P.02/03

Docket No.: END920040174US1

PAN #TO 4595 (Modified) RECORDATION FOR	RM COVER SHEET U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		
	PATENTS ONLY		
ab settings -	Please record the attached original documents or copy thereof.		
To the Director of the United States Patent and Trademark Office	2. Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies):		
Name of conveying party(ies): Philip Kendal Mullins	Name: International Business Machines Corporation Address: New Orchard Road		
Additional names(s) of conveying party(ies)			
3. Nature of conveyance:			
■ Assignment	City: Armonk State/Prov.: NY		
☐ Security Agreement ☐ Change of Name	Country: <u>US</u> ZIP: <u>10504</u>		
Execution Date:	Additional name(s) & address(es)		
Patent Application No. Filing date 11/196,116 08/02/2005	B. Patent No.(s)		
Additional numbers			
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:		
Name: Customer Number 46136	7. Total fee (37 CFR 3.41):\$ 40.00		
Registration No	 Enclosed - Any excess or insufficiency should be credited or debited to deposit account 		
	Authorized to be charged to deposit account		
	8. Deposit account number:		
City: State/Prov.:	09-0457		
Country: ZIP;	(Attach duplicate copy of this page if paying by deposit account)		
9. Statement and signature. To the best of my knowledge and belief, the foregoing information of the original document.	mation is true and correct and any attached copy is a true copy		
Name of Person Signing	Signature 2		

PATENT

DOCKET NO.: END920040174US1

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 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 therefore relating to:

Title of Invention for RFID READER HAVING ANTENNA WITH DIRECTIONAL ATTENUATION PANELS FOR DETERMINING RFID TAG LOCATION

United States Patent as set forth in United States Patent Application exe indicated by each inventor signature below, and t	cuted by each undersigned inventor on the date further identified by Attorney Docket Number
	or 🛭 Serial No. 11/196,1.16 Filed on 08/02/2005
(selectione); executed concurrently hardwith	·· ···

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 therefore which may issue on any such application or for said invention therein disclosed, including any and all relssues 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 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 therefore 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.

Executed by Inventor 1 of 1

Signature

(Philip Kendal Mullins)

Date: July 27, 20

1

CERTIFICATE OF TRANSMISSION BY FACSIMILE (37 CFR 1.8) pplicant(s): Philip Kendal Mullins		Docket No. END920040174US1	
Serial No. 11/196,116	Filing Date 08/02/05	Examiner N/A	Group Art Unit N/A
DETERMINING RFID TA		<u>rm Cover Page, Assignment, Ce</u>	ert. of Facsimile
I hereby certify that this is being facsimile transmi		(Identify type of correspondence) nt and Trademark Office (Fax.)	
on	5		
		Colleen B (Typed or Printed Name of Per	Son Signing Certificate)

Note: Each paper must have its own certificate of mailing.

PATENT

P18/REV01

RECORDED: 09/15/2005 REEL: 016810 FRAME: 0959