

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT
CONVEYING PARTY DATA	
Name	Execution Date
Hughes Network Systems, LLC	02/10/2012
RECEIVING PARTY DATA	
Name:	Wells Fargo Bank, National Association
Street Address:	625 Marquette Ave., 11th Floor
City:	Minneapolis
State/Country:	MINNESOTA
Postal Code:	55470
PROPERTY NUMBERS Total: 6	
Property Type	Number
Application Number:	12894380
Application Number:	12894358
Application Number:	13078612
Application Number:	13078113
Application Number:	12707766
Application Number:	13086702
CORRESPONDENCE DATA	
Fax Number:	(212)291-9174
Phone:	212 558 7250
Email:	millerse@sullcrom.com, nguyenb@sullcrom.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:	Stephen E. Miller
Address Line 1:	125 Broad Street
Address Line 4:	New York, NEW YORK 10004-2498
ATTORNEY DOCKET NUMBER:	018153/0038 (SEM)

OP \$240.00 12894380

NAME OF SUBMITTER:

Stephen E. Miller

**Total Attachments: 5**

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## Patent Security Agreement

**Patent Security Agreement**, dated as of February 10, 2012, by Hughes Network Systems, LLC, a Colorado limited liability company ("Pledgor"), in favor of Wells Fargo Bank, National Association, in its capacity as collateral agent pursuant to the Indenture (in such capacity, the "Collateral Agent").

### WITNESSETH:

WHEREAS, the Pledgor is party to a Security Agreement dated as of June 8, 2011 (as amended, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Pledgor is required to execute and deliver this Patent Security Agreement;

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Indenture, the Pledgor hereby agrees with the Collateral Agent as follows:

SECTION 1. Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement.

SECTION 2. Grant of Security Interest in Patent Collateral. The Pledgor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a lien on and security interest in and to all of its right, title and interest in, to and under all the following Pledged Collateral of the Pledgor:

- (a) Patents of the Pledgor listed on Schedule I attached hereto; and
- (b) all Proceeds of any and all of the foregoing (other than Excluded Property).

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted pursuant to the security interest granted to the Collateral Agent under the Security Agreement and the Pledgor hereby acknowledges and affirms that the rights and remedies of the Collateral Agent with respect to the security interest in the Patents made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control unless the Collateral Agent shall otherwise determine.

SECTION 4. Termination. Upon the payment in full of the Secured Obligations and termination of the Security Agreement, the Collateral Agent shall execute, acknowledge, and deliver to the Pledgor an instrument in writing in recordable form releasing the collateral pledge, grant, assignment, lien and security interest in the Patents under this Patent Security Agreement.

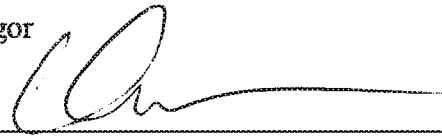
SECTION 5. Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts.

SECTION 6. Governing Law. This Patent Security Agreement and the transactions contemplated hereby, and all disputes between the parties under or relating to this Patent Security Agreement or the facts or circumstances leading to its execution, whether in contract, tort or otherwise, shall be construed in accordance with and governed by the laws (including statutes of limitation) of the State of New York, without regard to conflicts of law principles that would require the application of the laws of another jurisdiction.

[signature page follows]

IN WITNESS WHEREOF, the Pledgor and the Collateral Agent have caused this Patent Security Agreement to be duly executed and delivered by their duly authorized officer as of the date first set forth above.

**HUGHES NETWORK SYSTEMS, LLC,**  
as Pledgor

By:   
Name: Dean A. Manson  
Title: Executive Vice President, General  
Counsel and Secretary

**WELLS FARGO BANK, NATIONAL  
ASSOCIATION,**  
as Collateral Agent

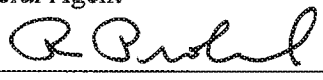
By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

IN WITNESS WHEREOF, the Pledgor and the Collateral Agent have caused this Patent Security Agreement to be duly executed and delivered by their duly authorized officer as of the date first set forth above.

**HUGHES NETWORK SYSTEMS, LLC,**  
as Pledgor

By: \_\_\_\_\_  
Name: Dean A. Manson  
Title: Executive Vice President, General  
Counsel and Secretary

**WELLS FARGO BANK, NATIONAL  
ASSOCIATION,**  
as Collateral Agent

By:  \_\_\_\_\_  
Name: **Richard Prokech**  
Title: **Vice President**

**SCHEDULE I**  
**to**  
**PATENT SECURITY AGREEMENT**  
**PATENT REGISTRATIONS AND PATENT APPLICATIONS**

**United States Patent Registrations:**

None.

**United States Patent Applications:**

OWNER	APPLICATION NUMBER	NAME
Hughes Network Systems, LLC	12/894,380	PHASE PULSE SYSTEM AND METHOD FOR BANDWIDTH AND ENERGY EFFICIENT CONTINUOUS PHASE MODULATION
Hughes Network Systems, LLC	12/894,358	CONTINUOUS PHASE MODULATION FOR SATELLITE COMMUNICATIONS
Hughes Network Systems, LLC	13/078,612	METHOD AND APPARATUS FOR INTEGRATED WAVEGUIDE TRANSMIT-RECEIVE ISOLATION, FILTERING, AND CIRCULAR POLARIZATION
Hughes Network Systems, LLC	13/078,113	METHOD AND APPARATUS FOR INTEGRATED WAVEGUIDE TRANSMIT-RECEIVE ISOLATION AND FILTERING
Hughes Network Systems, LLC	12/707,766	METHOD AND SYSTEM FOR PROVIDING LOW DENSITY PARITY CHECK (LDPC) ENCODING AND DECODING)
Hughes Network Systems, LLC	13/086,702	SYSTEM AND METHOD FOR MULTI-CARRIER MULTIPLEXING