

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT						
NATURE OF CONVEYANCE:	ASSIGNMENT						
CONVEYING PARTY DATA							
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Thomas Jackson</td> <td>01/31/2012</td> </tr> <tr> <td>George Eapon</td> <td>01/31/2012</td> </tr> </tbody> </table>		Name	Execution Date	Thomas Jackson	01/31/2012	George Eapon	01/31/2012
Name	Execution Date						
Thomas Jackson	01/31/2012						
George Eapon	01/31/2012						
RECEIVING PARTY DATA							
Name:	Hughes Network Systems, LLC						
Street Address:	11717 Exploration Lane						
City:	Germantown						
State/Country:	MARYLAND						
Postal Code:	20876						
PROPERTY NUMBERS Total: 1							
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13400959</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13400959		
Property Type	Number						
Application Number:	13400959						
CORRESPONDENCE DATA							
Fax Number:	(312)827-8185						
Phone:	312-807-4363						
Email:	chicago.patents@klgates.com						
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>							
Correspondent Name:	Patricia Kane Schmidt						
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Address Line 4:	Chicago, ILLINOIS 60690-1135						
ATTORNEY DOCKET NUMBER:	0361913-01273						
NAME OF SUBMITTER:	Patricia Kane Schmidt						
<p>Total Attachments: 4        source=0361913-1273Assignment#page1.tif        source=0361913-1273Assignment#page2.tif        source=0361913-1273Assignment#page3.tif        source=0361913-1273Assignment#page4.tif</p>							

CH \$40.00 13400959

## ASSIGNMENT

WHEREAS, I, Thomas Jackson ("Assignor"), a citizen of the United States of America, residing in Monrovia, MD, have invented certain new and useful inventions entitled "APPARATUS AND METHOD FOR PHASE LOCKED LOOP BANDWIDTH EXPANSION", for which an application for Letters Patent of the United States is filed herewith; and

WHEREAS, Hughes Networks Systems, LLC, ("Assignee"), a corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at 11717 Exploration Lane, Germantown, Maryland 20876, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto.

NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for and in consideration of the sum of One Dollar (\$1.00) to me in hand paid by the said Assignee, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer, and agree to sell, assign and transfer, unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all divisions, reissues, re-examinations, continuations (including, for example, continuations-in-part), and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, import, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all divisional, reissue, re-examination, continuation, and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 31<sup>st</sup> day of January, 2012

  
\_\_\_\_\_  
**Thomas Jackson, Assignor**

STATE OF: Maryland : SS  
COUNTY OF: Montgomery

On this 31<sup>st</sup> day of January, 2012 before me personally appeared **Thomas Jackson** to me known to be the person whose name is subscribed in the foregoing instrument, and who acknowledged that he executed said instrument as his free and voluntary act and for the purposes therein expressed.

  
\_\_\_\_\_  
Notary Public

My Commission Expires:

\_\_\_\_\_  
LINDA D. HARRIS  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Exp. Aug. 30, 2013

## ASSIGNMENT

WHEREAS, I, George Eapen ("Assignor"), a citizen of the United States of America, residing in Germantown, MD, have invented certain new and useful inventions entitled "APPARATUS AND METHOD FOR PHASE LOCKED LOOP BANDWIDTH EXPANSION", for which an application for Letters Patent of the United States is filed herewith; and

WHEREAS, Hughes Networks Systems, LLC, ("Assignee"), a corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at 11717 Exploration Lane, Germantown, Maryland 20876, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto.

NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for and in consideration of the sum of One Dollar (\$1.00) to me in hand paid by the said Assignee, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer, and agree to sell, assign and transfer, unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all divisions, reissues, re-examinations, continuations (including, for example, continuations-in-part), and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, import, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all divisional, reissue, re-examination, continuation, and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

IN WITNESS WHEREOF, I have hereunto set my hand and seal this 31 day of Jan., 2012



George Eapen, Assignor

STATE OF: Maryland  
COUNTY OF: Frederick : SS

On this 31 day of Jan., 2012 before me personally appeared George Eapen to me known to be the person whose name is subscribed in the foregoing instrument, and who acknowledged that he executed said instrument as his free and voluntary act and for the purposes therein expressed.



Notary Public

My Commission Expires:

2/22/2013

