To the Honorable Commissioner of Patents and 101103020

Lase record the attached original

1. Name of Conveying party(ies): Benjamin V. Fasano, David H. Gabriels, Richard F. Indyk

Sundar M. Kamath, Scott I. Langenthal, Srinivasa S.N. Reddy, Rao V. Vallabhaneni

Nature of Conveyance: Assignment

documents or copy thereof.

2. Name & address of receiving party(ies)

Name: International Business Machines Corporation

Execution Date: 7/6/99, 7/7/99, 7/2/99,

7/16/99

7/7/99, 7/6/99, 7/6/99, Street Address: New Orchard Road

Additional numbers attached? Yes X No

City: Armonk State: New York ZIP: 1050

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

Title of Application: MULTILAYER CERAMIC SUBSTRATE WITH ANCHORED PAD

If this document is being filed together with a new application, the execution date of the application is: 7/6/99, 7/7/99, 7/2/99, 7/7/99, 7/6/99, 7/16/99

Patent Application No(s). Docket No. FI9-99-080

Patent No(s)

Name and address of party to whom

correspondence concerning document

should be mailed:

Name: Ira D. Blecker

Street Address:

Total fee (37 CFR 3.41): \$40.00,

patents involved: 1

Total number of applications and

Enclosed Authorized to be charged to deposit account

International Business Machines Corp. Intellectual Property Law Dept. 1580 Route 52 Dept. 18G / Bldg. 300-48

Hopewell Junction, New York 12533

Deposit A/C no.: 09-0458 (FI-337)

07/27/1999 DMGUYEN 00000320 090458 09356944

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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.

<u>Ira D. Blecker, Registration No.</u> Name of Person Signing Telephone No. (914) 894-2580 29,894

Total number of pages including cover sheet, attachments, and document: 7

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS EXPRESS MAIL IN AN ENVELOPE ADDRESSED TO: COMMISSIONER OF PATENTS AND TRADEMARKS, WASHINGTON, D.C. 20231. APPLICANT AND/OR ATTORNEY REQUEST THE DATE OF DEPOSIT AS THE FILING DATE.

Express Mail Certificate No: EE468937431US

Date of Deposit:

July 19, 1999

Name of Person Making Deposit: RobinAnn Zeno

Signature:

7/19/99

ASSIGNMENT

WHEREAS, we

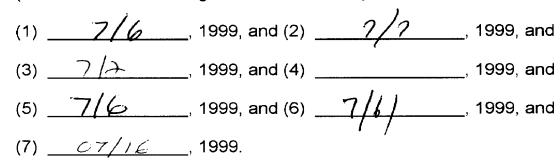
(1) Benjamin V. Fasano County of Orange and	of New Windsor State of New York
(2) David H. Gabriels	of Cold Spring
County of Putnam	State of New York
and	2.22.2
(3) Richard F. Indyk	of Wappingers Falls
County of Dutchess	State of New York
and	
(4) Sundar M. Kamath	of San Jose
County of Santa Clara	State of California
and	
(5) Scott I. Langenthal	of Hyde Park
County of Dutchess	State of New York
and	
(6) Srinivasa S.N. Reddy	of LaGrangeville
County of Dutchess	State of New York
and	
(7) Rao V. Vallabhaneni	of Hopewell Junction
County of Dutchess	State of New York

have invented certain improvements in

MULTILAYER CERAMIC SUBSTRATE WITH ANCHORED PAD

and executed a United States patent application therefor on:

(dates that Inventors signed the declaration)



Docket No. FI9-99-080 Page 2

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		Λ
(1) at	East Fishkill, NY	your an
on	7 /6, 1999,	Benjámin V. Fasano
and		
(2) at	East Fishkill, NY	Dovil of Sakat
on	<u>///</u> , 1999,	David H. Gabriels
and		1
(3) at	East Fishkill, NY	Mulund F Shiff
on	<u>7/→</u> , 1999,	Richard F. Indyk
and		
(4) at	San Jose, CA	
on	, 1999,	Sundar M. Kamath
and		

Docket No. FI9-99-080 Page 3

(5) at	East Fishkill, NY	Scott I. Langenthal
on	<u>7/6</u> , 1999,	Scott i. Langeritiai
and		
(6) at on and	East Fishkill, NY 7669, 1999,	Srinivasa S.N. Reddy
(7) at	East Fishkill, NY	Rao V. Valleshaneni

ASSIGNMENT

of New Windsor

WHEREAS, we

Benjamin V. Fasano

(1)

() Denjamin V. I asamo	Of INCW WITHGOOD
County of Orange	State of New York
and	
(2) David H. Gabriels	of Cold Spring
County of Putnam	State of New York
and	
(3) Richard F. Indyk	of Wappingers Falls
County of Dutchess	State of New York
and	
(4) Sundar M. Kamath	of San Jose
County of Santa Clara	State of California
and	
(5) Scott I. Langenthal	of Hyde Park
County of Dutchess	State of New York
and	
(6) Srinivasa S.N. Reddy	of LaGrangeville
County of Dutchess	State of New York
and	
(7) Rao V. Vallabhaneni	of Hopewell Junction
	State of New York
County of Dutchess	State of New York

have invented certain improvements in

(dates that Inventors signed the declaration)

MULTILAYER CERAMIC SUBSTRATE WITH ANCHORED PAD

and executed a United States patent application therefor on:

(1) ______, 1999, and (2) ______, 1999, and (3) ______, 1999, and (4) _____, 1999, and (5) ______, 1999, and (6) ______, 1999, and (7) ______, 1999.

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 acknow-ledged, 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

U		
(1) at	East Fishkill, NY	
on	, 1999,	Benjamin V. Fasano
and		
(2) at	East Fishkill, NY	Dovid H. Cobrido
on	, 1999,	David H. Gabriels
and		
(3) at	East Fishkill, NY	Distance E. Ladah
on	, 1999,	Richard F. Indyk
and		
(4) at	San Jose, CA	Lendar of Kamak
on	July 7 , 1999,	Sundar M. Kamath
and	•	

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(5) at	East Fishkill, NY	
		Scott I. Langenthal
on	, 1999,	
and		
(6) at	East Fishkill, NY	
(0) 41	Edot Floritin, 141	Srinivasa S.N. Reddy
on	, 1999,	,
and		
(7) at	East Fishkill, NY	
•		Rao V. Vallabhaneni
on	, 1999,	

PATENT REEL: 010119 FRAME: 0387