Client Code: IMEC182.001AUS/001C1/001C1C1 01-23-2004 RECORDATION PATE ereof. SSISTANT COMMISSIONER FOR PATENTS: Please 102653118 Name of conveying party: (If multiple assignors, list 2. Name and address of receiving parties: 1. numerically) Name: Interuniversitair MicroElectronica Centrum VZW ASM America, Inc. (IMEC) Internal Address: Kapeldreef 75, 3001 Leuven, Belgium Additional name(s) of conveying party attached? Yes (X) No ()Additional name(s) of receiving party(ies) attached? (X) Yes ()No Application numbers or Patent numbers: 4. 3. Nature of conveyance: (X) Patent Application No.: 10(731,656 (X) Assignment Filing Date: December 8, 2003 Merger ()Security Agreement ()(X) Patent No.: 6,664,192 Change of Name ()Issue Date: December 16, 2003 ()Other: Execution Date: (If multiple assignors, list execution (X) Patent No.: 6,391,785 Issue Date: May 21, 2002 dates in numerical order corresponding to numbers indicated in 1 above) January 14, 2004 Additional numbers attached? () Yes (X) No 7. Total fee (37 CFR 1.21(h)): 5. Name and address of party to whom correspondence \$120 concerning document should be mailed: (X) Enclosed Andrew N. Merickel Authorized to be charged to deposit account if any Name: (X) KNOBBE, MARTENS, OLSON & BEAR, LLP additional fees are required, or to credit any overpayment Customer No. 20,995 Internal Address: Fourteenth Floor Street Address: 2040 Main Street 8. Deposit account number: 11-1410 City: Irvine State: CA ZIP: 92614 Attorney's Docket No.: IMEC182.001AUS Please charge this account for any additional fees which may be required, or credit any overpayment to this account. Total number of applications and patents involved: 3 6. 9. Statement and signature. To the best of my knowledge and belief, the foregoing information is true and correct, and any attached copy is a true copy of the original document. 1/16/02 Andrew N. Merickel

Name of Person Signing

53,317 Registration No.

Total number of pages including cover sheet, attachments and document: 4

Signature

Mail documents to be recorded with required cover sheet information to:

0176278064 ECOUNTR 00000304 30733666 01 ALEORS 346.40 1 Mail Stop Assignment Recordation Services Director, U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

2. Name and address of receiving party(ies):

Name: ASM International NV Internal Address: Jan Van Eycklaan 10, 3723BC Bilthoven, The Netherlands

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PATENT REEL: 014902 FRAME: 0397

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ASSIGNMENT

WHEREAS, ASM America, Inc., a U.S. corporation having offices at 3440 University Drive, Phoenix, AZ 85034-7200 (hereinafter "ASSIGNOR"), represents and warrants that it is the assignee of record for certain new and useful improvements disclosed in the following United States issued Letters Patents and pending applications in the United States (hereinafter "the Patents"):

Patent No.	Issue Date	Title
6,391,785	May 21, 2002	METHOD OF BOTTOMLESS DEPOSITION OF BARRIER LAYERS IN INTEGRATED CIRCUIT METALLIZATION SCHEMES
<u>Application No.</u> 10/123,492	<u>Filing Date</u> April 15, 2002	<u>Title</u> METHOD OF BOTTOMLESS DEPOSITION OF BARRIER LAYERS IN INTEGRATED CIRCUIT METALLIZATION SCHEMES

WHEREAS, Interuniversitair MicroElectronica Centrum VZW (IMEC), a Belgium corporation having offices at Kapeldreef 75, 3001 Leuvein, Belgium, and ASM International NV, a Netherlands corporation having offices at Jan Van Eycklaan 10, 3723BC Bilthoven, the Netherlands (hereinafter "ASSIGNEES") desire to purchase the entire right, title, and interest in and to the inventions disclosed in the Patents;

NOW, THEREFORE, in return for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR hereby further acknowledges that it has sold, assigned, and transferred, and by these presents does hereby sell, assign, and transfer, unto ASSIGNEES, their successors, legal representatives, and assigns, any right, title, and interest throughout the world in, to, and under the said improvements, and the said Patents and all Patents that may be granted thereon, and all provisional applications relating thereto, and all divisions, continuations, reissues, reexaminations, renewals, and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent that may hereafter be filed for said improvements or for the said Patents in any country or countries foreign to the United States; and ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States, and any Official of any country foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements and all Letters Patents resulting from the Patents to ASSIGNEES, their successors, legal representatives, and assigns, in accordance with the terms of this Agreement.

ASSIGNOR does hereby sell, assign, transfer, and convey to ASSIGNEES, their successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEES, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of the said issued Letters Patents;

ASSIGNOR hereby covenants and agrees that it will communicate to ASSIGNEES, their successors, legal representatives, and assigns any facts known to ASSIGNOR respecting the Patents immediately upon becoming aware of those facts, and that it will testify in any legal proceeding involving any of the Patents, will sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths, and will generally do everything possible to aid ASSIGNEES, their successors, legal representatives, and assigns to obtain and enforce the Patents in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal th	is 14th day of Sanvan	1,200f
	I MAN	
ASM Amer	ica. Inc.	

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By: Todd Westersund

Name Printed:

Title: Intellectual Property Officer

Date: Junuary 14, Zest

STATE OF

COUNTY OF

On bound 14,2004, before me, <u>Juda</u>, <u>Murphy</u>, personally appeared personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name(s) is/are subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity(ies), and that by his signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal JUDY MURPHY Notary Public - Arizona MARICOPA COUNTY [SEAL] My Comm. Exp. 9-29-2006

SS.

Gudy Munphy Notary Signature

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(1) 「新久住村」、「新安市」「新安市」である。

PATENT REEL: 014902 FRAME: 0399

RECORDED: 01/20/2004