

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6314821

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
SPACE SYSTEMS/LORAL, LLC	09/22/2020

RECEIVING PARTY DATA

Name:	WILMINGTON TRUST, NATIONAL ASSOCIATION, AS NOTES COLLATERAL AGENT
Street Address:	GLOBAL CAPITAL MARKETS, 246 GOOSE LANE, SUITE 105
City:	GUILFORD
State/Country:	CONNECTICUT
Postal Code:	06437

PROPERTY NUMBERS Total: 217

Property Type	Number
Patent Number:	6883588
Patent Number:	6237876
Patent Number:	6392611
Patent Number:	6411262
Patent Number:	6454217
Patent Number:	6304228
Patent Number:	6400696
Patent Number:	6879808
Patent Number:	6591899
Patent Number:	6478258
Patent Number:	6448940
Patent Number:	6559742
Patent Number:	7363960
Patent Number:	7219132
Patent Number:	6476772
Patent Number:	6854510
Patent Number:	6367509
Patent Number:	6583692
Patent Number:	6898428
Patent Number:	6563404

PATENT

Property Type	Number
Patent Number:	6695251
Patent Number:	6583994
Patent Number:	8160575
Patent Number:	6441794
Patent Number:	6553286
Patent Number:	6543723
Patent Number:	6476686
Patent Number:	6581880
Patent Number:	6691955
Patent Number:	6501434
Patent Number:	7028953
Patent Number:	6623826
Patent Number:	6522306
Patent Number:	6672544
Patent Number:	6725277
Patent Number:	6570535
Patent Number:	6720918
Patent Number:	7787819
Patent Number:	7874519
Patent Number:	7792070
Patent Number:	8568053
Patent Number:	8021069
Patent Number:	8135338
Patent Number:	9045239
Patent Number:	8179313
Patent Number:	8301377
Patent Number:	8270899
Patent Number:	9108748
Patent Number:	9136606
Patent Number:	8448902
Patent Number:	8800935
Patent Number:	8482894
Patent Number:	9085377
Patent Number:	8660482
Patent Number:	8789796
Patent Number:	8868263
Patent Number:	8732916
Patent Number:	8914258

Property Type	Number
Patent Number:	9000288
Patent Number:	9180982
Patent Number:	9004409
Patent Number:	9248922
Patent Number:	9145216
Patent Number:	8915473
Patent Number:	9774095
Patent Number:	8952769
Patent Number:	9108749
Patent Number:	9030271
Patent Number:	8447296
Patent Number:	8907742
Patent Number:	8872714
Patent Number:	8915474
Patent Number:	9019039
Patent Number:	8763957
Patent Number:	8973641
Patent Number:	8876062
Patent Number:	8998146
Patent Number:	9368851
Patent Number:	8894017
Patent Number:	8996051
Patent Number:	9531048
Patent Number:	8761026
Patent Number:	9537209
Patent Number:	9708082
Patent Number:	9677602
Patent Number:	9627565
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Patent Number:	9663251
Patent Number:	9546510

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Patent Number:	10337594
Patent Number:	9889950
Patent Number:	9628168
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Patent Number:	10236970
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Patent Number:	10096726
Patent Number:	9979466
Patent Number:	10056668
Application Number:	14868076
Patent Number:	9705586
Patent Number:	10618678
Patent Number:	10336475
Patent Number:	9621255
Patent Number:	10183764
Patent Number:	9640288
Patent Number:	10259599
Patent Number:	10312995
Patent Number:	10033099
Application Number:	14969839
Patent Number:	10501211
Patent Number:	10239477
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Patent Number:	10411362
Patent Number:	10128577

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Patent Number:	10594046
Patent Number:	10418724
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Patent Number:	10214303
Patent Number:	10407189
Patent Number:	10538347
Patent Number:	10364051
Patent Number:	10320064
Patent Number:	10577130
Application Number:	15374528
Patent Number:	9882632
Patent Number:	10075242
Patent Number:	9917646
Patent Number:	10305195
Application Number:	15441032
Patent Number:	10543937
Patent Number:	10329034
Patent Number:	10033455
Patent Number:	9979465
Patent Number:	10050699
Patent Number:	9923625
Patent Number:	10122456
Application Number:	15466610
Patent Number:	10464694
Patent Number:	10538346

Property Type	Number
Patent Number:	10044436
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Patent Number:	10479534
Patent Number:	10435183
Patent Number:	10618677
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Patent Number:	10219051
Patent Number:	10589879
Patent Number:	10200922
Patent Number:	10326209
Patent Number:	10320481
Application Number:	15637466
Application Number:	15654593
Application Number:	15669470
Patent Number:	10142021
Patent Number:	10661918
Patent Number:	10566684
Patent Number:	10367575
Application Number:	15710740
Application Number:	15799258
Patent Number:	10573949
Patent Number:	10461409
Patent Number:	10263325
Patent Number:	10361762
Patent Number:	10518909
Patent Number:	10562647
Application Number:	15887721
Patent Number:	10536674
Patent Number:	10250330
Patent Number:	10320349
Patent Number:	10284308
Patent Number:	10432308
Application Number:	16163105
Patent Number:	10476595
Patent Number:	10673399
Application Number:	16505937
Patent Number:	10541656

Property Type	Number
Patent Number:	10511377
Application Number:	16286520
Application Number:	62994651
Application Number:	62984942
Application Number:	63024825
Application Number:	16276987
Application Number:	16434481

CORRESPONDENCE DATA

Fax Number: (213)891-8763
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.
Email: rhonda.deleon@lw.com
Correspondent Name: LATHAM & WATKINS LLP
Address Line 1: 355 SOUTH GRAND AVENUE
Address Line 4: LOS ANGELES, CALIFORNIA 90071-1560

ATTORNEY DOCKET NUMBER:	061398-0031
NAME OF SUBMITTER:	RHONDA DELEON
SIGNATURE:	/Rhonda DeLeon/
DATE SIGNED:	09/23/2020

Total Attachments: 23

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PATENT SECURITY AGREEMENT

PATENT SECURITY AGREEMENT, dated as of September 22, 2020, made by each of the undersigned grantors (individually, a “**Grantor**”, and, collectively, the “**Grantors**”), in favor of Wilmington Trust, National Association, in its capacity as Notes Collateral Agent.

W I T N E S S E T H:

WHEREAS, the Grantors and Maxar Technologies Inc., a Delaware corporation (the “**Company**”) are party to that certain Security Agreement, dated as of July 1, 2020 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “**Security Agreement**”), in favor of the Notes Collateral Agent pursuant to which the Grantors have agreed to execute and deliver this Patent Security Agreement (this “**Patent Security Agreement**”); and

WHEREAS, the Company, the Grantors, Wilmington Trust, National Association, as trustee, and the Notes Collateral Agent entered into that certain indenture, dated as of June 25, 2020 (as amended, amended and restated, supplemented or otherwise modified from time to time, the “**Indenture**”), pursuant to which (x) the Company has issued \$150,000,000 aggregate principal amount of its 7.54% Senior Secured Notes due 2027, and (y) each Grantor has agreed to secure such Grantor’s obligations under the Notes and the Indenture as set forth herein.

NOW, THEREFORE, in consideration of the premises, the Grantors hereby agree with the Notes 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. Each Grantor hereby pledges and grants to the Notes 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 Collateral of such Grantor:

- (a) patents of such Grantor, including those listed on Schedule I attached hereto (other than Excluded Assets); and
- (b) all Proceeds of any and all of the foregoing.

SECTION 3. Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Notes Collateral Agent pursuant to the Security Agreement and Grantors hereby acknowledge and affirm that the rights and remedies of the Notes 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.

SECTION 4. Termination. Upon the release of the Grantors in accordance with Section 5.1 of the Security Agreement, the Notes Collateral Agent, at the sole cost and expense of the Grantors, shall execute, acknowledge, and deliver to the Grantors 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.

SECTION 7. First Lien Intercreditor Agreement. This Patent Security Agreement is subject to the terms and conditions set forth in the First Lien Intercreditor Agreement in all respects and, in the event of any conflict between the terms of the First Lien Intercreditor Agreement and this Patent Security Agreement, the terms of the First Lien Intercreditor Agreement shall govern.

SECTION 8. Concerning the Notes Collateral Agent. Wilmington Trust, National Association is entering into this Patent Security Agreement solely in its capacity as Notes Collateral Agent under the Indenture and shall be entitled to all of the rights, privileges and immunities granted to the Notes Collateral Agent under the Indenture as if such rights, privileges and immunities were set forth herein.

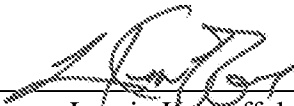
[Signature Pages Follow]

IN WITNESS WHEREOF, each Grantor has caused this Patent Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

Very truly yours,

Grantors:

DIGITALGLOBE, INC.

By:  _____
Name: Laurie Korneffel
Title: Authorized Signatory

RADIANT GEOSPATIAL SOLUTIONS LLC


By:  _____
Name: Laurie Korneffel
Title: Authorized Signatory

SPACE SYSTEMS/LORAL, LLC

By:  _____
Name: Laurie Korneffel
Title: Authorized Signatory

Accepted and Agreed to:

WILMINGTON TRUST, NATIONAL ASSOCIATION,
as Notes Collateral Agent

By: 
Name: Nedine P. Sutton
Title: Vice President

[Signature Page to Patent Security Agreement]

PATENT
REEL: 053866 FRAME: 0821

SCHEDULE I
to
PATENT SECURITY AGREEMENT
PATENT REGISTRATIONS AND PATENT APPLICATIONS

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
1.	DigitalGlobe, Inc.	Apparatuses and methods for mapping image coordinates to ground coordinates	09846621	05/01/2001	6735348	05/11/2004
2.	DigitalGlobe, Inc.	Method for using remotely sensed data to provide agricultural information	10047423	01/15/2002	7068816	06/27/2006
3.	DigitalGlobe, Inc.	Tonal balancing of multiple images	10423720	04/25/2003	7236646	06/26/2007
4.	DigitalGlobe, Inc.	Image warp	10684295	10/10/2003	7269299	09/11/2007
5.	DigitalGlobe, Inc.	Estimation of coefficients for a rational polynomial camera model	10849276	05/18/2004	7421151	09/02/2008
6.	DigitalGlobe, Inc.	Method and apparatus for determination of water pervious surfaces	10908695	05/23/2005	7660430	02/09/2010
7.	DigitalGlobe, Inc.	Tonal balancing of multiple images	11753272	05/24/2007	7317844	01/08/2008
8.	DigitalGlobe, Inc.	Semi-automatic extraction of linear features from image data	11764765	06/18/2007	7653218	01/26/2010
9.	DigitalGlobe, Inc.	Image warp	11835169	08/07/2007	7613362	11/03/2009
10.	DigitalGlobe, Inc.	Method and apparatus for enhancing a digital image	12463797	05/11/2009	7715651	05/11/2010
11.	DigitalGlobe, Inc.	Semi-automatic extraction of linear features from image data	12606918	10/27/2009	8155391	04/10/2012
12.	DigitalGlobe, Inc.	Advanced cloud cover assessment	13112583	05/20/2011	8594375	11/26/2013
13.	DigitalGlobe, Inc.	Semi-automatic extraction of linear features from image data	13417568	03/12/2012	8488845	07/16/2013
14.	DigitalGlobe, Inc.	Pan sharpening digital imagery	13452741	04/20/2012	8761506	06/24/2014
15.	DigitalGlobe, Inc.	Hyperspherical pan sharpening	13452768	04/20/2012	8737733	05/27/2014
16.	DigitalGlobe, Inc.	Automated metric information network	13762355	02/07/2013	9251419	02/02/2016
17.	DigitalGlobe, Inc.	Using parallax in remote sensing to determine cloud feature height	13835804	03/15/2013	9001311	04/07/2015
18.	DigitalGlobe, Inc.	Automated geospatial image mosaic generation	13838475	03/15/2013	9042674	05/26/2015

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
19.	DigitalGlobe, Inc.	System and method for geolocation of social media posts	13840173	03/15/2013	9032000	05/12/2015
20.	DigitalGlobe, Inc.	Atmospheric compensation in satellite imagery	13840743	03/15/2013	9396528	07/19/2016
21.	DigitalGlobe, Inc.	Automated geospatial image mosaic generation with automatic source selection	13952442	07/26/2013	9202259	12/01/2015
22.	DigitalGlobe, Inc.	Automated geospatial image mosaic generation with automatic outline generation	13952464	07/26/2013	9135505	09/15/2015
23.	DigitalGlobe, Inc.	Automatic generation of built-up layers from high resolution satellite image data	13955268	07/31/2013	9230168	01/05/2016
24.	DigitalGlobe, Inc.	Advanced cloud cover assessment for panchromatic images	13955429	07/31/2013	8913826	12/16/2014
25.	DigitalGlobe, Inc.	Crowdsourced search and locate platform	14010450	08/26/2013	9122708	09/01/2015
26.	DigitalGlobe, Inc.	Automatic extraction of built-up footprints from high resolution overhead imagery through manipulation of alpha-tree data structures	14013904	08/29/2013	9031325	05/12/2015
27.	DigitalGlobe, Inc.	Automated and scalable object and feature extraction from imagery	14024399	09/11/2013	9141872	09/22/2015
28.	DigitalGlobe, Inc.	Classification of land based on analysis of remotely-sensed earth images	14024418	09/11/2013	9147132	09/29/2015
29.	DigitalGlobe, Inc.	Crowdsourced image analysis platform	14049189	10/08/2013	9560092	01/31/2017
30.	DigitalGlobe, Inc.	Crowdsourced search and locate platform	14049199	10/08/2013	9128959	09/08/2015
31.	DigitalGlobe, Inc.	Techniques for identifying parking lots in remotely-sensed images by identifying parking rows	14053332	10/14/2013	9275297	03/01/2016
32.	DigitalGlobe, Inc.	Generation of high resolution population density data sets through exploitation of high resolution overhead imagery data and low resolution population density data sets	14063309	10/25/2013	9230169	01/05/2016
33.	DigitalGlobe, Inc.	Automatic extraction of built-up footprints from high resolution overhead imagery through manipulation of alpha-tree data structures	14089405	11/25/2013	8682079	03/25/2014

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
34.	DigitalGlobe, Inc.	System and method for multi resolution and multi temporal image search	14091412	11/27/2013	9529824	12/27/2016
35.	DigitalGlobe, Inc.	Oil tank farm storage monitoring	14095608	12/03/2013	9195876	11/24/2015
36.	DigitalGlobe, Inc.	Automated remote car counting	14095637	12/03/2013	9122930	09/01/2015
37.	DigitalGlobe, Inc.	Automated compound structure characterization in overhead imagery	14163008	01/24/2014	9639755	05/02/2017
38.	DigitalGlobe, Inc.	Automated sliver removal in orthomosaic generation	14219884	03/19/2014	9367895	06/14/2016
39.	DigitalGlobe, Inc.	Automated geospatial image mosaic generation with multiple zoom level support	14307307	06/17/2014	9396391	07/19/2016
40.	DigitalGlobe, Inc.	Bathymetric techniques using satellite imagery	14340389	07/24/2014	9336441	05/10/2016
41.	DigitalGlobe, Inc.	Multi-spectral image labeling with radiometric attribute vectors of image space representation components	14499440	09/29/2014	9619711	04/11/2017
42.	DigitalGlobe, Inc.	Crowdsourced feature identification and orthorectification	14680495	04/07/2015	10078645	09/18/2018
43.	DigitalGlobe, Inc.	System and method for large scale crowdsourcing of map data cleanup and correction	14680665	04/07/2015	10083186	09/25/2018
44.	DigitalGlobe, Inc.	Advanced semi-automated vector editing in two and three dimensions	14681043	04/07/2015	10133928	11/20/2018
45.	DigitalGlobe, Inc.	Automated tonal balancing	14708129	05/08/2015	9589334	03/07/2017
46.	DigitalGlobe, Inc.	Some automated and semi-automated tools for linear feature extraction in two and three dimensions	14730176	06/03/2015	9727784	08/08/2017
47.	DigitalGlobe, Inc.	System and methods for semi-automated editing of ortho-mosaics built from remotely-sensed imagery	14730227	06/03/2015	9600740	03/21/2017
48.	DigitalGlobe, Inc.	Spectral data analytic cube classifier (SPADACC) for continuous wide area geospatial modeling using normalized and highly dimensional multispectral raster data	14788651	06/30/2015	10121106	11/06/2018
49.	DigitalGlobe, Inc.	Automated seamline construction for high-quality high-resolution orthomosaics	14789877	07/01/2015	9858645	01/02/2018

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
50.	DigitalGlobe, Inc.	Automated conversion of two-dimensional hydrology vector models into valid three-dimensional hydrology vector models	14789893	07/01/2015	9626565	04/18/2017
51.	DigitalGlobe, Inc.	Integrated architecture for near-real-time satellite imaging applications	14800644	07/15/2015	10014928	07/03/2018
52.	DigitalGlobe, Inc.	System and method for combining geographical and economic data extracted from satellite imagery for use in pre-dictive modeling	14801740	07/16/2015		
53.	DigitalGlobe, Inc.	Global-scale object detection using satellite imagery	14810382	07/27/2015	9922265	03/20/2018
54.	DigitalGlobe, Inc.	Object detection with textural to spectral domain adaptation	14819839	08/06/2015	9495618	11/15/2016
55.	DigitalGlobe, Inc.	Automated and scalable object and feature extraction from imagery	14826740	08/14/2015	9569690	02/14/2017
56.	DigitalGlobe, Inc.	Broad area geospatial object detection using autogenerated deep learning models	14835736	08/26/2015	9589210	03/07/2017
57.	DigitalGlobe, Inc.	Classification of land based on analysis of remotely-sensed earth images	14837628	08/27/2015	9619734	04/11/2017
58.	DigitalGlobe, Inc.	Global-scale damage detection using satellite imagery	14941504	11/13/2015	9858479	01/02/2018
59.	DigitalGlobe, Inc.	Generation of high resolution population density data sets through exploitation of high resolution overhead imagery data and low resolution population density data sets	14976400	12/21/2015	9672424	06/06/2017
60.	DigitalGlobe, Inc.	Automated metric information network	14984613	12/30/2015	9875404	01/23/2018
61.	DigitalGlobe, Inc.	Automated Registration Of Three-Dimensional Vectors To Three-Dimensional Linear Features In Remotely-Sensed Data	14993074	01/11/2016	10223828	03/05/2019
62.	DigitalGlobe, Inc.	Automated sliver removal in orthomosaic generation	15040780	02/10/2016	9916640	03/13/2018
63.	DigitalGlobe, Inc.	Automated remote car counting	15064609	03/09/2016	9619710	04/11/2017
64.	DigitalGlobe, Inc.	Enhanced crowdsourced search and locate platform	15077886	03/22/2016	10176194	01/08/2019

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
65.	DigitalGlobe, Inc.	Bathymetric techniques using satellite imagery	15093040	04/07/2016	9767361	09/19/2017
66.	DigitalGlobe, Inc.	Atmospheric compensation in satellite imagery	15186171	06/17/2016	9990705	06/05/2018
67.	DigitalGlobe, Inc.	Synthesizing training data for broad area geospatial object detection	15194541	06/27/2016	9767565	09/19/2017
68.	DigitalGlobe, Inc.	Automated geospatial image mosaic generation with multiple zoom level support	15204307	07/07/2016	9940514	04/10/2018
69.	DigitalGlobe, Inc.	Choreographing automated and manual processes in support of mosaic generation	15228954	08/04/2016	10120884	11/06/2018
70.	DigitalGlobe, Inc.	Analyzing and viewing social interactions based on personal electronic devices	15239729	08/17/2016		
71.	DigitalGlobe, Inc.	Movement intelligence using satellite imagery	15241034	08/18/2016	10089528	10/02/2018
72.	DigitalGlobe, Inc.	System and method for large scale crowdsourcing of map data cleanup and correction	15262118	09/12/2016	10346495	07/09/2019
73.	DigitalGlobe, Inc.	Advanced cloud detection using machine learning and optimization techniques	15362254	11/28/2016	10083354	09/25/2018
74.	DigitalGlobe, Inc.	System and method for multi resolution and multi temporal image search	15391786	12/27/2016	10482122	11/19/2019
75.	DigitalGlobe, Inc.	Automated tonal balancing	15445949	02/28/2017	10311557	06/04/2019
76.	DigitalGlobe, Inc.	Broad area geospatial object detection using autogenerated deep learning models	15452076	03/07/2017	10013774	07/03/2018
77.	DigitalGlobe, Inc.	System and methods for semi-automated editing of ortho-mosaics built from remotely-sensed imagery	15465581	03/21/2017	10121074	11/06/2018
78.	DigitalGlobe, Inc.	Automated conversion of two-dimensional hydrology vector models into valid three-dimensional hydrology vector models	15490866	04/18/2017	9922252	03/20/2018
79.	DigitalGlobe, Inc.	System for simplified generation of systems for broad area geospatial object detection	15608894	05/30/2017	9904849	02/27/2018
80.	DigitalGlobe, Inc.	Some automated and semi-automated tools for linear feature extraction in two and three dimensions	15672267	08/08/2017	10318808	06/11/2019

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
81.	DigitalGlobe, Inc.	Muddy water detection using normalized semantic layers	15694353	09/01/2017	10515272	12/24/2019
82.	DigitalGlobe, Inc.	Synthesizing training data for broad area geospatial object detection	15709252	09/19/2017	10157479	12/18/2018
83.	DigitalGlobe, Inc.	Techniques for image co-registration	15716425	09/26/2017		
84.	DigitalGlobe, Inc.	Shape-based segmentation using hierarchical image representations for automatic training data generation and search space specification for machine learning algorithms	15802313	11/02/2017	10372984	08/06/2019
85.	DigitalGlobe, Inc.	Anomaly detection using non-target clustering	15802743	11/03/2017	10679055	06/09/2020
86.	DigitalGlobe, Inc.	Unsupervised land use and land cover detection	15812124	11/14/2017	10691942	06/23/2020
87.	DigitalGlobe, Inc.	Sensor shift for remote sensing	15825478	11/29/2017	10577131	03/03/2020
88.	DigitalGlobe, Inc.	Automated seamline construction for high-quality high-resolution orthomosaics	15860281	01/02/2018	10346952	07/09/2019
89.	DigitalGlobe, Inc.	System for simplified generation of systems for broad area geospatial object detection	15906348	02/27/2018	10372985	08/06/2019
90.	DigitalGlobe, Inc.	Atmospheric compensation in satellite imagery	16000844	06/05/2018		
91.	DigitalGlobe, Inc.	Broad area geospatial object detection using autogenerated deep learning models	16027235	07/03/2018	10395388	08/27/2019
92.	DigitalGlobe, Inc.	Advanced cloud detection using machine learning and optimization techniques	16140052	09/24/2018	10685253	06/16/2020
93.	DigitalGlobe, Inc.	Movement intelligence using satellite imagery	16150177	10/02/2018	10503975	12/10/2019
94.	DigitalGlobe, Inc.	System and methods for semi-automated editing of ortho-mosaics built from remotely-sensed imagery	16182367	11/06/2018	10474895	11/12/2019
95.	DigitalGlobe, Inc.	Advanced semi-automated vector editing in two and three dimensions	16196979	11/20/2018		
96.	DigitalGlobe, Inc.	Synthesizing training data for broad area geospatial object detection	16224400	12/18/2018	10636169	04/28/2020

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97.	DigitalGlobe, Inc.	Automated registration of three-dimensional vectors to three-dimensional linear features in remotely-sensed data	16293409	03/05/2019		
98.	Radiant Geospatial Solutions LLC	System and method for coherent array aberration sensing	09916422	07/27/2001	6597304	07/22/2003
99.	Radiant Geospatial Solutions LLC	Self-calibrating interferometric synthetic aperture radar altimeter	10437836	05/14/2003	7218268	05/15/2007
100.	Radiant Geospatial Solutions LLC	Method and system for providing along-track alignment and formatting of synthetic aperture radar (SAR) data, and SAR image formation algorithms using such method and system	10615687	07/09/2003	6873285	03/29/2005
101.	Radiant Geospatial Solutions LLC	Measurement-diverse imaging and wavefront sensing with amplitude and phase estimation	11446109	06/05/2006	7531774	05/12/2009
102.	Radiant Geospatial Solutions LLC	Methods for two-dimensional autofocus in high resolution radar systems	11889637	08/15/2007	7663529	02/16/2010
103.	Radiant Geospatial Solutions LLC	Methods for two-dimensional autofocus in high resolution radar systems	12656689	02/12/2010	7843377	11/30/2010
104.	Radiant Geospatial Solutions LLC	Methods for two-dimensional autofocus in high resolution radar systems	12926602	11/29/2010	8009079	08/30/2011
105.	Radiant Geospatial Solutions LLC	Correlated Land Change System and Method	13096174	04/28/2011	8548248	10/01/2013
106.	Radiant Geospatial Solutions LLC	Method for aligning a plurality of sub-apertures of a multiple-aperture imaging system	13225127	09/02/2011	8559017	10/15/2013
107.	Radiant Geospatial Solutions LLC	System and method for aggregating multi-source data and identifying geographic areas for data acquisition	15341338	11/02/2016	10346446	07/09/2019
108.	Radiant Geospatial Solutions LLC	Method and apparatus for imaging the silhouette of an object occluding a light source using a synthetic aperture	15488918	04/17/2017	10152802	12/11/2018
109.	Space Systems/Loral, LLC	Spacecraft radiator system using a heat pump	09624151	07/24/2000	6883588	04/26/2005

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110.	Space Systems/Loral, LLC	Methods for using satellite state vector prediction to provide three-axis satellite attitude control	09627482	07/28/2000	6237876	05/29/2001
111.	Space Systems/Loral, LLC	Array fed multiple beam array reflector antenna systems and method	09640936	08/17/2000	6392611	05/21/2002
112.	Space Systems/Loral, LLC	Shaped reflector antenna system configuration for use on a communication satellite	09643269	08/22/2000	6411262	06/25/2002
113.	Space Systems/Loral, LLC	Method and apparatus for rate integration supplement for attitude referencing with quaternion differencing	09670904	09/28/2000	6454217	09/24/2002
114.	Space Systems/Loral, LLC	Stepped waveguide slot array with phase control and satellite communication system employing same	09684299	10/06/2000	6304228	10/16/2001
115.	Space Systems/Loral, LLC	Bent-pipe satellite system which couples a lan to a gateway and uses a dynamic assignment/multiple access protocol	09708249	11/07/2000	6400696	06/04/2002
116.	Space Systems/Loral, LLC	Broadband communication systems and methods using low and high bandwidth request and broadcast links	09713121	11/15/2000	6879808	04/12/2005
117.	Space Systems/Loral, LLC	Spacecraft multi-directional loop heat pipe thermal systems	09717585	11/21/2000	6591899	07/15/2003
118.	Space Systems/Loral, LLC	Spacecraft multiple loop heat pipe thermal system for internal equipment panel applications	09718181	11/21/2000	6478258	11/12/2002
119.	Space Systems/Loral, LLC	Triple reflector antenna deployment and storage systems	09812298	03/20/2001	6448940	09/10/2002
120.	Space Systems/Loral, LLC	Flexible waveguide with rounded corrugations	09818489	03/27/2001	6559742	05/06/2003
121.	Space Systems/Loral, LLC	Heat transfer of a remote heat source using a loop heat pipe	09822073	03/30/2001	7363960	04/29/2008
122.	Space Systems/Loral, LLC	Dynamic resource allocation architecture for differentiated services over broadband communication networks	09822691	03/30/2001	7219132	05/15/2007
123.	Space Systems/Loral, LLC	Waveguide slot array capable of radiating shaped beams	09835795	04/16/2001	6476772	11/05/2002

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124.	Space Systems/Loral, LLC	Spacecraft radiator system and method using cross-coupled deployable thermal radiators	09841373	04/24/2001	6854510	02/15/2005
125.	Space Systems/Loral, LLC	Thermal harness using encased carbon-based fiber and end attachment brackets	09843898	04/27/2001	6367509	04/09/2002
126.	Space Systems/Loral, LLC	Multiple passband filter	09850695	05/08/2001	6583692	06/24/2003
127.	Space Systems/Loral, LLC	Satellite communication system with gateway switch networks	09871075	05/31/2001	6898428	05/24/2005
128.	Space Systems/Loral, LLC	Voltage tunable patch filter element with dielectrically loaded slot	09880381	06/13/2001	6563404	05/13/2003
129.	Space Systems/Loral, LLC	Method and system for synchronized forward and Aft thrust vector control	09883622	06/19/2001	6695251	02/24/2004
130.	Space Systems/Loral, LLC	Method and apparatus for soft switched AC power distribution	09884734	06/19/2001	6583994	06/24/2003
131.	Space Systems/Loral, LLC	Methods for testing multibeam satellite systems using input power telemetry and output noise power	09912167	07/23/2001	8160575	04/17/2012
132.	Space Systems/Loral, LLC	Dual function subreflector for communication satellite antenna	09928597	08/13/2001	6441794	08/27/2002
133.	Space Systems/Loral, LLC	Spacecraft constellation formation keeping using inter-spacecraft distance measurement	09931205	08/16/2001	6553286	04/22/2003
134.	Space Systems/Loral, LLC	Electric orbit raising with variable thrust	09947186	09/04/2001	6543723	04/08/2003
135.	Space Systems/Loral, LLC	Dielectric resonator equalizer	09957734	09/21/2001	6476686	11/05/2002
136.	Space Systems/Loral, LLC	Energy managed electric propulsion methods and systems for stationkeeping satellites	09977834	10/15/2001	6581880	06/24/2003
137.	Space Systems/Loral, LLC	Spacecraft having a momentum wheel configuration that prevents zero wheel speeds	09995017	11/27/2001	6691955	02/17/2004
138.	Space Systems/Loral, LLC	Multi-band corrugated antenna feed horn with a hexagonal aperture and antenna array using same	10002808	11/15/2001	6501434	12/31/2002
139.	Space Systems/Loral, LLC	Two-sided deployable thermal radiator system and method	10007256	11/11/2001	7028953	04/18/2006
140.	Space Systems/Loral, LLC	Passive intermodulation free multilayer thermal blanket	10020704	10/29/2001	6623826	09/23/2003

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141.	Space Systems/Loral, LLC	Hybrid horn for dual Ka-band communications	10036347	10/19/2001	6522306	02/18/2003
142.	Space Systems/Loral, LLC	Satellite harmonic torque estimator	10087279	03/01/2002	6672544	01/06/2004
143.	Space Systems/Loral, LLC	CDMA code address data routing system and method	10094898	03/11/2002	6725277	04/20/2004
144.	Space Systems/Loral, LLC	Single-receiver multiple-antenna RF autotrack control	10097678	03/13/2002	6570535	05/27/2003
145.	Space Systems/Loral, LLC	Antenna distortion estimation and compensation	10244944	09/17/2002	6720918	04/13/2004
146.	Space Systems/Loral, LLC	Ground-based beamforming for satellite communications systems	11467490	08/25/2006	7787819	08/31/2010
147.	Space Systems/Loral, LLC	Spacecraft three-axis attitude acquisition from sun direction measurement	11709614	02/22/2007	7874519	01/25/2011
148.	Space Systems/Loral, LLC	Multi-beam satellite network to maximize bandwidth utilization	11891086	08/08/2007	7792070	09/07/2010
149.	Space Systems/Loral, LLC	Radial release device	12082818	04/14/2008	8568053	10/29/2013
150.	Space Systems/Loral, LLC	Redundant radial release apparatus	12215041	06/23/2008	8021069	09/20/2011
151.	Space Systems/Loral, LLC	Satellite system with enhanced payload capacity	12344064	12/24/2008	8135338	03/13/2012
152.	Space Systems/Loral, LLC	Spacecraft payload orientation steering	12629707	12/02/2009	9045239	06/02/2015
153.	Space Systems/Loral, LLC	Antenna tracking profile estimation	12779872	05/13/2010	8179313	05/15/2012
154.	Space Systems/Loral, LLC	Image navigation method using parametric systematic error correction	12800450	05/14/2010	8301377	10/30/2012
155.	Space Systems/Loral, LLC	Ground-based beamforming for satellite communications systems	12856468	08/13/2010	8270899	09/18/2012
156.	Space Systems/Loral, LLC	Satellite orbit raising using electric propulsion	12925386	10/20/2010	9108748	08/18/2015
157.	Space Systems/Loral, LLC	Electrically large stepped-wall and smooth-wall horns for spot beam applications	12928135	12/03/2010	9136606	09/15/2015
158.	Space Systems/Loral, LLC	Satellite Having Multiple Aspect Ratios	13026175	02/11/2011	8448902	05/28/2013
159.	Space Systems/Loral, LLC	Spacecraft payload positioning with respect to a virtual pivot point	13044278	03/09/2011	8800935	08/12/2014
160.	Space Systems/Loral, LLC	Source driver current fold-back protection	13053084	03/21/2011	8482894	07/09/2013
161.	Space Systems/Loral, LLC	Redundant fuse wire release device	13068655	05/17/2011	9085377	07/21/2015

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162.	Space Systems/Loral, LLC	Broadband Satellite with Dual Frequency Conversion and Bandwidth Aggregation	13093669	04/25/2011	8660482	02/25/2014
163.	Space Systems/Loral, LLC	High capacity broadband satellite	13101944	05/05/2011	8789796	07/29/2014
164.	Space Systems/Loral, LLC	Spacecraft momentum management using solar array	13115370	05/25/2011	8868263	10/21/2014
165.	Space Systems/Loral, LLC	Band clamp with redundant load path	13164414	06/20/2011	8732916	05/27/2014
166.	Space Systems/Loral, LLC	RF feed element design optimization using secondary pattern	13170813	06/28/2011	8914258	12/16/2014
167.	Space Systems/Loral, LLC	Current collector bar and grid pattern for a photovoltaic solar cell	13189354	07/22/2011	9000288	04/07/2015
168.	Space Systems/Loral, LLC	Preload releasing fastener and release system using same	13215229	08/23/2011	9180982	11/10/2015
169.	Space Systems/Loral, LLC	Extendable antenna reflector deployment techniques	13215929	08/23/2011	9004409	04/14/2015
170.	Space Systems/Loral, LLC	Reflector deployment techniques for satellites	13215932	08/23/2011	9248922	02/02/2016
171.	Space Systems/Loral, LLC	Unified chemical electric propulsion system	13223041	08/31/2011	9145216	09/29/2015
172.	Space Systems/Loral, LLC	Hold-down mechanism for a spacecraft appendage	13237761	09/20/2011	8915473	12/23/2014
173.	Space Systems/Loral, LLC	Antenna system with multiple independently steerable shaped beams	13240079	09/22/2011	9774095	09/26/2017
174.	Space Systems/Loral, LLC	Dual mode dielectric resonator operating in a HE mode with a Q factor no less than 5000	13247243	09/28/2011	8952769	02/10/2015
175.	Space Systems/Loral, LLC	Spacecraft momentum management	13326654	12/15/2011	9108749	08/18/2015
176.	Space Systems/Loral, LLC	Microstrip manifold coupled multiplexer	13340095	12/29/2011	9030271	05/12/2015
177.	Space Systems/Loral, LLC	Methods for testing multibeam satellite systems using input power telemetry and output noise power	13385619	02/27/2012	8447296	05/21/2013
178.	Space Systems/Loral, LLC	Electrostatic discharge control for a multi-cavity microwave filter	13442252	04/09/2012	8907742	12/09/2014
179.	Space Systems/Loral, LLC	Wide beam antenna	13474084	05/17/2012	8872714	10/28/2014
180.	Space Systems/Loral, LLC	Solar panel sequencing mechanism	13624410	09/21/2012	8915474	12/23/2014
181.	Space Systems/Loral, LLC	Frequency and Bandwidth Tunable Microwave Filter	13644632	10/04/2012	9019039	04/28/2015
182.	Space Systems/Loral, LLC	Spacecraft Transfer Orbit Techniques	13647207	10/08/2012	8763957	07/01/2014

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183.	Space Systems/Loral, LLC	Roll-up contamination cover	13665717	10/31/2012	8973641	03/10/2015
184.	Space Systems/Loral, LLC	Shape memory alloy pre-loaded deployment hinge	13665722	10/31/2012	8876062	11/04/2014
185.	Space Systems/Loral, LLC	Spacecraft momentum unload and station-keeping techniques	13683887	11/21/2012	8998146	04/07/2015
186.	Space Systems/Loral, LLC	Waveguide T-switch	13728745	12/27/2012	9368851	06/14/2016
187.	Space Systems/Loral, LLC	Flexible array support structure	13729848	12/28/2012	8894017	11/25/2014
188.	Space Systems/Loral, LLC	Satellite system resource allocation optimization	13793922	03/11/2013	8996051	03/31/2015
189.	Space Systems/Loral, LLC	Mode filter	13800365	03/13/2013	9531048	12/27/2016
190.	Space Systems/Loral, LLC	Compact microstrip hybrid coupled input multiplexer	13870761	04/25/2013	8761026	06/24/2014
191.	Space Systems/Loral, LLC	Antenna Array with Reduced Mutual Coupling Between Array Elements	13896181	05/16/2013	9537209	01/03/2017
192.	Space Systems/Loral, LLC	Radial release device	14012915	08/28/2013	9708082	07/18/2017
193.	Space Systems/Loral, LLC	Caging mechanism for a single- or multi-axis positioning mechanism	14089067	11/25/2013	9677602	06/13/2017
194.	Space Systems/Loral, LLC	Integral corner bypass diode interconnecting configuration for multiple solar cells	14092775	11/27/2013	9627565	04/18/2017
195.	Space Systems/Loral, LLC	Axially grooved crossing heat pipes	14097020	12/04/2013	9352856	05/31/2016
196.	Space Systems/Loral, LLC	Side-by-side multiple launch configuration	14108213	12/16/2013	9242743	01/26/2016
197.	Space Systems/Loral, LLC	Reflective and permeable metalized laminate	14161343	01/22/2014	9685710	06/20/2017
198.	Space Systems/Loral, LLC	Heat pipe and radiator system with thermoelectric cooler	14183263	02/18/2014	9714777	07/25/2017
199.	Space Systems/Loral, LLC	Depressurization test method using pressure vessel	14222136	03/21/2014	9606044	03/28/2017
200.	Space Systems/Loral, LLC	Highly inclined elliptical orbit launch and orbit acquisition techniques	14300027	06/09/2014	9365299	06/14/2016
201.	Space Systems/Loral, LLC	Highly inclined elliptical orbit de-orbit techniques	14300032	06/09/2014	9550585	01/24/2017
202.	Space Systems/Loral, LLC	Nondestructive proof loading of honeycomb panels	14448744	07/31/2014	9523633	12/20/2016
203.	Space Systems/Loral, LLC	Thruster support mechanism for satellite propulsion	14580063	12/22/2014	9663251	05/30/2017
204.	Space Systems/Loral, LLC	Hinge with spring pre-load transfer mechanism	14596096	01/13/2015	9546510	01/17/2017

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205.	Space Systems/Loral, LLC	Incremental deployment device	14596101	01/13/2015	10337594	07/02/2019
206.	Space Systems/Loral, LLC	Spacecraft with aerodynamic control	14627936	02/20/2015	9889950	02/13/2018
207.	Space Systems/Loral, LLC	Dynamic link adaption and/or dynamic allocation of communication resources of a communication system based on external interference information received from external interference information sources	14632482	02/26/2015	9628168	04/18/2017
208.	Space Systems/Loral, LLC	Navigational route selection to mitigate probability mobile terminal loses communication capability	14632492	02/26/2015	9476715	10/25/2016
209.	Space Systems/Loral, LLC	On-orbit assembly of communication satellites	14642486	03/09/2015	9878806	01/30/2018
210.	Space Systems/Loral, LLC	Communication system with multi band gateway	14659222	03/16/2015	9967792	05/08/2018
211.	Space Systems/Loral, LLC	Redundant telemetry transmission path	14670141	03/26/2015	10236970	03/19/2019
212.	Space Systems/Loral, LLC	Dielectric resonator filter and multiplexer having a common wall with a centrally located coupling iris and a larger peripheral aperture adjustable by a tuning screw	14681920	04/08/2015	9705171	07/11/2017
213.	Space Systems/Loral, LLC	Broadband satellite payload architecture	14685302	04/13/2015	10270524	04/23/2019
214.	Space Systems/Loral, LLC	Solid state traveling wave amplifier for space applications	14729883	06/03/2015	9641144	05/02/2017
215.	Space Systems/Loral, LLC	All front contact solar cell	14734996	06/09/2015	10096726	10/09/2018
216.	Space Systems/Loral, LLC	Reverse wireless broadband system	14820408	08/06/2015	9979466	05/22/2018
217.	Space Systems/Loral, LLC	High-frequency cavity resonator filter with diametrically-opposed heat transfer legs	14864669	09/24/2015	10056668	08/21/2018
218.	Space Systems/Loral, LLC	Brazing of High Temperature Wire to Electrical Contact	14868076	09/28/2015		
219.	Space Systems/Loral, LLC	Satellite with transition beam size	14875491	10/05/2015	9705586	07/11/2017
220.	Space Systems/Loral, LLC	Self-Balancing Solar Array	14918337	10/20/2015	10618678	04/14/2020
221.	Space Systems/Loral, LLC	Flexible propulsion system	14937208	11/10/2015	10336475	07/02/2019

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222.	Space Systems/Loral, LLC	Channelizer supplemented spacecraft telemetry and command functionality	14939433	11/12/2015	9621255	04/11/2017
223.	Space Systems/Loral, LLC	High capacity spacecraft	14939445	11/12/2015	10183764	01/22/2019
224.	Space Systems/Loral, LLC	Flexible radiation shield	14954583	11/30/2015	9640288	05/02/2017
225.	Space Systems/Loral, LLC	Spacecraft with rigid antenna reflector deployed via linear extension boom	14962941	12/08/2015	10259599	04/16/2019
226.	Space Systems/Loral, LLC	Digital payload with variable high power amplifiers	14965620	12/10/2015	10312995	06/04/2019
227.	Space Systems/Loral, LLC	Dual-polarized, dual-band, compact beam forming network	14968725	12/14/2015	10033099	07/24/2018
228.	Space Systems/Loral, LLC	Ribbon Cable withh Integrated Diode	14969839	12/15/2015		
229.	Space Systems/Loral, LLC	Pre and Post Orbit Maneuver Pulses to Reduce Flexural Oscillations	14972736	12/17/2015	10501211	12/10/2019
230.	Space Systems/Loral, LLC	Battery charge management for geosynchronous spacecraft	14973186	12/17/2015	10239477	03/26/2019
231.	Space Systems/Loral, LLC	Non-blockings switch matrix	14989612	01/06/2016	10109441	10/23/2018
232.	Space Systems/Loral, LLC	Waveguide hinge	14995070	01/13/2016	10103417	10/16/2018
233.	Space Systems/Loral, LLC	Truss structure optimization techniques	15053993	02/25/2016	10112731	10/30/2018
234.	Space Systems/Loral, LLC	Truss structure	15053998	02/25/2016	10227145	03/12/2019
235.	Space Systems/Loral, LLC	Satellite transmit antenna ground-based pointing	15092413	04/06/2016	9608716	03/28/2017
236.	Space Systems/Loral, LLC	Flexible Bandwidth Assignment To Spot Beams	15144487	05/02/2016	10136438	11/20/2018
237.	Space Systems/Loral, LLC	Stowage, deployment and positioning of rigid antenna reflectors on a spacecraft	15160258	05/20/2016	10053240	08/21/2018
238.	Space Systems/Loral, LLC	Protected Overlay Of Assigned Frequency Channels	15163465	05/24/2016	10305646	05/28/2019
239.	Space Systems/Loral, LLC	Highly inclined elliptical orbit launch and orbit acquisition techniques	15166033	05/26/2016	9533774	01/03/2017
240.	Space Systems/Loral, LLC	Satellite system using time domain beam hopping	15172825	06/03/2016	10111109	10/23/2018
241.	Space Systems/Loral, LLC	Synchronization for satellite system	15172859	06/03/2016	10411362	09/10/2019
242.	Space Systems/Loral, LLC	Satellite system with different frequency plan at the equator	15172882	06/03/2016	10128577	11/13/2018

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243.	Space Systems/Loral, LLC	Satellite systems with single polarization path	15172965	06/03/2016	10594046	03/17/2020
244.	Space Systems/Loral, LLC	Satellite system with steerable gateway beams	15172978	06/03/2016	10418724	09/17/2019
245.	Space Systems/Loral, LLC	Satellite system having terminals in hopping beams communicating with more than one gateway	15173038	06/03/2016	10347987	07/09/2019
246.	Space Systems/Loral, LLC	Satellite system with beam hopping plan that takes into account the needs of gateways and subscriber terminals	15173054	06/03/2016	10135154	11/20/2018
247.	Space Systems/Loral, LLC	Satellite system beam to beam handover	15173083	06/03/2016	10128578	11/13/2018
248.	Space Systems/Loral, LLC	Satellite system with handover for multiple gateways	15173097	06/03/2016	10381748	08/13/2019
249.	Space Systems/Loral, LLC	Orthomode transducer	15180444	06/13/2016	9947978	04/17/2018
250.	Space Systems/Loral, LLC	Waveguide to microstrip line N-port power splitter/combiner	15201208	07/01/2016	10177726	01/08/2019
251.	Space Systems/Loral, LLC	Satellite system with rolling wave handovers	15218009	07/23/2016	10225002	03/05/2019
252.	Space Systems/Loral, LLC	Satellite diversity	15221273	07/27/2016	10397920	08/27/2019
253.	Space Systems/Loral, LLC	Digital beamforming architecture	15225525	08/01/2016	9917623	03/13/2018
254.	Space Systems/Loral, LLC	Multi-channel satellite calibration	15225588	08/01/2016	9642107	05/02/2017
255.	Space Systems/Loral, LLC	Cloud mask data acquisition and distribution using geosynchronous communications or broadcast satellites	15247052	08/25/2016	10230454	03/12/2019
256.	Space Systems/Loral, LLC	Highly inclined elliptical orbit de-orbit techniques	15261696	09/09/2016	10202207	02/12/2019
257.	Space Systems/Loral, LLC	Articulation techniques for a spacecraft solar array	15263209	09/12/2016	10435182	10/08/2019
258.	Space Systems/Loral, LLC	Access switch network with redundancy	15267828	09/16/2016	10284283	05/07/2019
259.	Space Systems/Loral, LLC	Low cost launch vehicle fairing	15277505	09/27/2016	10214303	02/26/2019
260.	Space Systems/Loral, LLC	Spacecraft exoskeleton truss structure	15336541	10/27/2016	10407189	09/10/2019
261.	Space Systems/Loral, LLC	Smallsat Payload Configuration	15351233	11/14/2016	10538347	01/21/2020
262.	Space Systems/Loral, LLC	Efficient stationkeeping strategy for the three apogee (TAP) orbit	15352471	11/15/2016	10364051	07/30/2019

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263.	Space Systems/Loral, LLC	Multiport amplifiers (MPAs) using output filtering to improve performance over life	15364115	11/29/2016	10320064	06/11/2019
264.	Space Systems/Loral, LLC	Flexible Radio Frequency Converters for Digital Payloads	15372276	12/07/2016	10577130	03/03/2020
265.	Space Systems/Loral, LLC	Enhanced Radiator	15374528	12/09/2016		
266.	Space Systems/Loral, LLC	Satellite constellation switching	15388269	12/22/2016	9882632	01/30/2018
267.	Space Systems/Loral, LLC	High throughput satellite system with optical feeder uplink beams and RF service downlink beams	15394512	12/29/2016	10075242	09/11/2018
268.	Space Systems/Loral, LLC	High throughput satellite system with RF service uplink beams and optical feeder downlink beams	15394602	12/29/2016	9917646	03/13/2018
269.	Space Systems/Loral, LLC	Imaging array fed reflector	15438620	02/21/2017	10305195	05/28/2019
270.	Space Systems/Loral, LLC	Inclined geosynchronous orbit spacecraft constellations	15441032	02/23/2017		
271.	Space Systems/Loral, LLC	Stationkeeping techniques for spacecraft in inclined geo-synchronous orbit	15441037	02/23/2017	10543937	01/28/2020
272.	Space Systems/Loral, LLC	Efficient orbital storage and deployment for spacecraft in inclined geosynchronous orbit	15441040	02/23/2017	10329034	06/25/2019
273.	Space Systems/Loral, LLC	Channelizer supplemented spacecraft telemetry and command functionality	15445797	02/28/2017	10033455	07/24/2018
274.	Space Systems/Loral, LLC	Satellite System That Produces Optical Inter-Satellite Link (ISL) Beam Based On Optical Feeder Uplink Beam	15461369	03/16/2017	9979465	05/22/2018
275.	Space Systems/Loral, LLC	Satellite System That Produces Optical Inter-Satellite Link (ISL) Beam Based On Optical ISL Received From Another Satellite	15461372	03/16/2017	10050699	08/14/2018
276.	Space Systems/Loral, LLC	Satellite System That Produces Optical Inter-Satellite Link (ISL) Beam Based On RF Feeder Uplink Beam	15461377	03/16/2017	9923625	03/20/2018

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277.	Space Systems/Loral, LLC	Ground Based Subsystems, For Inclusion In Optical Gateway, And That Interface With Optical Networks External To Optical Gateway	15461381	03/16/2017	10122456	11/06/2018
278.	Space Systems/Loral, LLC	Spacecraft Design with Multiple Thermal Zones	15466610	03/21/2017		
279.	Space Systems/Loral, LLC	Asymmetric thruster gimbal configuration	15467612	03/23/2017	10464694	11/05/2019
280.	Space Systems/Loral, LLC	Electric Thruster Waste Heat Recovery During Satellite Orbit Transfer	15470592	03/27/2017	10538346	01/21/2020
281.	Space Systems/Loral, LLC	Multi-channel satellite antenna calibration	15470600	03/27/2017	10044436	08/07/2018
282.	Space Systems/Loral, LLC	Exoskeletal Launch Support Structure	15480276	04/05/2017	10633123	04/28/2020
283.	Space Systems/Loral, LLC	Rotatable Stacked Spacecraft	15488166	04/14/2017	10479534	11/19/2019
284.	Space Systems/Loral, LLC	Deployable propulsion module for spacecraft	15488179	04/14/2017	10435183	10/08/2019
285.	Space Systems/Loral, LLC	Articulating Sunshield	15586076	05/03/2017	10618677	04/14/2020
286.	Space Systems/Loral, LLC	Satellite system using optical gateways and onboard processing	15599852	05/19/2017	10069565	09/04/2018
287.	Space Systems/Loral, LLC	Ecliptic Sun Acquisition Control Mode For Satellites	15603288	05/23/2017	10538342	01/21/2020
288.	Space Systems/Loral, LLC	Communication platform with flexible photonics payload	15604165	05/24/2017	10219051	02/26/2019
289.	Space Systems/Loral, LLC	Cross-Feeding Propellant Between Stacked Spacecraft	15616803	06/07/2017	10589879	03/17/2020
290.	Space Systems/Loral, LLC	Satellite network switching	15618897	06/09/2017	10200922	02/05/2019
291.	Space Systems/Loral, LLC	Lattice structure design and manufacturing techniques	15622888	06/14/2017	10326209	06/18/2019
292.	Space Systems/Loral, LLC	Flexible high throughput satellite system using optical gateways	15633007	06/26/2017	10320481	06/11/2019
293.	Space Systems/Loral, LLC	Spacecraft Radiator System and Method	15637466	06/29/2017		
294.	Space Systems/Loral, LLC	Space Based Robotic Assembly of a Modulator Reflector	15654593	07/19/2017		
295.	Space Systems/Loral, LLC	Multi-Reflector Hold-Down	15669470	08/04/2017		
296.	Space Systems/Loral, LLC	Satellite system using optical gateways and ground based beamforming	15682785	08/22/2017	10142021	11/27/2018
297.	Space Systems/Loral, LLC	Self-assembling persistent space platform	15689993	08/29/2017	10661918	05/26/2020

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298.	Space Systems/Loral, LLC	Amplifier integrated feed array with modularized feed elements and amplifiers	15699909	09/08/2017	10566684	02/18/2020
299.	Space Systems/Loral, LLC	High pointing accuracy spacecraft	15709341	09/19/2017	10367575	07/30/2019
300.	Space Systems/Loral, LLC	Adaptive communication system	15710740	09/20/2017		
301.	Space Systems/Loral, LLC	Satellite with Regenerative Processor	15799258	10/31/2017		
302.	Space Systems/Loral, LLC	Additive manufactured RF module	15818542	11/20/2017	10573949	02/25/2020
303.	Space Systems/Loral, LLC	Pointing system improvement with imaging array feeds	15831257	12/04/2017	10461409	10/29/2019
304.	Space Systems/Loral, LLC	Modularized feed array arrangement	15831258	12/04/2017	10263325	04/16/2019
305.	Space Systems/Loral, LLC	Calibration of satellite beamforming channels	15833351	12/06/2017	10361762	07/23/2019
306.	Space Systems/Loral, LLC	On-orbit assembly of communication satellites	15847780	12/19/2017	10518909	12/31/2019
307.	Space Systems/Loral, LLC	Spacecraft with aerodynamic control	15849289	12/20/2017	10562647	02/18/2020
308.	Space Systems/Loral, LLC	High capacity communication satellite	15887721	02/02/2018		
309.	Space Systems/Loral, LLC	Low earth orbiting spacecraft with a dual-use directional antenna	15900653	02/20/2018	10536674	01/14/2020
310.	Space Systems/Loral, LLC	Flexible signal distribution assisted by tunable optical carrier modulating a desired signal	15904063	02/23/2018	10250330	04/02/2019
311.	Space Systems/Loral, LLC	Multiport amplifier input network with compensation for output network gain and phase frequency response imbalance	15926186	03/20/2018	10320349	06/11/2019
312.	Space Systems/Loral, LLC	Satellite system calibration in active operational channels	15926628	03/20/2018	10284308	05/07/2019
313.	Space Systems/Loral, LLC	Satellite system using an RF GBBF feeder uplink beam from a gateway to a satellite, and using an optical ISL from the satellite to another satellite	16111008	08/23/2018	10432308	10/01/2019
314.	Space Systems/Loral, LLC	Flexible bandwidth assignment to spot beams	16163105	10/17/2018		
315.	Space Systems/Loral, LLC	Ground based subsystems, for inclusion in optical gateway, and that interface with optical networks external to optical gateway	16168658	10/23/2018	10476595	11/12/2019

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316.	Space Systems/Loral, LLC	Multiport amplifier input network with compensation for output network gain and phase frequency response imbalance	16405162	05/07/2019	10673399	06/02/2020
317.	Space Systems/Loral, LLC	Satellite Diversity	16505937	07/09/2019	201903354 64	10/31/2019
318.	Space Systems/Loral, LLC	Method and Apparatus for Calibration and Equalization of Multiport Amplifiers (MPAs)	15/628,14 0	06/20/2017	10541656	01/21/2020
319.	Space Systems/Loral, LLC	High Linearity Satellite Payload Using Solid State Power Amplifiers	16/113,56 7	08/27/2018	10511377	12/17/2019
320.	Space Systems/Loral, LLC	High Linearity Satellite Payload Using Solid State Power Amplifiers	16/286,52 0	11/14/2019	202000919 96	03/19/2020
321.	Space Systems/Loral, LLC	Multi-Mission Configurable Spacecraft System	62/994,65 1	03/25/2020		
322.	Space Systems/Loral, LLC	Aggregated Space System Network	62/984,94 2	03/05/2020		
323.	Space Systems/Loral, LLC	Dayside-Only Roll Steering	63/024,82 5	05/14/2020		
324.	Space Systems/Loral, LLC	Attitude Rate Mitigation of Spacecraft in Close Proximity	16/276,98 7	02/15/2019	202002625 89	08/20/2020
325.	Space Systems/Loral, LLC	High Availability Scalable Multi-Source Virtualized Spectrum Signal Processing System	16/434,48 1	06/07/2019	202002443 51	07/30/2020
326.	DigitalGlobe, Inc.	Automated Process for Building Material Detection in Remotely Sensed Memory	16805461	02/28/2020		
327.	DigitalGlobe, Inc.	Advanced Cloud Detection Using Neural Networks and Optimization Techniques	16901674	06/20/2020		
328.	DigitalGlobe, Inc.	Sensor Shift for Remote Sensing	16804315	02/28/2020		
329.	DigitalGlobe, Inc.	Broad area geospatial object detection using autogenerated deep learning models	16553060	08/27/2019	10733759	08/04/2020