FD <b>RM PTO-1595</b> , (Fev. 6 93)	REC 05-14	-2003	IEET	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office	
CMB No. 0651-0011 (exp. 4/94) Tab Settings ≎ ⇔ ♥			•	▼ ▼	
To the Honorable Commissi	oner of P. 10244	17325	ed original dod	cuments or copy thereof.	
1 Name of conveying party(ies):		2. Name and addres	s of receiving pa	rty(ies)	
Ashraf A. TAHAT		Name: Ill	linois Institute	e of Technology	
		Internal Address:		0/43/005	
Additional name(s) of conveying part	y(ies) attached? □Yes ■ No				1
3 Nature of conveyance:	Street Address:	10 West 33	rd Street	"	
■ Assignment	□ Merger	_			•
□ Security Agreement	☐ Change of Name				-
□ Other	City: Chicago	State:	Illinois zip: 60616		
Execution Date: 06 May 200	Additional name(s) & address(es) attached? □ Yes ■ No				
4 Application number(s) or patent null fithis document is being filed togs		e execution date of the	application is:	06 May 2003	
A. Patent Application No.(s)	6)43 00 <b>5</b>	B. Patent No.(s)  B. Patent No.(s)  B. Patent No.(s)	0		•
5 Name and address of party to who		6. Total number of		patents involved: 1	—
concerning document should be mailed:		o. Total number of	аррисацона ано	patents involved.	
Name: Roland W. Norris		7. Total fee (37 CFR 1.21(h))\$ 40.00			
Internal Address: Pauley Peters	■ Enclosed				
		□ Authorized to b	e charged to dep	posit account	
Street Address: 2800 West Higgins Road		8. Deposit Account :			
Suite 365		(Attach duplicate	copy of this page	e if paying by deposit account)	
City: Hoffman Estates St	ate: <u>IL</u> Zip: <u>60195</u>				
	DO NOT U	SE THIS SPACE			
9 Statement and signature. To the best of my knowledge and of the original document Roland W. Norris  Mame of Person Signing  eg. No. 32,799  Tota	belief, the foregoing information Sigha	ture low		07 May 03	_
4	documents to be recorded v				
ooket No.: IT-190	Mail Stop Assignn	nent Recordation Serv	vices		
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01 FC:8021	40.00.00	NO.: EV217085368US			

DATE OF DEPOSIT: 07 May 2003

PATENT REEL: 014049 FRAME: 0374

P1010/jms

## ASSIGNMENT

WHEREAS, the following inventor

Name:

Ashraf A. TAHAT

Residence:

Chicago, Illinois

Post Office Address: 5510 North Campbell

Chicago, Illinois 60625

Citizenship:

Jordan

hereinafter referred to as ASSIGNOR, has invented certain new and useful improvements in an invention entitled

## METHODS FOR MULTI-USER BROADBAND WIRELESS CHANNEL ESTIMATION

which is described and claimed in an application for Letters Patent of the United States executed by ASSIGNOR on even date herewith, and naming as sole inventor Ashraf A. TAHAT; said improvements as described and claimed in said application for Letters Patent of the United States, being hereinafter referred to as said "Invention"; and

WHEREAS, Ulinois Institute of Technology, a not-for-profit corporation duly organized and existing under and by virtue of the laws of the State of Illinois and having its principal office and place of business at 10 West 33rd Street, Chicago, Illinois 60616, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S entire rights, title and interest in and to said Invention, and in, to and under Letters Patent therefor in the United States and countries foreign thereto;

NOW THEREFORE BE IT KNOWN THAT, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR has sold, assigned, transferred and set over and by these presents does hereby sell, assign, transfer and set over to and unto ASSIGNEE, its successors and assigns ASSIGNOR'S entire rights, title and interest in and to said Invention, and in, to and under the above-identified application and all other applications for Letters Patent therefor of the United States and countries foreign thereto, and in, to and under all divisions, reissues, continuations, extensions and reexaminations thereof, and covenants that ASSIGNOR has the full right so to do; and the Commissioner of Patents is hereby authorized and requested to issue all United States Letters Patent on said Invention included herein to ASSIGNEE, as assignce of ASSIGNOR'S entire interest.

P140\paf IIT-190

> PATENT REEL: 014049 FRAME: 0375

ASSIGNOR further agrees to communicate to ASSIGNEE or its representatives or agents all facts and information known or available to ASSIGNOR regarding said Invention including evidence for interference purposes or for other legal proceedings, whenever requested; to testify in any interference or other proceedings; to execute and deliver, on request, all lawful papers including original, divisional, continuing and reissue applications, renewals, assignments, powers of attorney, declarations, oaths, affidavits, depositions, etc.; and to generally do everything possible to aid ASSIGNEE, its successors and assigns, but at the expense of ASSIGNEE, in obtaining and enforcing proper protection for said Invention, in the United States and countries foreign thereto.

05/06/2003

Ashraf A. TAHAT

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PATENT
RECORDED: 05/07/2003 REEL: 014049 FRAME: 0376