

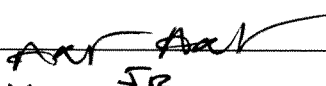
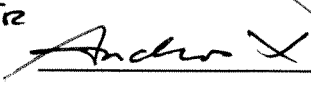
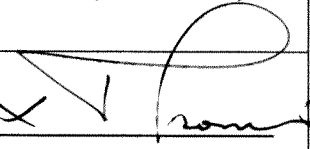
PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT3292011

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ANDROS X THOMSON	02/25/2015
YT HO	03/26/2015
RECEIVING PARTY DATA	
Name:	EHOSTAR TECHNOLOGIES LLC
Street Address:	100 INVERNESS TERRACE EAST
City:	ENGLEWOOD
State/Country:	COLORADO
Postal Code:	80112
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14583555
CORRESPONDENCE DATA	
Fax Number:	
<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>	
Phone:	301-299-4624
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Correspondent Name:	POTOMAC TECHNOLOGY LAW, LLC
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Address Line 4:	POTOMAC, MARYLAND 20854
ATTORNEY DOCKET NUMBER:	P2013-08-18
NAME OF SUBMITTER:	CRAIG PLASTRIK
SIGNATURE:	/Craig Plastrik/
DATE SIGNED:	04/01/2015
Total Attachments: 2	
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source=US-App-No_14583555_Assignment#page2.tif	

PATENT ASSIGNMENT

Assignor(s):	Mr. Andros THOMSON, Mr. YT HO		
Assignee:	Echostar Technologies LLC 100 Inverness Terrace East, Englewood, Colorado, 80112		
Patent Application(s):	Title: A BACK-DRILLING METHOD FOR A PIN-IN-HOLE PCB COMPONENT PROCESS, AND A PCB ASSEMBLY PRODUCED THEREBY <input type="checkbox"/> executed by the undersigned concurrently herewith <input checked="" type="checkbox"/> Application No(s): 14583555 Filing Date: 2014-12-26		
In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, I/we, the above-named Assignors, hereby: sell, assign and transfer to the above-named Assignee (and its successors, assigns and legal representatives) the entire right, title and interest (for the United States and all foreign countries) in and to: (1) the above-identified patent application(s) ("the Application(s)"), including any and all improvements that are disclosed in the Application(s); and (2) all divisional, continuing, substitute, renewal, reissue and all other patent applications, which have been or are subsequently filed in the United States and any and all foreign countries, based on or claiming priority to the Application(s), or based on any of said improvements; and (3) all original and reissued patents that have been or are subsequently issued in the United States and any and all foreign countries from the Application(s) or based on any of said improvements; and (4) any and all rights of priority arising from the filing of the Application(s) in the United States and any and all foreign countries; and agree that the Assignee may apply for and receive a patent or patents from the Application(s) and for said improvements in its own name; and that, to carry out in good faith the intent and purpose of this Assignment, I/we (without charge to, but at the expense of the Assignee) shall: execute the Application(s), and all divisional, continuing, substitute, renewal, reissue and other patent applications based on or claiming priority to the Application(s), or based on any and all of said improvements, and execute all associated assignments and powers of attorney; convey to the Assignee (and its successors, assigns and legal representatives) all known facts relating to the Application(s) said improvements and the history thereof; and generally assist the Assignee (and its successors, assigns and legal representatives) in securing and maintaining proper patent protection for the Application(s) and said improvements, and for vesting title in and to the Application(s), and all applications for patents and all patents on said improvements, in the Assignee (and its successors, assigns and legal representatives); and covenant with the Assignee (and its successors, assigns and legal representatives) that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the Assignor(s), and that full right to convey the same as herein expressed is possessed by the Assignor(s).			
Date:	<u>25 Feb 2015</u>	Andros THOMSON:  X 512 	
Date:	_____	YT HO:	_____

PATENT ASSIGNMENT

Assignor(s):	Mr. Andros THOMSON, Mr. YT HO
Assignee:	EchoStar Technologies LLC 100 Inverness Terrace East, Englewood, Colorado, 80112
Patent Application(s):	Title: A BACK-DRILLING METHOD FOR A PIN-IN-HOLE PCB COMPONENT PROCESS, AND A PCB ASSEMBLY PRODUCED THEREBY <input type="checkbox"/> executed by the undersigned concurrently herewith <input checked="" type="checkbox"/> Application No(s): 14583555 Filing Date: 2014-12-26
<p>In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, I/we, the above-named Assignors, hereby:</p> <p>sell, assign and transfer to the above-named Assignee (and its successors, assigns and legal representatives) the entire right, title and interest (for the United States and all foreign countries) in and to: (1) the above-identified patent application(s) ("the Application(s)"), including any and all improvements that are disclosed in the Application(s); and (2) all divisional, continuing, substitute, renewal, reissue and all other patent applications, which have been or are subsequently filed in the United States and any and all foreign countries, based on or claiming priority to the Application(s), or based on any of said improvements; and (3) all original and reissued patents that have been or are subsequently issued in the United States and any and all foreign countries from the Application(s) or based on any of said improvements; and (4) any and all rights of priority arising from the filing of the Application(s) in the United States and any and all foreign countries; and</p> <p>agree that the Assignee may apply for and receive a patent or patents from the Application(s) and for said improvements in its own name; and that, to carry out in good faith the intent and purpose of this Assignment, I/we (without charge to, but at the expense of the Assignee) shall: execute the Application(s), and all divisional, continuing, substitute, renewal, reissue and other patent applications based on or claiming priority to the Application(s), or based on any and all of said improvements, and execute all associated assignments and powers of attorney; convey to the Assignee (and its successors, assigns and legal representatives) all known facts relating to the Application(s) said improvements and the history thereof; and generally assist the Assignee (and its successors, assigns and legal representatives) in securing and maintaining proper patent protection for the Application(s) and said improvements, and for vesting title in and to the Application(s), and all applications for patents and all patents on said improvements, in the Assignee (and its successors, assigns and legal representatives); and</p> <p>covenant with the Assignee (and its successors, assigns and legal representatives) that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the Assignor(s), and that full right to convey the same as herein expressed is possessed by the Assignor(s).</p>	
Date:	Andros THOMSON:
Date: 2015-03-26	YT HO: 