PATENT ASSIGNMENT

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SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DATA				
Name			ame	Execution Date
Roderick Ragland				10/18/2012
Nimesh Ambeskar				11/20/2012
Michael Pierce				10/18/2012
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				
Property Type			Number 2904739	
Application Number:		12904	2904739	
CORRESPONDENCE DATA				
CORRESPONDENCE DATA Fax Number: 3128278185				
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.				
Filolic. 512-512-1121				
Email: chicago.patents@klgates.com				
Correspondent Name: Nolan R. Hubbard Address Line 1: P.O. Box 1135				
Address Line 4: Chicago, ILLINOIS 60690-1135				
NAME OF SUBMITTER: Nolan			Nolan R. Hubbard	
Total Attachments: 4				
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PATENT				

ASSIGNMENT

WHEREAS, the undersigned, to wit: <u>Roderick Ragland</u>, <u>Nimesh Ambeskar</u>, and <u>Michael</u> <u>Pierce</u> (hereinafter "ASSIGNORS"), are the lawful owners of an invention entitled **METHOD AND APPARATUS FOR HIGH SYMBOL RATE COMMUNICATION SYSTEM WITH REDUCED OVERHEAD BANDWIDTH** for which application for Letter Patent of the United States was filed on <u>October 14, 2010</u> having Application Serial No. <u>12/904,739</u>;

AND WHEREAS, <u>Hughes Network Systems</u>, <u>LLC</u> (hereinafter "ASSIGNEE"), a corporation duly organized and existing under the laws of <u>Delaware</u> and having its principal office and place of business at <u>11717 Exploration Lane</u>, <u>Germantown</u>, <u>Maryland 20876</u>, desires to acquire the entire right, title, and interest therein;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, said ASSIGNORS do hereby sell, assign, and transfer, and hereby set over unto ASSIGNEE, its successors, assigns and legal representatives, the full and exclusive right, title and interest to said invention in the United States of America and all foreign countries, including, without limitation, said invention as described in the aforesaid application, to be held and enjoyed by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by said ASSIGNORS had this assignment and sale not been made, including, without limitation, all rights to the aforesaid application and to any United States Letters Patent therefor, when issued together with all improvements thereon and betterments thereof, all related applications including, but not limited to, divisions, continuations, continuations-in-part, reissues and reexaminations thereof and substitutions of or for said application, and all foreign rights including the right to make application for Letters Patent for said inventions in any and all foreign countries and the right to claim priority as to the filing date under the International Convention on the basis for the aforesaid application for United States Letters Patent; and ASSIGNORS hereby authorize and request the Commissioner of Patents to issue all Letters Patent issuing therefrom to ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legal representatives.

ASSIGNORS hereby agree to execute any papers, provide any information and testify in any interference or litigation at the request of ASSIGNEE, its successors, assigns and legal representatives, when deemed essential to ASSIGNEE's, its successors', assigns' and legal representatives' full enjoyment, protection, enforcement and title in and to such invention and rights hereby transferred.

ASSIGNOR furthermore agrees upon request of said ASSIGNEE, its successors, assigns and legal representatives, and without further remuneration, to execute any and all papers desired by said ASSIGNEE, its successors, assigns and legal representatives, for the filing and granting of foreign applications and the perfecting of title thereto in said ASSIGNEE, its successors, assigns and legal representatives.

PATENT REEL: 029367 FRAME: 0177

Atty. Docket No. 0361913-1223

Signature Name: Røderick Ragland

Date Signed

10 2012

Before me personally appeared the person whose name is subscribed to the foregoing instrument, and executed the foregoing instrument in my presence for the purpose contained therein, by signing his/her name hereto.

Sign tai I hyse

Date Signed

Atty, Docket No. 0361913-1223

Signature

motul J Prese Name: Michael Pierce

Date Signed

10/18/2012

Before me personally appeared the person whose name is subscribed to the foregoing instrument, and executed the foregoing instrument in my presence for the purpose contained therein, by signing his/her name hereto.

Signatu Papicin I Buck

Date Signed

Atty. Docket No. 0361913-1223

Signature

Name: Nimesh Ambeskar

<u>Date Signed</u>

Before me personally appeared the person whose name is subscribed to the foregoing instrument, and executed the foregoing instrument in my presence for the purpose contained therein, by signing his/her name hereto.

Signat

Date Signed

11/20/12