FORM PTO-1594

RECC

04-05-1999



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U.S. Department of Commerce Patent and Trademark Office Attorney Docket No. 131\*159

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.	ATTN. BOX ASSIGNMENTS
1.Name of conveying parties: Xiang-Gen Xia and Guangcai Zhou	Name and address of receiving party:
	Name: University of Delaware
Additional name(s) of conveying party(ies) attached? Yes _X No	Internal Address: Office of the Vice Provost for Research
3. Nature of conveyance:	Street Address: 210 Hullihen Hall
	City: Newark
Assignment (U.S. X rights only) Merger	State: Delaware Zip Code: 19716
Security Agreement Agreement	
M8 2 5 5	Additional name(s) & Address(es) attached?
Execution Dates: March 5 and 15, 1994	Yes <u>X</u> No
4. Application number(s) or patent number(s): If this document is being fi	led together with a new application, the execution date of the application:
A. Patent Application Number(s):	B. Patent Number(s):
09/261,294, filed on March 2, 1999 (based on provisional application Serial No. 60/076,920)	N/A
Additional numbers attach	ed?Yes _X_No
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and registrations involved: One (1)
Name: James M. Olsen	7. Total fee (37 CFR 3.41): \$40.00
Internal Address:	Enclosed (Please charge deficiency to deposit account)
Connolly & Hutz	Authorized to be charged to deposit account
Street Address: 1220 Market Street, P.O. Box 2207	
City: Wilmington	8. Deposit account number: <u>03-2775</u>
State: Delaware Zip: 19899	
9. Statement and 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.	
James M. Olsen Reg. No. 40,408	1. Olam MARCH 23, 1999
Name of Person Signing Sign	nature Date
Total number of pages including cover st	neet attachments and documents: 3

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## **ASSIGNMENT**

WHEREAS We, the below named inventors, [hereinafter referred to as "Assignors"], have made an invention entitled:

## DIGITAL WIRELESS COMMUNICATIONS SYSTEM THAT ELIMINATES INTERSYMBOL INTERFERENCE (ISI) AND MULTIPATH CANCELLATION USING A PLURALITY OF OPTIMAL AMBIGUITY RESISTANT PRECODERS

for which We executed an application for United States Letters Patent on March 2, 1999 (based upon U.S. Provisional Patent Application Serial No. 60/076,920); and

WHEREAS, The University of Delaware, a non-profit corporation of the State of Delaware whose post office address is Office of the Vice Provost for Research, 210 Hullihen Hall, Newark, Delaware 19716-1553 [hereinafter referred to as "Assignee"], is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application for United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that for good and valuable consideration the receipt of which from Assignee is hereby acknowledged, We, as Assignors, have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, our entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such application, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and We hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, WE HEREBY covenant that We have the full right to convey the interest assigned by this Assignment, and We have not executed and will not execute any agreement in conflict with this Assignment;

AND, WE HEREBY further covenant and agree that We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to us respecting this

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invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said assignee, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns.

IN TESTIMONY WHEREOF, We have hereunto set our hands.

County of Au Captle ) State of Lelwiau )	Xiang-Gen Xia Newark, Delaware Signature  3-5-99 Date
Subscribed and sworn to before me this	day of
County of Att County of Att County of California	Guangcai Zhou Los Angeles, California  ( They Coy & My Signature  March 15, 1999 Date
Subscribed and sworn to before me this 15  Notary Public Private M Warkway 15  F:\Docs\WLM\PATN\JMO\64507.WPD	MANUEL M MARQUEZUR Commission #1065027 Notary Public — Colifornia LOS ANGELES COUNTY My Comm. Expires Jul 15.1700

**RECORDED: 03/25/1999** 

PATENT REEL: 9856 FRAME: 0581