09-18-1	998 Docket No. 11545 (\$1098-242)				
(Rev. 6-93) OMB No. 0651-0011 (exp. 4/94) Copyright 1994-97 LegalStar P08/REV02	Patent and Trademark Office				
To the Honorable Commissioner of Patents and Trademark	s: Please record the atta ched original documents or copy thereof.				
1. Name of conveying party(ies): 1. Hussein Ibrahim Hanafi 2. Young Hoon Lee 3. Hsingjen Wann	Name and address of receiving party(ies): Name: International Business Machines Corporation Internal Address: Comparison				
Additional names(s) of conveying party(ies) ☐ Yes ☒ No					
3. Nature of conveyance:					
★ Assignment	Street Address: New Orchard Road				
☐ Security Agreement ☐ Change of Name					
☐ Other	City: Armonk State: NY ZIP: 10504				
Execution Date: 1.8/18/98; 2.8/25/98; and 3.8/18/98	Additional name(s) & address(es) attached?				
4. Application number(s) or registration numbers(s):If this document is being filed together with a new application	on, the execution date of the application is:				
A. Patent Application No.(s)	B. Patent No.(s)				
09/136,325 filed 8/19/98					
09136325					
Additional numbers atta	ached? Yes No				
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:				
Name: Richard L. Catania	7. Total fee (37 CFR 3.41):\$ 40.00				
Internal Address: Scully, Scott, Murphy & Presser	☐ Enclosed - Any excess or insufficiency should be credited or debited to deposit account				
	Authorized to be charged to deposit account				
Street Address: 400 Garden City Plaza	Deposit account number:				
City: Garden City State: NY ZIP: 11530	50-0510/IBM (Yorktown)				
09/18/1998 JSHABAZZ 00000005 500510 09136325 DO NOT	USE THIS SPACE 406				
9. Statement and signature. To the best of my knowledge and belief, the foregoing inform of the original document.	nation is true and correct and any attached copy is a true copy				
Leopold Presser	September 10, 1998				
Name of Person Signing Total number of pages including cover s	Signature James Date				
	PATENT				

REEL: 9451 FRAME: 0321

(JOINT FORM)
(MORE THAN TWO)

Page 1 of 2

Assignment

Whereas, we

Inventor and City

(1) Hussein Ibrahim Hanafi County of Somerset

and (2) Young Hoon Lee County of Westchester

and (3) Hsingen Wann County of Westchester of Basking Ridge and State of New Jersey

of Somers

and State of New York

of Briarcliff Manor and State of New York

have invented certain improvements in

TITLE

DECLARATION

METHODS FOR MAKING HIGH-ASPECT RATIO HOLES IN SEMICONDUCTOR AND ITS APPLICATION TO A GATE DAMASCENE PROCESS FOR SUB-0.05 μM MOSFETS

and executed, respectively, a United States patent application therefor on DATES THAT (1) August 18, 1998, and (2) August 25, 1998, and (3) August 18, 1998. INVENTORS SIGNED THE

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, we, 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 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 we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when

		papers necessary .	.ii connect	.10m with the or	filed States	and foreign ag	pricat	TOITS WITEIT
CITY DATE	_	signed and sealed at Yorkhun Height 18.	1 2 t,.Ny _ 1998, (Hussein First Name	I. MIDDLE INIT		a fi I NAME	_SIGNATURE) INVENTOR
CITY DATE	and on	Signed and sealed (2) at Yorktaun Xugunt 25	1 Hughts NL - 1998, (Young FIRST NAME	ACT H. MIDDLE INIT	Lee PIAL LAST	P NAME	_SIGNATURE) INVENTOR
CITY DATE	and on	Signed and sealed (3) at Yorkton He August 18.	1998, (1	Hsinjen FIRST NAME	MIDDLE INIT	Wan IAL LAST	i n)	_SIGNATURE) INVENTOR

PATENT REEL: 9451 FRAME: 0322

SSM&P Docket No.: 11545 IBM Docket No.: Y0998-242

Page 2 of 2

State of New York County of Westcherter)ss.:

INVENTOR (1)

Ascent On this day of 1998, before me personally came Hussein Ibrahim Hanafi to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.

> WENDÝ Ř. PĚŤROVICH Notary Public, State of New York No. 01RI5042058 Qualified in Westchester County Commission Expires April 17, 129

State of Www. ss.: County of Weitchertun)

On this 25th day of August

1998, before me personally came

INVENTOR (2)

to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.

State of New York)ss.: County of Weitcherter)

WENDY R. PETROVICH Notary Public, State of New York No. 01RI5042058 Qualified in Westchester County Commission Expires April 17, 199

On this

18th day of August

1998, before me personally came

INVENTOR (3)

Hsinjen Wann to me personally known, and known to me to be the person described in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed.

> WENDY R. PETROVICH Notary Public, State of New York
> No. 01Ri5042058
> Qualified in Westchester County
> Commission Expires April 17,

RECORDED: 09/14/1998

PATENT REEL: 9451 FRAME: 0323