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(1) Shih-Ming CHENG (2) Wen-Chuan WANG (3) Jan-Wen YOU		Name: Taiwan Se Co., Ltd.	miconductor Manufacturing	
Additional name(s) of conveying party(ies)	attached? ⊠Yes □No	Street Address:	No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77,	
Nature of conveyance:			R.O.C.	
△ Assignment		Additional name(s) &	address(es) attached? ☐ Yes ☒ No ଙૣ	
Execution Date: September 9, 2004		ie		
Application number(s) or patent number				
Cother: Execution Date: September 9, 2004 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: A. Patent application No.(s) 10/935,904 B. Patent No.(s)				
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Name and address of party to whom correspondence concerning document should be mailed:		6. Total number of a	oplications/patents involved: [1]	
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PATENT REEL: 016017 FRAME: 0390

ASSIGNMENT

WHEREAS, Shih-Ming CHANG, Wen-Chuan WANG and Jan-Wen YOU_			
hereafter referred to as ASSIGNOR, has/have invented certain new and useful improvements as			
described and set forth in the below identified application for United States Letters Patent:			
·······································			
Title: METHOD AND SYSTEM FOR ENHANCING IMAGE RESOLUTION			
Filed: September 8, 2004 Serial No.			
Executed on: September 9, 2004			
WHEREAS, Taiwan Semiconductor Manufacturing Co., Ltd. of			
No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park, Hsin-Chu,			
Taiwan 300-77, R.O.C. hereinafter referred to as ASSIGNEE, is desirous of			
acquiring ASSIGNOR'S interest in the said invention and application and in any U.S. Letters			
Patent which may be granted on the same;			
NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has/have sold, assigned and transferred, and by these presents does/do sell, assign and transfer unto the said Assignee, and Assignee's successors and assigns, all his/her/their rights, title and interest in and to the said invention and application and all future improvements thereon, and in and to any Letters Patent which may hereafter be granted on the same in the United States, the said interest to be held and enjoyed by said Assignee as fully and exclusively as it would have been held and enjoyed by said Assignor had this Assignment and transfer not been made, to the full end and term of any Letters Patent which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.			
Assignor further agrees/agree that he/she/they will, without charge to said Assignee, but at Assignee's expense, cooperate with Assignee in the prosecution of said application and/or applications, execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof, and will perform such other acts as Assignee lawfully may request, to obtain or maintain Letters Patent for said invention and improvement, and to vest title thereto in said Assignee, or Assignee's successors and assigns. IN TESTIMONY WHEREOF, Assignor has/have signed his/her/their name(s) on the date(s) indicated.			
Shin-Ming CHANG Sep. 9, 2004 Date:			
2/2/2/2011 09 09 vanu			

TSMC2003-1232/0503-A30267US

Wen-Chuan WANG

Jana-Wen	You	
Jan-Wen YOU	- 	

09.09.2004

Date:

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