

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4050208

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	EHOSTAR TECHNOLOGIES L.L.C.	08/03/2016
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	NAGRASTAR, LLC	
<b>Street Address:</b>	90 INVERNESS CIRCLE EAST	
<b>City:</b>	ENGLEWOOD	
<b>State/Country:</b>	COLORADO	
<b>Postal Code:</b>	80112	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	14608900
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
<b>Email:</b>	jslate@merchantgould.com	
<b>Correspondent Name:</b>	MERCHANT & GOULD P.C.	
<b>Address Line 1:</b>	P.O. BOX 2903	
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402	
<b>ATTORNEY DOCKET NUMBER:</b>	40706.0009US11	
<b>NAME OF SUBMITTER:</b>	ANDREW T. POUZESHI, #67672	
<b>SIGNATURE:</b>	/Andrew T. Pouzeshi/	
<b>DATE SIGNED:</b>	09/13/2016	
<b>Total Attachments: 3</b>		
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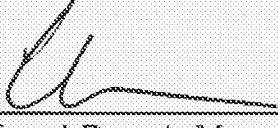
**ASSIGNMENT**

For good and valuable consideration, the receipt of which is hereby acknowledged, and subject to the reservations stated in the Joint Invention, Patent Assignment, and Patent License Agreement (the "Agreement") between the parties, EchoStar Technologies L.L.C., a Texas limited liability company and having a principal place of business of 100 Inverness Terrace East, Englewood, Colorado 80112 (hereinafter "Assignor"), hereby grants and assigns to NagraStar, LLC, a Colorado limited liability company having a principal place of business of 90 Inverness Circle East, Englewood, Colorado 80112, United States (hereinafter "Assignee"), all of Assignor's right, title and interest in and to the United States and foreign patent applications identified in Exhibit A attached hereto, and to any continuations, continuations-in-part, divisionals, reissues, reexaminations, renewals, extensions, or any other application claiming priority to any of the foregoing and arising anywhere in the world or being prosecuted in or before any national, international and/or regional patent office or similar governmental body (hereinafter, collectively, the "Assigned Patent Applications"), to have and to hold the same, unto Assignee for its own use and enjoyment and for the use and enjoyment of its successors and assigns, including all past, present and future damages for infringement of any of the Assigned Patent Applications and the sole right to sue therefore under such Assigned Patent Applications, for the full term or terms of all such Assigned Patent Applications.

Assignor hereby retains for its benefit and its successors and assigns, the rights and licenses set forth in the Agreement.

IN WITNESS WHEREOF, Assignor has caused this Agreement to be duly signed on its behalf.

Signature: \_\_\_\_\_

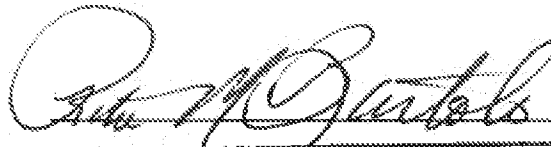
  
[Name] Dean A. Manson  
[Title] Executive Vice President, General Counsel & Secretary  
[Entity] EchoStar Technologies L.L.C.  
[Date] August 3, 2016

STATE OF Colorado                    )  
  ) ss.  
COUNTY OF Arapahoe                )

On this 3rd day of August, 2016, before me personally appeared to me known and known to me to be the person described in and who executed the foregoing instrument, and he duly acknowledged to me that he executed the same for the uses and purposes therein set forth.

[SEAL]

Notary Public



RITA M BARTOLO  
NOTARY PUBLIC  
STATE OF COLORADO  
NOTARY ID 19914008535  
MY COMMISSION EXPIRES SEPTEMBER 26, 2019

### EXHIBIT A

1. U.S. Application Serial No. 13/799,891, entitled "SYSTEMS AND METHODS FOR PERFORMING TRANSPORT I/O," filed March 13, 2013 (Attorney Docket No. 40706.0009US01).
2. U.S. Application Serial No. 29/448,754, entitled "SMART CARD INTERFACE," filed March 13, 2013 (Attorney Docket No. 40706.0012US01).
3. U.S. Application Serial No. 29/448,761, entitled "SMART CARD INTERFACE," filed March 13, 2013 (Attorney Docket No. 40706.0013US01).
4. U.S. Application Serial No. 29/448,766, entitled "SMART CARD INTERFACE," filed March 13, 2013 (Attorney Docket No. 40706.0014US01).
5. U.S. Application Serial No. 13/799,774, entitled "SYSTEMS AND METHODS FOR ASSEMBLING AND EXTRACTING COMMAND AND CONTROL DATA," filed March 13, 2013 (Attorney Docket No. 40706.0017US01).
6. U.S. Application Serial No. 62/048,142, entitled "SYSTEMS AND METHODS FOR PERFORMING TRANSPORT I/O," filed September 9, 2014 (Attorney Docket No. 40706.0009USP1).
7. U.S. Application Serial No. 14/499,956, entitled "SYSTEMS AND METHODS FOR PERFORMING TRANSPORT I/O," filed September 29, 2014 (Attorney Docket No. 40706.0009USD1).
8. U.S. Application Serial No. 14/500,037, entitled "SYSTEMS AND METHODS FOR PERFORMING TRANSPORT I/O," filed September 29, 2014 (Attorney Docket No. 40706.0009USD2).
9. U.S. Application Serial No. 14/500,113, entitled "SYSTEMS AND METHODS FOR PERFORMING TRANSPORT I/O," filed September 29, 2014 (Attorney Docket No. 40706.0009USD3).
10. U.S. Application Serial No. 14/608,900, entitled "USB INTERFACE FOR PERFORMING TRANSPORT I/O," filed January 29, 2015 (Attorney Docket No. 40706.0009US11).
11. U.S. Application Serial No. 29/525,632, entitled "SMART CARD INTERFACE," filed April 30, 2015 (Attorney Docket No. 40706.0020US01).
12. U.S. Application Serial No. 14/818,860, entitled "HYBRID ELECTRONIC PROGRAM GUIDE," filed August 5, 2015 (Attorney Docket No. 40706.0019US01).