

# PATENT ASSIGNMENT

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<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Chao Tian	11/04/2011
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	AT&T Intellectual Property I, L.P.
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<b>State/Country:</b>	GEORGIA
<b>Postal Code:</b>	30375
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13286445
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<b>ATTORNEY DOCKET NUMBER:</b>	2011-0150
<b>NAME OF SUBMITTER:</b>	Kin-Wah Tong
<b>Total Attachments: 2</b> source=20110150_EASGN#page1.tif source=20110150_EASGN#page2.tif	

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**PATENT**  
**REEL: 027184 FRAME: 0666**

## ASSIGNMENT AND AGREEMENT

For value received, I, Chao Tian of Parsippany in the County of Morris and State of New Jersey, hereby sell, assign and transfer to AT&T Intellectual Property I, L.P., a partnership organized and existing under the laws of the State of Nevada, having a place of business at 675 W. Peachtree Street, Atlanta, Georgia 30375, U.S.A., and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to **METHOD AND APPARATUS FOR IMPROVING TRANSMISSION OF DATA ON A BANDWIDTH EXPANDED CHANNEL**, described in an application for Letters Patent of the United States, filed on November 1, 2011 and associated with U.S. Patent Application Serial No. 13/286,445, and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and I also concurrently hereby sell, assign and transfer to AT&T Intellectual Property I, L.P. the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

I authorize AT&T Intellectual Property I, L.P. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from me, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of AT&T Intellectual Property I, L.P. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

I request that any and all patents for said inventions be issued to AT&T Intellectual Property I, L.P. in the United States and in all countries foreign to the United States, or to such nominees as AT&T Intellectual Property I, L.P. may designate.

I agree that, when requested, I shall, without charge to AT&T Intellectual Property I, L.P. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Date: Nov 4, 2011

Tian  
CHAO TIAN

County of Union )  
State of NJ )

On this 4th day of November, 2011, before me personally came CHAO TIAN, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Ingrid Filannino  
Notary Public

INGRID FILANNINO  
ID # J226569  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 6/15/2016