Docket No.: END920050013US1

U.S. DEPARTMENT OF COMMERCE

Date

Rev. 03-01)	Patent and Trademark Off					
MB No. 0851-0027 (exp.5/31/2002) 08/REV03 PATEN	TS ONLY					
Tab settings → → → ▼	▼ ▼ ▼					
To the Director of the United States Patent and Trademark Offi	ce: Please record the attached original documents or copy thereof.					
l. Name of conveying party(ies): Paul S. Andry	Name and address of receiving party(ies):					
Chirag S. Patel	Name: International Business Machines Corporation					
Edmund J. Sprogis Cornelia K. Tsang	Internal Address:					
	Internal Address.					
Additional names(s) of conveying party(ies)						
3. Nature of conveyance:						
	Street Address: New Orchard Road					
☐ Security Agreement ☐ Change of Name						
☐ Other	City: Armonk State: NY ZIP: 10504					
Other	Oity,					
Execution Date: 08/08/05, 08/09/05, 08/08/05, 08/08/05	Additional name(s) & address(es) attached? Yes No					
A. Patent Application No.(s) 11/214,602 Filed 08/30/05	B. Patent No.(s)					
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: Customer No. 49449	7. Total fee (37 CFR 3.41):\$ 40.00					
Internal Address:	 Enclosed - Any excess or insufficiency should be credited or debited to deposit account 					
1111/	Authorized to be charged to deposit account					
Street Address:	8. Deposit account number:					
	09-0457					
City: State: ZiP:	(Attach duplicate copy of this page if paying by deposit account)					
DO NO	T USE THIS SPACE					
 Statement and signature. To the best of my knowledge and belief, the foregoing inform of the original document. William H. Steinberg, Reg. No. 28,580 	mation is true and correct and any attached copy is a true copy					

Name of Person Signing

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

Signature

PATENT DOCKET NO. END920050013US1

PATENT ASSIGNMENT FORM

For and in consideration of good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor acknowledges his/her prior and ongoing obligation to sell, assign, and transfer, and agrees to sell, assign, and transfer the entire world wide right, title and interest for the United States and all foreign countries, in and to any and all inventions and improvements conceived during and within the scope of his/her employment, and further acknowledges that he/she has sold, assigned, and transferred, and hereby sells, assigns, and transfers, unto:

INTERNATIONAL BUSINESS MACHINES CORPORATION ("IBM"), Armonk. New York 10504

a corporation of New York, and IBM desires to acquire all right, title, and interest, in and to the certain inventions (identified below), applications, and any United States and foreign patents to be obtained therefor relating to:

Title of Invention for CONDUCTIVE THROUGH VIA STRUCTURE AND PROCESS FOR ELECTRONIC DEVICE CARRIERS

United States Patent

as set fort	h in Un	ited State	s Patent Ap	oplication exe	cute	d by each ur	idersig	ned inven	tor on the	date ind	dicated
by each in	ventor	signature	below, and	l further iden	tified	by Attorney	Dock	et Numbe	r END920	050013	US1;
select on-	e):	executed	concurrent	ly herewith o	r <u>X</u>	Serial No	11/2	14,602			
Filed on	08/30	/05									

for and to said United States Patent Application including any and all divisions or continuations thereof and in and to any and all Letters Patent of the United States and foreign patents and all rights of priority to be obtained therefor which may issue on any such application or for said invention therein disclosed, including any and all reissues or extensions thereof, to be held and enjoyed by, its successors, legal representatives and assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made:

Each undersigned inventor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all such Letters Patent to IBM, its successors and assigns, in accordance herewith:

Each undersigned inventor warrants and covenants that he/she has the full and unencumbered right to sell and assign the interests hereby sold and assigned and that he/she has not executed and will not execute any document or instrument in conflict herewith;

Each undersigned inventor further covenants and agrees that he/she, upon the request and at the expense of the IBM, will execute and deliver any papers, make all rightful oaths, testify in any legal proceeding relating to said inventions and improvements, communicate to the IBM all facts known to the undersigned relating to such inventions and improvements and the history thereof; and perform all other lawful acts deemed necessary or desirable by IBM, and its legal representatives, to secure, maintain, and enforce patent protection for such inventions and improvements and for vesting title to such inventions and improvements in the IBM, and in particular to perfect title to said above-identified certain inventions, and applications including divisions and continuations thereof, and any and all Letters Patent which may be granted therefor or thereon, including reissues, extensions, or counterparts;

Each undersigned inventor hereby grants the IBM and the firm of the power to insert in this Assignment any further identification which may be necessary or desirable for recordation of this Assignment.

This assignment is governed by the substantive laws of the state of New York.

PATENT REEL: 016854 FRAME: 0476

PATENT DOCKET NO. END920050013US1

Executed by Inventor 1 of 4

1 1. trul Date: 08/08/2005

PATENT DOCKET NO. END920050013US1

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Signature:	Chirleg S. Patel	Date: 8/9/2005

PATENT DOCKET NO. END920050013U\$1

Executed by Inventor 3 of 4

Signature: Edmund & Sprogis Date: Quy 8, 2005

Edmund & Sprogis

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PATENT REEL: 016854 FRAME: 0479

___Date:____

PATENT DOCKET NO. END920050013US1

Executed by inventor 4 of 4

RECORDED: 10/06/2005

Signature: Cornelia K. Tsano

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