IBM Docket No.: FI9-9 7-100

To the I	Honorable Commissioner of	Patents and				il documents or copy ther	eof.
1.	Name of conveying par	ty(ies):	1009	5213	2	ddress of receiving part	ty(ies):
Additio 3.  [X] [ ]	Krishna G. Sachdev Umar M. Ahmad Hsing H. Chen  onal name(s) of conveying [ ] Yes	o [] Merg [] Chan	David erry all thed? L-19-99 ger age of Name	Name Interna Street City: A	: <b>Internatio</b> al Address:	New Orchard Road State: New York	jc523 U.S. PTO 09/233384 uointamination 01/19/99
	on Date: 12/11/98; 12/1 /13/98; 12/21/98; 12/10	0/98; 12/14/9		Additio	onal Name	e(s) & Address(es) attached?  [X] No	
	A. Patent Applicati	THOD OF ETC t is being filed t appli	together with a cation is: 12/11;	DENUM new app	olication, th 12/14;12/1 12/10		
		Addit	tional numbers	attached	l? [ ] Yes	[ <b>X</b> ] No	<del></del>
	Name and address of pa ence concerning docum DeLIO & PETERSON, LL Address: 121 Whitney Ave New Haven de: 06510-1241	ent should be r		7.	involved  Total Fee	mber of applications and particular in the parti	
deposited the Comi D.C. 202	CERTIFICATE OF MAILING certify that, on the date shown d with the United States Postal missioner of Patents and Traden 31, as "Express Mail Post Office E1374493337US  January 19, 1999  RobinAnn Zeno person mailing parts	below, this corresp Service in an enven Parks, Box Assignm	oondence is being clope addressed to ents, Washington,	8. Numb	[X] Assignee	Authorized to be charged to Account number below Any deficiencies in the ence IBM Corporation Deposit	closed fees
			DO NOT US	E THIS SP	ACE		
To atta	tement and Signature. the best of my knowledg ached copy is a true copy . Ahsan			ormation		d correct and any	00000158 090458 40.00 CH
Name o Registra	of Person Signing ation No. 32,100		o.: <b>914-894-4</b> 71			Date 5	SOURCE

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DATENT (01/27/1999) **REEL: 9716 FRAME: 0965** 

IBM Docket No.: FI9-97-100

### **ASSIGNMENT**

Whereas, we

(1) Kuishma C. Cashalan

City	County of <b>Dutchess</b>	and State of New York
and	(2) <b>Umar M. Ahmad</b> County of <b>Dutchess</b>	City of <b>Hopewell Junction</b> and State of <b>New York</b>
and	(3) <b>Hsing H. Chen</b> County of <b>Dutchess</b>	City of <b>Poughkeepsie</b> and State of <b>New York</b>
and	(4) Lawrence D. David County of Hillsborough	City of Amherst and State of New Hampshire
and	(5) Charles H. Perry County of Dutchess	City of <b>Poughkeepsie</b> and State of <b>New York</b>
and	(6) <b>Donald R. Wall</b> County of <b>Dutchess</b>	City of <b>Poughkeepsie</b> and State of <b>New York</b>
Title	have invented certain improvements in METHOD OF ETCHING MOLYBDENUM METAL FROM SUBSTRATES	
Date That Inventors Signed the Declaration	and have executed, respectively, a United States pate (1)	

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 invention 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 called upon to do so by IBM.

PAGE 1 OF \_\_2\_\_

PATENT REEL: 9716 FRAME: 0966

# **ASSIGNMENT** (continued)

TITLE: METHOD OF ETCHING MOLYBDENUM METAL FROM CERAMIC SUBSTRATES

City	(1) Signed at Fast Fishko	CE NY	_
Date	on <u>/2 ///</u> , 19 <u>9</u> 8	Grahma G Sachday	_signature
City	(2) Signed at <u>East Fishkill</u> City	NEW YORK State	_
Date	on 12 10-, 19 <u>9</u> 8	Umar M. Ahmad Umar M. Ahmad	_signature
City	(3) Signed at East Fish(41)	Hew Gork	
Date	on <u>Fee. 14</u> , 19 <u>48</u>	Hsing H. Chen	_signature
City	(4) Signed at	State	<u> </u>
Date	on, 19	Lawrence D. David	_signature
City	(5) Signed at <u>EAST</u> FISHKILL	Mew York State	_
Date	on 12-21, 19 <u>98</u>	Charles H. Perry	_signature
City	(6) Signed at Cast Fishfull	Mew York State	_
Date	on 13/10 , 19 <u>98</u>	State    Windle   Wall    Donald R. Wall	_signature

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PAGE 2 OF 2

IBM Docket No.: FI9-97-100

#### **ASSIGNMENT**

Whereas, we

(1) Krishna G. Sachdev

Inventor and

Inventor and City	(1) Krishna G. Sachdev County of Dutchess	City of <b>Hopewell Junction</b> and State of <b>New York</b>
and	(2) Umar M. Ahmad County of Dutchess	City of <b>Hopewell Junction</b> and State of <b>New York</b>
and	(3) <b>Hsing H. Chen</b> County of <b>Dutchess</b>	City of <b>Poughkeepsie</b> and State of <b>New York</b>
and	(4) Lawrence D. David County of Hillsborough	City of Amherst and State of New Hampshire
and	(5) Charles H. Perry County of Dutchess	City of <b>Poughkeepsie</b> and State of <b>New York</b>
and	(6) <b>Donald R. Wall</b> County of <b>Dutchess</b>	City of <b>Poughkeepsie</b> and State of <b>New York</b>
Title	have invented certain improvements in METHOD OF ETCHING MOLYBDENUM METAL FROM SUBSTRATES	
Date That Inventors Signed the Declaration	and have executed, respectively, a United States paten (1)	
	Whereas, INTERNATIONAL BUSINESS MAC of New York, having a place of business at Armonk IBM), desires to acquire the entire right, title and invention, and to any United States and foreign patents	, New York 10504, (hereinafter called interest in the said application and

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 invention 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 called upon to do so by IBM.

PAGE 1 OF \_\_2\_\_\_

**PATENT REEL: 9716 FRAME: 0968** 

## **ASSIGNMENT** (continued)

#### TITLE: METHOD OF ETCHING MOLYBDENUM METAL FROM CERAMIC SUBSTRATES

City	(1) Signed atCity		
	City	State	
Date	on, 19		signature
		Krishna Sachdev	
City	(2) Signed atCity		
	City	State	
Date	on, 19		signature
		Umar M. Ahmad	
City	(3) Signed at		
	City	State	
Date	on, 19		signature
		Hsing H. Chen	
City	(4) Signed at <u>City</u>	, New Hampshire	
	City	State State	)
Date	on <u>December 13,</u> 19 <u>98</u>	Xawame / voor	signature
		Lawrence D. David	
		_	
City	(5) Signed atCity	State	
Date	,		
Date	on, 19	Charles H. Perry	signature
City	(6) Signed at		_
•	(6) Signed atCity	State	_
Date	on, 19		signature
		Donald R. Wall	

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RECORDED: 01/19/1999

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PATENT REEL: 9716 FRAME: 0969