hereunto set hand and seal this (Date of signing).			
WARNING: Date of signing must be the same as the co	date of execution of the application if item (a) was checked above.			
1-1-H	1-30-200   Dated			
LOÚIS L. HSU	Dated			
RAJIV V. JOSHI	2/06/ J.1			
/ 6 b	Dated			
ist the	1-30-2031 Dated			
CARL RADENS	Dated			
Jack a. Mandelman	1-30-01			
JACK A. MANDELMAN	Dated			
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TSORNG-DIH YUAN	Dated			
If ASSIGNOR is a legal entity complete the following	ing information			
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	Type or print the name of the above person authorized to sign on behalf of ASSIGNOR			
Title				
NOTE: No witnessing, notarization or legalization is necessal evidence of execution 35 USC 261. Use next page if	ary. If the assignment is notarized or legalized then it will only be prima faci inotarization is desired.			

RECORDED: 06/15/2001

(Assignment of Invention [16-3]-- page 3 of 3)