

12-24-2002

12/11/02

REC



102320864

To the Honorable Commissioner of Patent copy thereof.

the attached original documents or

1. Name of Conveying party(ies): Larry Clevenger, Timothy J. Dalton, Steffen K. Kaldor, Kaushik Kumar, Douglas C. La Tulipe, Jr., Soon-Cheon Seo, Andrew H. Simon, Yun-Yu Wang, Chih-Chao Yang, Haining Yang

3. Nature of Conveyance: Assignment

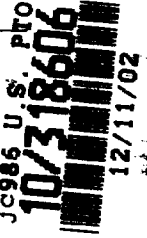
Execution Date: 12/10/02, 12/06/02, 11/22/02, 12/03/02, 12/06/02, 11/22/02, 11/25/02, 11/22/02, 11/26/02, 12/03/02.

2. Name & address of receiving party(ies)

Name: International Business Machines Corporation

Street Address: New Orchard Road

City: Armonk State: New York ZIP: 10504



4. Application number(s) or patent number(s):

Title of Application: A METHOD FOR DEPOSITING A METAL LAYER ON A SEMICONDUCTOR INTERCONNECT STRUCTURE HAVING A CAPPING LAYER

If this document is being filed together with a new application, the execution date of the application is: 12/10/02, 12/06/02, 11/22/02, 12/03/02, 12/06/02, 11/22/02, 11/25/02, 11/22/02, 11/26/02, 12/03/02.

A. Patent Application No(s). Docket No. Serial No.

B. Patent No(s)

10/318606

Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Ira D. Blecker Street Address: PATENT TRADEMARK OFFICE

IBM Corporation Intellectual Property Law Dept. Dept. 18G/Bldg. 300-482 2070 Route 52 Hopewell Junction, NY 12533-6531



6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00 Enclosed X Authorized to be charged to deposit account

8. Deposit A/C no.: 09-0458 (FI-565) (Attach duplicate copy of this page if paying by deposit account)

12/23/2002 TDIAZI 00000037 090458 10318606 01 FC:8021 40.00 CH

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9. Statement of 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.

Ira D. Blecker, Reg. No. 29,894 Name of Person Signing Telephone No. (845) 894-2580

Signature

Date

Handwritten signature of Ira D. Blecker

Dec 11, 2002

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

Express Mail No. EU702259826US

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail in an envelope addressed to: UNITED STATES PATENT & TRADEMARK OFFICE, PO BOX 2327, ARLINGTON, VA 22202. Applicant and/or Attorney requests the date of deposit as the filing date.

December 11, 2002 DATE OF DEPOSIT

KAREN CINQ-MARS

Handwritten signature and date: KAREN CINQ-MARS 12/11/02 PATENT SIGNATURE AND DATE

REEL: 013594 FRAME: 0444

## ASSIGNMENT

WHEREAS, we

- |      |                           |                     |
|------|---------------------------|---------------------|
| (1)  | Larry Clevenger           | of LaGrangeville    |
|      | County of Dutchess        | State of New York   |
|      | and                       |                     |
| (2)  | Timothy J. Dalton         | of Ridgefield       |
|      | County of Fairfield       | State of New York   |
|      | and                       |                     |
| (3)  | Steffen K. Kaldor         | of New York         |
|      | County of New York        | State of New York   |
|      | and                       |                     |
| (4)  | Kaushik Kumar             | of Beacon           |
|      | County of Dutchess        | State of New York   |
|      | and                       |                     |
| (5)  | Douglas C. La Tulipe, Jr. | of Danbury          |
|      | County of Fairfield       | State of New York   |
|      | and                       |                     |
| (6)  | Soon-Cheon Seo            | of White Plains     |
|      | County of Westchester     | State of New York   |
|      | and                       |                     |
| (7)  | Andrew H. Simon           | of Fishkill         |
|      | County of Dutchess        | State of New York   |
|      | and                       |                     |
| (8)  | Yun-Yu Wang               | of Poughquag        |
|      | County of Dutchess        | State of New York   |
|      | and                       |                     |
| (9)  | Chih-Chao Yang            | of Beacon           |
|      | County of Dutchess        | State of New York   |
|      | and                       |                     |
| (10) | Haining Yang              | of Wappingers Falls |
|      | County of Dutchess        | State of New York   |

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have invented certain improvements in

### **A METHOD FOR DEPOSITING A METAL LAYER ON A SEMICONDUCTOR INTERCONNECT STRUCTURE HAVING A CAPPING LAYER**

and executed a United States patent application therefor on:  
 (dates that Inventors signed the declaration)


- (1) 12/14/02, and (2) 12/06/02, and (3) 11/22/2002, and (4) 12/03/2002,  
 (5) 12/6/02, and (6) 11/22/2002, and (7) 11/25/2002, and (8) 11/22/02,  
 (9) Nov 26 02, and (10) 12/03/02

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire, right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

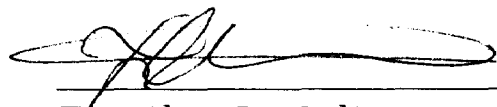
Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, I, the above named, hereby sell, assign and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and the invention therein disclosed for the United States and foreign countries, and all rights of priority resulting from the filing of said United States application, and I request the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth in said application to IBM, its successors and assigns; and I hereby agree that IBM may apply for foreign Letters Patent on said invention and I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed

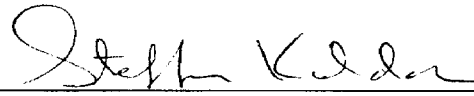
(1) at 12/10/02  
 on East Fishkill NY,

  
 Larry Clevenger


(2) at 12/6/02  
 on East Fishkill, NY,

  
 Timothy J. Dalton

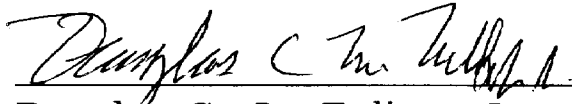
(3) at E. Fishkill, NY  
on 11/22/02,

  
Steffen K. Kaldor

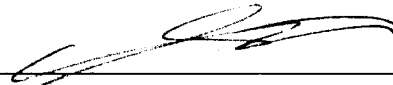
(4) at E. Fishkill, NY  
on 12/03/02,

  
Kaushik Kumar

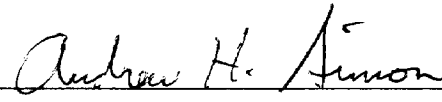
(5) at E. Fishkill, NY  
on 12/06/02,

  
Douglas C. La Tulipe, Jr.

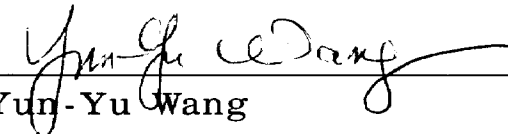
(6) at E. Fishkill, NY  
on 11/22/02,

  
Soon-Cheon Seo


(7) at E. Fishkill, NY  
on 11/25/02,

  
Andrew H. Simon

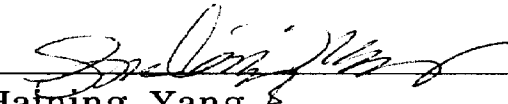
(8) at <sup>East</sup> Fishkill, NY  
on 11-22-02,

  
Yun-Yu Wang

(9) at E. Fishkill, NY  
on Nov. 26'02,

  
Chih-Chao Yang

(10) at E. Fishkill, NY  
on 12/03/02,

  
Haiming Yang