U.S. PTO 11/985956 11/19/2007

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Form PTO-1595

103464798

U.S. DEPARTMENT OF COMMERCE

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or  1. Name and address of conveying party(ies):  (1) Huihao Xu (4) James D. Rockrohr 2253 E. 27th St. 2nd Fl. 21 Pleasant Hill Road Brooklyn, NY 11229 Hopewell Junction, NY 12533  (2) Louis L. Hsu 7 Crosby Court 7 Crosby Court Fishkill, NY 12524 Hopewell Junction, NY 12533  2. Name and address of receiving party(ies): International Business Machine Name: Corporation  Internal Address: Street Address:	es)
(1) Huihao Xu (4) James D. Rockrohr 2253 E. 27th St. 2nd Fl. 21 Pleasant Hill Road Brooklyn, NY 11229 Hopewell Junction, NY 12533  (2) Louis L. Hsu (5) Michael A. Sorna 7 Crosby Court 29 Blackberry Way Fighkill NY 12524	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
2253 E. 27th St. 2nd Fl. 21 Pleasant Hill Road Brooklyn, NY 11229 Hopewell Junction, NY 12533  (2) Louis L. Hsu 7 Crosby Court 29 Blackberry Way Fightill NY 12523  Internal Address:	es
7 Crosby Court 29 Blackberry Way Internal Address:	
Fishkiii, NY 12524 Fropeweii Junction, NY 12555 Street Address:	į.
(3) Kevin G. Kramer 2 Lake Drive Wappingers Falls, NY 12590  New Orchard Road	
Additional name(s) of conveying party(ies) Yes X No	j
3. Nature of Conveyance:	j
x Assignment Merger	
Security Agreement Change of Name City: Armonk	
Other NY Zip	: 10504
Execution Date:  Additional name(s) & address(es) attached:  Yes	x No
Application number(s) or patent number(s):	
If this document is being filed together with a new application, the execution date of the new applica October 29, 2007 ((1) through (4)); and October 30, 2007 (5).	tion is:
A. Patent Application No.(s):    B. Patent No.(s):	-
Additional numbers attached? Yes X No	
5. Name and address of party to whom correspondence concerning document should be mailed:  6. Total number of applications and patents involved:	1
Name: Kerry B. Goodwin 7. Total fee (37 CFR 3.41) \$	40.00
IBM Corporation Enclosed	
Street Address: x Authorized to be charged to de	posit account
IPLaw Dept 18G Authorized to be charged to cre	edit card
Bldg 321 Zip 482 (Form 2038 enclosed)	
	9-0458
Docket No. FIS920070097US2 City: State: Zip:  8. Deposit account number:	
Hopewell Junction NY 12533 (Attach duplicate copy of this page if paying by	deposit account)
	4 090458 119859
9. Statement and signature. 01 FC:8021 / 40.00 DA	
To the best of my knowledge and belief, the foregoing information is true and correct and any attach is a true copy of the original document.	ed copy
Daryl K. Neff November	er 19, 2007
	ate
Total number of pages including cover sheet, attachments, and documents: 6	)

Express Mail Label: (if applicable) EB437003258US Docket No. FIS920070097US2

REEL: 020176 FRAME: 0287

## 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 United States Patent

## DESIGN STRUCTURE FOR ROBUST CABLE CONNECTIVITY TEST RECEIVER FOR HIGH-SPEED DATA RECEIVER

As set forth in United States Patent Application executed by each undersigned inventor on the date indicated by

each inventor's signature below, and further identified by Attorney Docket Number FIS920070097US2:

	executed concurrently herewith or S			
any and all Let	United States Patent Application includers Patent of the United States and the United St	oreign patents and a	Il rights of priority to be of	btained therefor

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 IBM, will execute and deliver any papers, make all rightful oaths, testify in any legal proceeding relating to said inventions and improvements, communicate to 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 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 to IBM 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.

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PATENT DOCKET NO.	FIS920070097US2
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Executed by inventor 1 of 5	
Signature: Muihao Xu	Date: 10/28/2017
Executed by Inventor 2 of 5	
Signature:Louis L. Hau	Date:
Executed by inventor 3 of 5	
Signature: 74 9. Maner  Kevin G. Kramer  Executed by Inventor 4 of 5	Date: /0/29/07
Signature:  James D. Rockrohr  Executed by Inventor 5 of 5	Date:
Signature:	Date:

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**REEL: 020176 FRAME: 0289** 

Executed by Inventor 1 of 5	
Signature:Huihao Xu	Date:
Executed by Inventor 2 of 5	
Signature: Louis L. Hau	Date: 10 -29 - 2007
Executed by Inventor 3 of 5	
Signature:	Date:
Executed by Inventor 4 of 5	
	Date:
Executed by inventor 5 of 5	
Signature:	Date:

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Signature:Kevin G. Kramer	Date:
Executed by Inventor 4 of 5	
Signature: James D. Rockrohr  Executed by Inventor 5 of 5	Date: 10/29/2007

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Signature: Huihao Xu	Date:
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Signature: Louis L. Hau	Date:
Executed by Inventor 3 of 5	
Signature:Kevin G. Kramer	Date:
Executed by Inventor 4 of 5	
Signature:	Date:
Signature: Michael A. Soma	

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PATENT REEL: 020176 FRAME: 0292