

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7264599

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	CHANGE OF NAME

CONVEYING PARTY DATA

Name	Execution Date
BROOKS AUTOMATION, INC.	10/01/2021

RECEIVING PARTY DATA

Name:	BROOKS AUTOMATION HOLDING, LLC
Street Address:	15 ELIZABETH DRIVE
City:	CHELMSFORD
State/Country:	MASSACHUSETTS
Postal Code:	01824

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17658060

CORRESPONDENCE DATA

Fax Number: (203)255-5170

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.

Phone: 2032591800

Email: kclayton@pgpatent.com

Correspondent Name: PERMAN & GREEN, LLP

Address Line 1: 99 HAWLEY LN

Address Line 4: STRATFORD, CONNECTICUT 06614

ATTORNEY DOCKET NUMBER:	390-015752-US(C01)
NAME OF SUBMITTER:	JANIK MARCOVICI
SIGNATURE:	/jm/
DATE SIGNED:	04/06/2022

Total Attachments: 39

source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page1.tif
 source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page2.tif
 source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page3.tif
 source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page4.tif
 source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page5.tif
 source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page6.tif

source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page7.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page8.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page9.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page10.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page11.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page12.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page13.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page14.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page15.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page16.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page17.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page18.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page19.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page20.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page21.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page22.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page23.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page24.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page25.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page26.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page27.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page28.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page29.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page30.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page31.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page32.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page33.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page34.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page35.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page36.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page37.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page38.tif
source=1_Patent Assignment Agreement (to HoldCo) - EXECUTED#page39.tif

PATENT ASSIGNMENT AGREEMENT

This PATENT ASSIGNMENT AGREEMENT (“Agreement”), effective as of 12:01 A.M. United States Eastern Time on October 1, 2021 (the “Effective Time”), is by and between Brooks Automation, Inc., a Delaware corporation with a principal place of business of 15 Elizabeth Drive, Chelmsford, MA 01824 (“Assignor”), and Brooks Automation Holding, LLC, a Delaware limited liability company with a principal place of business of 15 Elizabeth Drive, Chelmsford, MA 01824 (“Assignee”; together with Assignor, the “Parties,” and individually referred to herein as a “Party”).

WHEREAS, Assignor and Assignee have entered into an Asset Contribution Agreement (the “Contribution Agreement”), dated as of September 21, 2021, pursuant to which Assignor has agreed to convey certain Contributed Assets (as defined in the Contribution Agreement), which include the Assigned Patents (as defined below), to Assignee;

WHEREAS, Assignor has the right to assign its interest in the Assigned Patents; and

WHEREAS, Assignor desires to assign its ownership interest in the Assigned Patents, and Assignee desires to acquire such ownership interest in the Assigned Patents;

NOW, THEREFORE, in consideration of the foregoing recitals and the representations, warranties and covenants contained herein and in the Contribution Agreement and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignee and Assignor hereby agree as follows:

Section 1. Assignment

1.1 Assignor hereby irrevocably sells, transfers, conveys, and assigns to Assignee, and Assignee hereby accepts, all of Assignor’s right, title and interest in and to the Assigned Patents, including, without limitation, the right to sue for injunctive relief and damages for past, present and future infringement of any of the Assigned Patents, including, without limitation, the following: (a) all rights of any kind whatsoever (including, without limitation, priority rights) of Assignor accruing under any of the foregoing provided by applicable Governmental Rules of any jurisdiction, by international treaties and conventions, and otherwise throughout the world; (b) any and all royalties, fees, income, payments, and other proceeds now or hereafter due or payable with respect to any and all of the foregoing; and (c) any and all claims and causes of action with respect to any of the foregoing, whether accruing before, on, or after the date hereof, including, without limitation, all rights to and claims for damages, restitution, and injunctive and other legal and equitable relief for past, present, and future infringement, misappropriation, violation, misuse, breach, or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

1.2 Subject to the terms and provisions of the Contribution Agreement, Assignee shall be solely responsible for all actions and all costs whatsoever, including, without limitation, taxes, attorneys’ fees and patent office fees in any jurisdiction, associated with the perfection of the Assignee’s right, title, and interest in and to each Assigned Patent and recordation thereof.

Section 2. Payment. Consideration for the rights granted to Assignee under this Agreement is set forth in the Contribution Agreement.

Section 3 Further Assurances.

3.1 This Agreement shall automatically be binding on Assignor and Assignee upon the Effective Time.

3.2 Upon request from Assignee and, except as provided in the Contribution Agreement, at Assignee's expense, Assignor shall furnish, execute, verify and acknowledge such documents or information, including, without limitation, any instruments of transfer, recordable assignments, affidavits, declarations, oaths, exhibits, powers of attorney or other documents, and perform such other acts as Assignee lawfully and reasonably may request from time to time, to perfect and vest title in the Assigned Patents in Assignee. It is the sole responsibility of Assignee to prepare and record this Agreement for any of the Assigned Patents.

3.3 Assignor agrees to execute any necessary confirmatory assignment and other documents acknowledging that it transferred whatever rights it has in the Assigned Patents to Assignee for recording at any relevant Governmental Authority. Except as provided in the Contribution Agreement, Assignee shall bear all costs, expenses and responsibility for determining what confirmatory assignments are necessary, preparing such confirmatory assignments, and filing and recording the same in all jurisdictions, and shall be responsible for any Governmental Authority fees or other fees, costs, taxes or expenses associated with any such confirmatory assignments and other documents.

3.4 Notwithstanding the provisions of Section 1.2, the Parties hereto acknowledge that any prosecution of the Assigned Patents, or enforcement, or defense, prior to the commencement of a lawsuit involving the Assigned Patents, after the Effective Time may require the provision of assistance from employees of Assignor who are inventors for such applications ("Assignor Inventors"). In the event Assignee wishes for such Assignor Inventors to provide such prosecution assistance, Assignee shall so request and describe the requested assistance from Assignor in writing. Provided any such Assignor Inventor is in possession of relevant information that is not otherwise publicly available, and further provided any such Assignor Inventor is still employed by Assignor at the time of such request and such assistance would not be adverse to the interests of Assignor or the Assignor Inventor, Assignor will grant permission for such Assignor Inventors to cooperate with Assignee, on any Assigned Patent on which such Assignor Inventor is an inventor, at Assignee's expense in accordance with Assignor's then current rates for the engineering services of the Assignor Inventors and including the reasonable attorney's fees of Assignor's outside counsel incurred by Assignor in connection therewith, if any.

Section 4. Miscellaneous.

4.1 This Agreement and any claim, controversy, dispute, or cause of action (whether in contract, tort, or otherwise) based upon, arising out of, or relating to this Agreement and the transactions contemplated hereby shall be governed by, and construed in accordance with, the laws of the United States and the State of Delaware, without giving effect to any choice or conflict of law provision or rule (whether of the State of Delaware or any other jurisdiction).

4.2 Nothing in this Agreement shall be deemed to create, either express or implied, the power of any Party to bind the other and nothing herein shall create a partnership or joint venture between the Parties hereto. Neither Party shall be bound by the actions of the other, shall be liable for the debts of the other, or shall have the right to share in the profits of the other, as a result of anything contained in this Agreement.

4.3 The Parties hereto acknowledge and agree that this Agreement is entered into pursuant to the Contribution Agreement, to which reference is made for a further statement of the rights and obligations of Assignee and Contribution Agreement Assignor with respect to the Assigned Patents. The representations, warranties, covenants, agreements, and indemnities contained in the Contribution

Agreement shall not be superseded hereby but shall remain in full force and effect to the full extent provided therein. In the event of any conflict or inconsistency between the terms of the Contribution Agreement and the terms hereof, the terms of the Contribution Agreement shall govern.

4.4 This Agreement shall be binding upon and shall inure to the benefit of the Parties hereto and their respective successors and assigns. This Agreement may be executed in counterparts, each of which shall be deemed an original, but all of which together shall be deemed one and the same agreement. A signed copy of this Agreement delivered by facsimile, e-mail or other means of electronic transmission shall be deemed to have the same legal effect as delivery of an original signed copy of this Agreement.

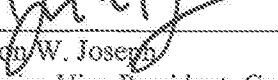
Section 5. Definitions. In addition to the definitions set forth below and herein, capitalized terms used herein or in any attachment hereto and not defined herein or therein shall have the meanings assigned to them in the Contribution Agreement.

“Assigned Patents” shall mean the issued patents and pending patent applications listed in **Exhibit A** hereto, and all issuances, divisions, continuations, continuations-in-part, reissues, extensions, reexaminations, and renewals thereof.

[Signatures are on the following page]

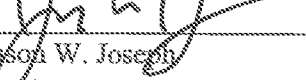
IN WITNESS WHEREOF, the Parties hereto have caused this Patent Assignment Agreement to be duly signed as of the date set forth below.

BROOKS AUTOMATION, INC.

By 
Name: Jason W. Joseph
Title: Senior Vice President, General Counsel
and Secretary

Date: October 1, 2021

BROOKS AUTOMATION HOLDING, LLC

By 
Name: Jason W. Joseph
Title: Secretary

Date: October 1, 2021

[Patent Assignment Agreement Signature Page]

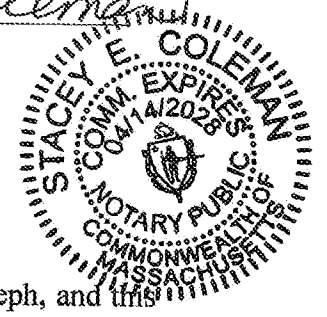
COMMONWEALTH OF MASSACHUSETTS)
) SS:
COUNTY OF MIDDLESEX)

On this 1st day of October, 2021, personally came before me Jason W. Joseph, and this person acknowledged under oath, to my satisfaction, that:

(a) This person signed, sealed and delivered the foregoing instrument as the Senior Vice President, General Counsel and Secretary of Brooks Automation, Inc., a Delaware corporation; and

(b) This document was signed and delivered by Brooks Automation, Inc., a Delaware corporation, as its voluntary act and deed by virtue of authority from its directors.

Stacey E. Coleman
Notary Public



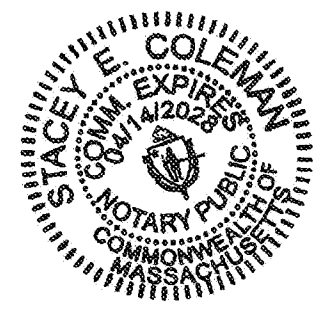
COMMONWEALTH OF MASSACHUSETTS)
) SS:
COUNTY OF MIDDLESEX)

On this 1st day of October, 2021, personally came before me Jason W. Joseph, and this person acknowledged under oath, to my satisfaction, that:

(a) This person signed, sealed and delivered the foregoing instrument as the Secretary of Brooks Automation Holding, LLC, a Delaware limited liability company; and

(b) This document was signed and delivered by Brooks Automation Holding, LLC, a Delaware limited liability company, as its voluntary act and deed by virtue of authority from its directors.

Stacey E. Coleman
Notary Public



[Patent Assignment Agreement Notary Page]

EXHIBIT A
ASSIGNED PATENTS

[Attached]

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	10/006,263	12/4/2001	6,719,517	4/13/2004	390-008762-US(PAR)
US	12/499,565	7/8/2009	9,033,647	5/19/2015	390-008764-US(D01)
US	10/266,072	10/7/2002	7,572,092	8/11/2009	390-008764-US(PAR)
US	11/239,272	9/29/2005	7,712,808	5/11/2010	390-009058-US(PAR)
US	10/159,726	5/29/2002	7,578,649	8/25/2009	390-009059-US(PAR)
US	13/561,873	7/30/2012	9,859,140	1/2/2018	390-010262-US(C03)
US	10/104,846	3/22/2002	6,779,962	8/24/2004	390-010535-US(PAR)
US	10/267,465	10/8/2002	6,769,861	8/3/2004	390-010536-US(PAR)
US	11/093,480	3/30/2005	9,099,506	8/4/2015	390-010546-US(PAR)
US	11/196,063	8/3/2005	8,112,171	2/7/2012	390-010850-US(C01)
US	13/366,968	2/6/2012	8,509,938	8/13/2013	390-010850-US(C02)
US	10/613,697	7/3/2003	6,944,517	9/13/2005	390-010850-US(PAR)
US	10/413,102	4/14/2003	7,255,524	8/14/2007	390-010853-US(PAR)
US	10/465,677	6/19/2003	7,192,791	3/20/2007	390-010854-US(PAR)
US	12/723,837	3/15/2010	8,454,293	6/4/2013	390-011009-US(C11)
US	13/908,909	6/3/2013	9,670,010	6/6/2017	390-011009-US(C12)
US	10/623,970	7/21/2003	7,677,859	3/16/2010	390-011009-US(I01)
US	10/200,818	7/22/2002	6,869,263	3/22/2005	390-011009-US(PAR)
US	10/692,047	10/23/2003	7,109,509	9/19/2006	390-011251-US(EQV)
US	10/339,150	1/9/2003	7,677,394	3/16/2010	390-011307-US(PAR)
US	12/761,499	4/16/2010	8,425,172	4/23/2013	390-011420-US(C01)
US	10/628,980	7/29/2003	7,699,573	4/20/2010	390-011420-US(PAR)
US	10/628,294	7/28/2003	7,478,454	1/20/2009	390-011422-US(EQV)
US	10/654,107	9/3/2003	6,880,757	4/19/2005	390-011423-US(EQV)
US	15/465,326	3/21/2017			390-011458-US(C211)
US	14/042,248	9/30/2013	9,601,362	3/21/2017	390-011458-US(C11)
US	13/030,926	2/18/2011	8,403,619	3/26/2013	390-011458-US(D01)
US	11/179,745	7/11/2005	8,545,165	10/1/2013	390-011458-US(I01)
US	11/093,479	3/30/2005	7,891,936	2/22/2011	390-011458-US(PAR)
US	14/472,678	8/29/2014	11,121,017	9/14/2021	390-011657-US(D01)
US	11/178,836	7/11/2005	8,821,099	9/2/2014	390-011657-US(PAR)
US	14/071,314	11/4/2013	10,065,307	9/4/2018	390-011658-US(C01)
US	16/121,148	9/4/2018			390-011658-US(C02)
US	11/178,830	7/11/2005	8,573,919	11/5/2013	390-011658-US(PAR)
US	13/113,476	5/23/2011	8,651,796	2/18/2014	390-011802-US(C01)
US	11/697,390	4/6/2007	7,946,800	5/24/2011	390-011802-US(PAR)
US	13/436,155	3/30/2012	8,628,288	1/14/2014	390-011803-US(C01)
US	14/148,785	1/7/2014	10,204,811	2/12/2019	390-011803-US(C02)
US	11/093,481	3/30/2005	8,167,522	5/1/2012	390-011803-US(PAR)
US	11/453,395	6/15/2006	7,880,155	2/1/2011	390-012038-US(PAR)
US	13/230,280	9/12/2011	8,590,956	11/26/2013	390-012188-US(C01)
US	14/089,439	11/25/2013	9,691,651	6/27/2017	390-012188-US(C02)
US	15/634,957	6/27/2017	10,615,068	4/7/2020	390-012188-US(D01)
US	11/045,545	1/28/2005	8,016,541	9/13/2011	390-012188-US(PAR)
US	11/769,688	6/27/2007	8,823,294	9/2/2014	390-012197-US(PAR)
US	15/012,425	2/1/2016	10,406,679	9/10/2019	390-012202-US(C01)
US	16/566,730	9/10/2019			390-012202-US(DC1)
US	11/179,762	7/11/2005	9,248,568	2/2/2016	390-012202-US(PAR)
US	11/442,511	5/26/2006	8,398,355	3/19/2013	390-012406-US(PAR)
US	11/741,416	4/27/2007	9,437,469	9/6/2016	390-012619-US(PAR)
US	11/769,651	6/27/2007	9,752,615	9/5/2017	390-012750-US(PAR)
US	10/626,504	7/23/2003	7,039,498	5/2/2006	390-012834-US(PAR)
US	10/635,231	8/6/2003	6,974,782	12/13/2005	390-013015-US(PAR)
US	10/618,446	7/22/2002	7,002,675	2/21/2006	390-013498-US(PAR)
US	11/302,563	12/13/2005	7,890,194	2/15/2011	390-014162-US(PAR)
US	13/042,407	3/7/2011	8,303,764	11/6/2012	390-014786-US(C01)
US	13/861,693	4/12/2013	10,204,810	2/12/2019	390-014786-US(C13)
US	13/286,186	10/31/2011	9,691,649	6/27/2017	390-014786-US(DI3)
US	12/325,993	12/1/2008	8,293,066	10/23/2012	390-014786-US(I01)
US	12/368,241	2/9/2009	9,524,896	12/20/2016	390-014786-US(I02)
US	12/875,414	9/3/2010	8,419,341	4/16/2013	390-014786-US(I03)
US	11/523,101	9/19/2006	7,901,539	3/8/2011	390-014786-US(PAR)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	13/703,234	5/12/2011	8,955,748	2/17/2015	390-015420-US(PCT)
US	16/570,453	9/13/2019			390-015752-US(PAR)
US	10/196,066	7/15/2002	6,737,826	5/18/2004	390P009913-US(PAR)
US	10/196,685	7/15/2002	6,643,563	11/4/2003	390P010465-US(PAR)
US	11/168,908	6/28/2005	8,292,563	10/23/2012	390P010545-US(PAR)
US	10/074,411	2/12/2002	8,510,476	8/13/2013	390P010777-US(PAR)
US	13/617,171	9/14/2012	8,747,050	6/10/2014	390P010855-US(C01)
US	12/117,355	5/8/2008	8,267,636	9/18/2012	390P010855-US(PAR)
US	12/542,588	8/17/2009	8,602,706	12/10/2013	390P011010-US(C01)
US	13/195,401	8/1/2011	8,371,792	2/12/2013	390P011010-US(CI1)
US	13/764,373	2/11/2013	8,827,617	9/9/2014	390P011010-US(CI2)
US	14/180,876	2/14/2014	9,570,330	2/14/2017	390P011010-US(D2I4)
US	13/159,034	6/13/2011	8,651,789	2/18/2014	390P011010-US(DI4)
US	10/962,787	10/9/2004	7,988,398	8/2/2011	390P011010-US(I01)
US	12/330,780	12/9/2008	8,960,099	2/24/2015	390P011010-US(I02)
US	11/442,509	5/26/2006	7,959,395	6/14/2011	390P011010-US(I04)
US	10/624,987	7/22/2003	7,575,406	8/18/2009	390P011010-US(PAR)
US	09/935,919	8/23/2001	6,711,731	3/23/2004	390P011119-US(PAR)
US	09/842,370	4/25/2001	7,058,627	6/6/2006	390P011120-US(PAR)
US	16/043,757	7/24/2018			390P011126-US(CD2)
US	13/030,856	2/18/2011	8,951,002	2/10/2015	390P011126-US(D01)
US	14/617,052	2/9/2015	10,029,363	7/24/2018	390P011126-US(D02)
US	10/434,582	5/9/2003	7,891,935	2/22/2011	390P011126-US(PAR)
US	10/739,375	12/18/2003	6,990,430	1/24/2006	390P011178-US(PAR)
US	10/741,146	12/19/2003	7,245,989	7/17/2007	390P011179-US(PAR)
US	10/120,673	4/11/2002	6,623,235	9/23/2003	390P011243-US(PAR)
US	10/121,152	4/11/2002	6,913,302	7/5/2005	390P011244-US(PAR)
US	10/120,744	4/11/2002	6,789,328	9/14/2004	390P011298-US(PAR)
US	10/106,571	3/26/2002	6,751,834	6/22/2004	390P011594-US(PAR)
US	14/698,110	4/28/2015	10,488,851	11/26/2019	390P011660-US(CD1)
US	16/696,822	11/26/2019			390P011660-US(CD2)
US	13/011,970	1/24/2011	9,020,617	4/28/2015	390P011660-US(D01)
US	11/178,615	7/11/2005	7,904,182	3/8/2011	390P011660-US(PAR)
US	13/008,559	1/18/2011	8,356,207	1/15/2013	390P011804-US(C01)
US	13/739,831	1/11/2013	9,104,650	8/11/2015	390P011804-US(C02)
US	14/822,310	8/10/2015	10,120,374	11/6/2018	390P011804-US(C03)
US	16/181,208	11/5/2018	10,845,793	11/24/2020	390P011804-US(C04)
US	17/102,811	11/24/2020			390P011804-US(C05)
US	11/485,143	7/11/2006	7,882,394	2/1/2011	390P011804-US(PAR)
US	17/158,723	1/26/2021			390P011831-US(C01)
US	16/201,899	11/27/2018	10,903,104	1/26/2021	390P011831-US(C2D1)
US	14/868,689	9/29/2015	10,141,214	11/27/2018	390P011831-US(CD1)
US	13/768,495	2/15/2013	9,147,590	9/29/2015	390P011831-US(D01)
US	11/148,871	6/9/2005	8,376,685	2/19/2013	390P011831-US(PAR)
US	11/154,787	6/15/2005	7,607,879	10/27/2009	390P011838-US(PAR)
US	14/541,934	11/14/2014	9,881,825	1/30/2018	390P011935-US(C01)
US	11/207,231	8/19/2005	8,888,433	11/18/2014	390P011935-US(PAR)
US	12/897,440	10/4/2010	8,678,734	3/25/2014	390P011937-US(C01)
US	14/223,553	3/24/2014	9,368,382	6/14/2016	390P011937-US(C02)
US	13/914,397	6/10/2013	8,892,248	11/18/2014	390P012193-US(C01)
US	12/651,160	12/31/2009	8,459,922	6/11/2013	390P012193-US(PAR)
US	11/485,146	7/11/2006	7,522,267	4/21/2009	390P012196-US(PAR)
US	11/485,144	7/11/2006	7,925,378	4/12/2011	390P012319-US(PAR)
US	12/843,659	7/26/2010	8,182,192	5/22/2012	390P012320-US(D01)
US	11/485,145	7/11/2006	7,762,755	7/27/2010	390P012320-US(PAR)
US	11/594,365	11/7/2006	7,798,758	9/21/2010	390P012404-US(C01)
US	14/976,952	12/21/2015	10,679,882	6/9/2020	390P012404-US(C2I3)
US	12/544,064	8/19/2009	8,328,495	12/11/2012	390P012404-US(CI1)
US	13/625,442	9/24/2012	9,224,628	12/29/2015	390P012404-US(CI3)
US	11/803,077	5/11/2007	8,267,634	9/18/2012	390P012404-US(I02)
US	11/891,835	8/13/2007	8,272,827	9/25/2012	390P012404-US(I03)
US	13/412,392	3/5/2012	8,803,513	8/12/2014	390P012408-US(C01)
US	12/163,716	6/27/2008	8,129,984	3/6/2012	390P012408-US(PAR)
US	12/163,802	6/27/2008	8,222,892	7/17/2012	390P012430-US(PAR)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	11/848,845	8/31/2007	9,117,859	8/25/2015	390P012654-US(PAR)
US	11/855,484	9/14/2007	8,297,319	10/30/2012	390P012667-US(PAR)
US	14/305,715	6/16/2014	10,335,945	7/2/2019	390P012752-US(D01)
US	16/460,676	7/2/2019			390P012752-US(D02)
US	12/117,415	5/8/2008	8,752,449	6/17/2014	390P012752-US(PAR)
US	14/822,392	8/10/2015	9,978,623	5/22/2018	390P012904-US(C01)
US	15/986,710	5/22/2018			390P012904-US(C02)
US	12/123,391	5/19/2008	9,105,673	8/11/2015	390P012904-US(PAR)
US	13/625,704	9/24/2012	8,662,812	3/4/2014	390P012907-US(C01)
US	14/195,086	3/3/2014	9,478,446	10/25/2016	390P012907-US(C02)
US	16/722,930	12/20/2019	10,854,478	12/1/2020	390P012907-US(CDC2)
US	17/108,473	12/1/2020			390P012907-US(CDC3)
US	15/333,021	10/24/2016	10,541,157	1/21/2020	390P012907-US(DC2)
US	12/123,365	5/19/2008	8,272,825	9/25/2012	390P012907-US(PAR)
US	12/901,146	10/8/2010	11,002,566	5/11/2021	390P012911-US(D01)
US	12/163,984	6/27/2008	7,834,618	11/16/2010	390P012911-US(PAR)
US	12/163,993	6/27/2008	8,659,205	2/25/2014	390P012912-US(PAR)
US	13/646,282	10/5/2012	9,024,488	5/5/2015	390P012913-US(C01)
US	12/163,996	6/27/2008	8,283,813	10/9/2012	390P012913-US(PAR)
US	14/058,436	10/21/2013	9,401,294	7/26/2016	390P012914-US(C01)
US	12/123,329	5/19/2008	8,562,271	10/22/2013	390P012914-US(PAR)
US	13/219,267	8/26/2011	8,237,391	8/7/2012	390P013018-US(C01)
US	13/567,812	8/6/2012	8,680,803	3/25/2014	390P013018-US(C02)
US	12/175,278	7/17/2008	8,008,884	8/30/2011	390P013018-US(PAR)
US	14/941,888	11/16/2015	9,751,209	9/5/2017	390P014101-US(C01)
US	15/695,744	9/5/2017	10,493,620	12/3/2019	390P014101-US(C02)
US	16/702,403	12/3/2019	11,110,598	9/7/2021	390P014101-US(C03)
US	13/547,786	7/12/2012	9,186,799	11/17/2015	390P014101-US(PAR)
US	13/270,844	10/11/2011	9,656,386	5/23/2017	390P014102-US(PAR)
US	13/036,876	2/28/2011	8,801,069	8/12/2014	390P014145-US(PAR)
US	12/260,818	10/29/2008	7,988,399	8/2/2011	390P014151-US(C01)
US	14/216,829	3/17/2014	9,884,726	2/6/2018	390P014151-US(CCI5)
US	14/014,910	8/30/2013	10,086,511	10/2/2018	390P014151-US(CD4)
US	12/030,902	2/14/2008	8,434,989	5/7/2013	390P014151-US(CI4)
US	12/025,477	2/4/2008	8,672,605	3/18/2014	390P014151-US(CI5)
US	12/025,516	2/4/2008	8,500,388	8/6/2013	390P014151-US(CI6)
US	12/025,541	2/4/2008	8,197,177	6/12/2012	390P014151-US(CI7)
US	12/032,733	2/18/2008	8,442,667	5/14/2013	390P014151-US(CIG)
US	11/876,869	10/23/2007	8,812,150	8/19/2014	390P014151-US(CIK)
US	11/876,876	10/23/2007	8,267,632	9/18/2012	390P014151-US(CIL)
US	11/876,896	10/23/2007	8,602,716	12/10/2013	390P014151-US(CIO)
US	13/616,683	9/14/2012	8,870,514	10/28/2014	390P014151-US(CLI1)
US	13/248,386	9/29/2011	8,523,507	9/3/2013	390P014151-US(DI4)
US	12/106,975	4/21/2008	8,950,998	2/10/2015	390P014151-US(I03)
US	12/239,717	9/26/2008	8,029,226	10/4/2011	390P014151-US(I04)
US	11/876,902	10/23/2007	8,696,298	4/15/2014	390P014151-US(I08)
US	11/876,915	10/23/2007	8,313,277	11/20/2012	390P014151-US(I09)
US	11/681,822	3/5/2007	8,403,613	3/26/2013	390P014151-US(I11)
US	10/985,834	11/10/2004	7,458,763	12/2/2008	390P014151-US(PAR)
US	12/206,382	9/8/2008	8,029,225	10/4/2011	390P014155-US(C01)
US	13/248,600	9/29/2011	8,944,738	2/3/2015	390P014155-US(C02)
US	10/985,839	11/10/2004	7,422,406	9/9/2008	390P014155-US(PAR)
US	10/985,727	11/10/2004	7,210,246	5/1/2007	390P014156-US(PAR)
US	11/846,290	8/28/2007	7,959,403	6/14/2011	390P014159-US(C01)
US	13/158,883	6/13/2011	8,807,905	8/19/2014	390P014159-US(C02)
US	11/382,491	5/10/2006	8,439,623	5/14/2013	390P014159-US(PAR)
US	12/434,330	5/1/2009	8,424,703	4/23/2013	390P014169-US(I01)
US	12/131,024	5/30/2008	10,586,722	3/10/2020	390P014169-US(PAR)
US	12/195,095	8/20/2008	8,178,829	5/15/2012	390P014171-US(PAR)
US	11/877,058	10/23/2007	10,444,749	10/15/2019	390P014180-US(CI1)
US	11/877,180	10/23/2007	8,775,148	7/8/2014	390P014180-US(CI4)
US	11/877,191	10/23/2007	8,612,198	12/17/2013	390P014180-US(CI5)
US	11/877,214	10/23/2007	8,473,270	6/25/2013	390P014180-US(CI6)
US	11/877,203	10/23/2007	8,972,029	3/3/2015	390P014180-US(CI7)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	11/877,228	10/23/2007	7,769,482	8/30/2010	390P014180-US(CI8)
US	11/877,242	10/23/2007	7,899,562	3/1/2011	390P014180-US(CI9)
US	11/877,071	10/23/2007	8,639,365	1/28/2014	390P014180-US(I01)
US	11/877,096	10/23/2007	8,639,489	1/28/2014	390P014180-US(I02)
US	11/877,303	10/23/2007	7,945,348	5/17/2011	390P014180-US(I05)
US	15/376,119	12/12/2016	10,058,998	8/28/2018	390P014203-US(C01)
US	16/115,505	8/28/2018	10,967,511	4/6/2021	390P014203-US(C02)
US	14/342,035	2/28/2014	9,517,558	12/13/2016	390P014203-US(PCT)
US	15/215,143	7/20/2016			390P014428-US(C01)
US	14/377,987	8/11/2014			390P014428-US(PCT)
US	15/137,722	4/25/2016	10,418,261	9/17/2019	390P014520-US(D01)
US	13/334,181	12/22/2011	9,324,594	4/26/2016	390P014520-US(PAR)
US	12/032,489	2/15/2008	7,859,685	12/28/2010	390P014524-US(C01)
US	12/875,462	9/3/2010	8,270,702	9/18/2012	390P014524-US(C03)
US	12/032,341	2/15/2008	7,894,657	2/22/2011	390P014524-US(C04)
US	12/977,514	12/29/2010	8,125,652	2/28/2012	390P014524-US(CI1)
US	13/406,252	2/27/2012	8,253,948	8/28/2012	390P014524-US(CI2)
US	13/617,333	9/14/2012	8,634,633	1/21/2014	390P014524-US(CI3)
US	14/159,223	1/20/2014	8,934,706	1/13/2015	390P014524-US(CI4)
US	11/682,306	3/5/2007	7,792,350	9/7/2010	390P014524-US(PAR)
US	14/579,067	12/22/2014	9,230,841	1/5/2016	390P014526-US(C01)
US	14/988,256	1/5/2016	9,852,935	12/26/2017	390P014526-US(C02)
US	15/849,002	12/20/2017	10,325,795	6/18/2019	390P014526-US(C03)
US	16/444,225	6/18/2019	10,600,665	3/24/2020	390P014526-US(C04)
US	16/825,663	3/20/2020			390P014526-US(C05)
US	13/417,837	3/12/2012	8,918,203	12/23/2014	390P014526-US(PAR)
US	15/489,449	4/17/2017	10737381	8/11/2020	390P014561-US(C01)
US	16/990,775	8/11/2020			390P014561-US(DIC1)
US	13/293,717	11/10/2011	9,623,555	4/18/2017	390P014561-US(PAR)
US	15/702,436	9/12/2017	10,204,817	2/12/2019	390P014648-US(C01)
US	16/272,974	2/11/2019	10,818,537	10/27/2020	390P014648-US(C02)
US	17/081,811	10/27/2020			390P014648-US(C03)
US	15/114,275	7/26/2016	9,761,478	9/12/2017	390P014648-US(PCT)
US	16/506,679	7/9/2019			390P014680-US(D01)
US	14/540,055	11/13/2014	10,348,172	7/9/2019	390P014680-US(PAR)
US	14/344,930	3/14/2014	9,812,343	11/7/2017	390P014702-US(PCT)
US	15/866,215	1/9/2018	10,239,707	3/26/2019	390P014750-US(C01)
US	14/353,153	4/21/2014	9,862,554	1/9/2018	390P014750-US(PCT)
US	16/201,539	11/27/2018	10,556,351	2/11/2020	390P014751-US(C01)
US	16/787,184	2/11/2020			390P014751-US(C02)
US	14/365,277	6/13/2014	10,137,576	11/27/2018	390P014751-US(PCT)
US	13/692,749	12/3/2012	8,827,618	9/9/2014	390P014781-US(PAR)
US	16/552,881	8/27/2019	11,121,015	9/14/2021	390P014865-US(C01)
US	14/161,039	1/22/2014	10,395,959	8/27/2019	390P014865-US(PAR)
US	16/793,623	2/18/2020			390P014905-US(C01)
US	14/540,077	11/13/2014	10,564,221	2/18/2020	390P014905-US(PAR)
US	15/369,573	12/5/2016	10,879,101	12/29/2020	390P014906-US(C01)
US	17/136,661	12/29/2020			390P014906-US(C02)
US	14/325,702	7/8/2014	9,514,974	12/6/2016	390P014906-US(PAR)
US	14/469,260	8/26/2014			390P014912-US(PAR)
US	16/838,785	4/2/2020			390P014929-US(C01)
US	14/540,058	11/13/2014	10,742,092	8/11/2020	390P014929-US(PAR)
US	15/952,595	4/13/2018	10,468,936	11/5/2019	390P014939-US(C01)
US	16/674,933	11/5/2019			390P014939-US(C02)
US	14/540,072	11/13/2014	9,948,155	4/17/2018	390P014939-US(PAR)
US	16/197,107	11/20/2018			390P014951-US(D01)
US	14/568,742	12/12/2014	10,134,621	11/20/2018	390P014951-US(PAR)
US	15/110,130	7/7/2016			390P014988-US(PCT)
US	15/103,268	6/9/2016	10,777,438	9/15/2020	390P014991-US(PCT)
US	16/011,978	6/19/2018	10,381,252	8/13/2019	390P015016-US(C01)
US	16/539,819	8/13/2019	10,770,325	9/8/2020	390P015016-US(C02)
US	17/014,575	9/8/2020			390P015016-US(C03)
US	14/937,676	11/10/2015	10,002,781	6/19/2018	390P015016-US(PAR)
US	17/002,587	8/25/2020			390P015178-US(D01)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	14/928,352	10/30/2015	10,755,960	8/25/2020	390P015178-US(PAR)
US	16/197,087	11/20/2018	10,978,330	4/13/2021	390P015253-US(C01)
US	17/229,495	4/13/2021			390P015253-US(C02)
US	15/209,497	7/13/2016	10,134,623	11/20/2018	390P015253-US(PAR)
US	16/996,409	8/18/2020			390P015255-US(C01)
US	15/743,727	1/11/2018	10748799	8/18/2020	390P015255-US(PCT)
US	15/634,871	6/27/2017			390P015313-US(PAR)
US	15/693,871	9/1/2017	10,607,879	3/11/2020	390P015426-US(PAR)
US	15/889,811	2/6/2018			390P015469-US(PAR)
US	16/151,598	10/4/2018	11,020,852	6/1/2021	390P015475-US(PAR)
US	16/872,864	5/12/2020			390P015477-US(D01)
US	15/880,387	1/25/2018	10,651,067	5/12/2020	390P015477-US(PAR)
US	17/103,243	11/24/2020			390P015503-US(C01)
US	15/971,827	5/4/2018	10,843,341	11/24/2020	390P015503-US(PAR)
US	17/158,523	1/26/2021			390P015542-US(D01)
US	16/029,320	7/6/2018	10,903,107	1/26/2021	390P015542-US(PAR)
US	17/398,847	8/10/2021			390P015606-US(C01)
US	16/257,595	1/25/2019	11,088,004	8/10/2021	390P015606-US(PAR)
US	16/354,954	3/15/2019			390P015620-US(PAR)
US	16/942,255	7/29/2020			390P015656-US(PAR)
US	16/426,983	5/30/2019			390P015661-US(PAR)
US	16/592,431	10/3/2019			390P015706-US(PAR)
US	16/668,290	10/30/2019			390P015716-US(PAR)
US	17/176,949	2/16/2021			390P015730-US(C01)
US	16/692,359	11/22/2019	10,923,375	2/16/2021	390P015730-US(PAR)
US	17/341,638	6/8/2021			390P015731-US(C01)
US	16/692,443	11/22/2019	11,031,265	6/8/2021	390P015731-US(PAR)
US	17/156,007	1/22/2021			390P015773-US(PAR)
US	16/899,151	6/11/2020			390P015777-US(PAR)
US	17/180,298	2/19/2021			390P015793-US(PAR)
US	17/108,530	12/1/2020			390P015826-US(PAR)
US	17/167,831	2/4/2021			390P015874-US(PAR)
US	17/362,565	6/29/2021			390P015885-US(PAR)
US	17/362,599	6/29/2021			390P015906-US(PAR)
US	10/438,470	5/15/2003	7,042,568	5/9/2006	ASTGP109
US	10/888,819	7/10/2004	7,055,875	6/6/2006	ASTGP110
US	11/404,536	4/14/2006	7,293,811	11/13/2007	ASTGP110C
US	11/870,560	10/11/2007	7,669,903	3/2/2010	ASTGP110D
US	10/087,400	3/1/2002	7,066,707	6/27/2006	ASTGP111
US	10/087,638	3/1/2002	7,100,340	9/5/2006	ASTGP112
US	10/194,702	7/12/2002	7,419,346	9/2/2008	ASTGP119
US	10/624,133	7/21/2003	7,300,082	11/27/2007	ASTGP122
US	11/014,401	12/16/2004	7,290,813	11/6/2007	ASTGP128
US	11/305,256	12/16/2005	7,648,327	1/19/2010	ASTGP137
US	11/774,764	7/9/2007	7,585,144	9/8/2009	ASTGP143C
US	11/644,240	12/22/2006	9,834,378	12/5/2017	ASTGP151
US	12/143,197	6/20/2008	7,737,567	6/15/2010	ASTGP154
US	12/780,761	5/14/2010	8,851,820	10/7/2014	ASTGP187
US	12/780,846	5/14/2010	8,882,433	11/11/2014	ASTGP187.CIP
US	14/537,696	11/10/2014	9,842,756	12/12/2017	ASTGP187.CIP.C1
US	15/816,728	11/17/2017	10,593,583	3/17/2020	ASTGP187.CIP.C2
US	10/087,092	3/1/2002	7,217,076	5/15/2007	C.ASTGP116
US	10/234,640	9/3/2002	7,293,950	11/13/2007	C.ASTGP118
US	11/938,236	11/9/2007	7,841,820	11/30/2010	C.ASTGP118C
US	12/943,198	11/10/2010	8,851,817	10/7/2014	C.ASTGP118C2
US	13/337,028	12/23/2011	8,800,774	8/12/2014	C.ASTGP133.C1
US	14/452,490	8/5/2014	9,878,453	1/30/2018	C.ASTGP133.C2
US	15/875,890	1/19/2018	10,434,661	10/8/2019	C.ASTGP133.C3
US	11/929,357	10/30/2007	7,748,944	7/6/2010	C.ASTGP189.DIV2
US	12/054,160	3/24/2008	10,163,667	12/25/2018	C.ASTGP190
US	12/828,236	6/30/2010	8,870,516	10/28/2014	C.ASTGP191
US	14/508,974	10/7/2014	9,378,995	6/28/2016	C.ASTGP191.C1
US	13/457,278	4/26/2012	9,275,885	3/1/2016	C.ASTGP192
US	13/475,723	5/18/2012	9,190,304	11/17/2015	C.ASTGP193

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	13/464,923	5/4/2012	9,184,078	11/10/2015	C.ASTGPI94
US	13/605,941	9/6/2012	8,881,297	11/4/2014	C.ASTGPI95
US	14/530,102	10/31/2014	10,534,356	1/14/2020	C.ASTGPI95.C1
US	13/830,692	3/14/2013	9,545,724	1/17/2017	C.ASTGPI96
US	15/386,799	12/21/2016	10,092,929	10/9/2018	C.ASTGPI96.DIV
US	16/116,025	8/29/2018	11,077,466	8/3/2021	C.ASTGPI96.DIV2
US	17/382,858	7/22/2021			C.ASTGPI96.DIV3
US	15/618,525	6/9/2017	10,252,420	4/9/2019	P0790.70003US00
US	15/682,632	8/22/2017	10,029,369	7/24/2018	P0790.70003US01
US	15/981,047	5/16/2018	10,173,323	1/8/2019	P0790.70003US02
TW	91134980	12/3/2002	1285392	8/11/2007	390-008762-TW(EQV)
TW	92106114	3/20/2003	251288	3/11/2006	390-010535-TW(EQV)
TW	95111131	3/30/2006	1395255	5/1/2013	390-010546-TW(EQV)
TW	95111132	3/30/2006	1429013	3/1/2014	390-011458-TW(EQV)
TW	095125183	7/11/2006	1462217	11/21/2014	390-011458-TW(I01)
TW	95125182	7/11/2006	1433248	4/1/2014	390-011657-TW(EQV)
TW	095125184	7/11/2006	1371423	9/1/2012	390-011658-TW(EQV)
TW	097112464	4/7/2008	1478797	4/1/2015	390-011802-TW(EQV)
TW	97124035	6/27/2008	1497898	8/21/2015	390-012197-TW(EQV)
TW	095125180	7/11/2006	1426987	2/21/2014	390-012202-TW(EQV)
TW	96118638	5/25/2007	1497633	8/21/2015	390-012406-TW(EQV)
TW	97115511	4/28/2008	1527149	3/21/2016	390-012619-TW(EQV)
TW	97124034	6/27/2008	1475783	3/1/2015	390-012750-TW(EQV)
TW	96134558	9/14/2007	1446477	7/21/2014	390-014786-TW(EQV)
TW	97143616	11/12/2008	1488247	6/11/2015	390-014786-TW(I01)
TW	98105804	2/24/2009	1394224	4/21/2013	390-014801-TW(EQV)
TW	108133602	9/18/2019			390-015752-TW(EQV)
TW	91115656	7/15/2002	187133	1/30/2004	390P009913-TW(EQV)
TW	91115655	7/15/2002	NI-193128	12/11/2003	390P010465-TW(EQV)
TW	91102618	2/15/2002	228660	3/1/2005	390P010777-TW(EQV)
TW	097116940	5/8/2008	1450356	8/21/2014	390P010855-TW(EQV)
TW	96118636	5/25/2007	1486999	6/1/2015	390P011010-TW(I04)
TW	92119902	7/22/2003	1304391	12/21/2008	390P011010-TW(PAR)
TW	92108182	4/10/2003	1266380	11/11/2006	390P011298-TW(EQV)
TW	95120309	6/8/2006	1447542	8/1/2014	390P011660-TW(EQV)
TW	95125759	7/14/2006	1470385	1/21/2015	390P011804-TW(EQV)
TW	94119765	6/14/2005	200611869	4/16/2006	390P011838-TW(EQV)
TW	94128322	8/19/2005	1365841	6/11/2012	390P011935-TW(EQV)
TW	099146029	12/27/2010	1556924	11/11/2016	390P012193-TW(EQV)
TW	95125185	7/11/2006	1447061	8/1/2014	390P012196-TW(EQV)
TW	95125186	7/11/2006	1397969	6/1/2013	390P012319-TW(EQV)
TW	103123787	7/10/2014	1557838	11/11/2016	390P012404-TW(DI3)
TW	95141080	11/7/2006			390P012404-TW(EQV)
TW	96116737	5/11/2007	1405290	8/11/2013	390P012404-TW(I02)
TW	97124036	6/27/2008	1460401	11/11/2014	390P012408-TW(EQV)
TW	097124037	6/27/2008	1451084	9/1/2014	390P012430-TW(EQV)
TW	96134145	9/14/2007	1484575	5/11/2015	390P012667-TW(EQV)
TW	103123072	7/31/2014	1590368	7/1/2017	390P012752-TW(D01)
TW	106113108	5/8/2008	1626705	6/11/2018	390P012752-TW(D02)
TW	107111032	3/29/2018	1660446	5/21/2019	390P012752-TW(D03)
TW	97118330	5/19/2008	1475627	3/1/2015	390P012904-TW(EQV)
TW	097118332	5/19/2008	1455861	10/11/2014	390P012907-TW(EQV)
TW	97124038	6/27/2008	1491168	7/1/2015	390P012911-TW(EQV)
TW	TW20080124039	6/27/2008	1442672	6/21/2014	390P012912-TW(EQV)
TW	97124040	6/27/2008	1492826	7/21/2015	390P012913-TW(EQV)
TW	97118334	5/19/2008	1474418	2/21/2015	390P012914-TW(EQV)
TW	97127079	7/17/2008	1512869	12/11/2015	390P013018-TW(EQV)
TW	106111170	3/31/2017	1667110	8/1/2019	390P014101-TW(D01)
TW	101125100	7/12/2012	1587995	6/21/2017	390P014101-TW(EQV)
TW	100136625	10/11/2011	1586500	6/11/2017	390P014102-TW(EQV)
TW	107122149	7/12/2018	1726219	5/1/2021	390P014203-TW(D01)
TW	101131835	8/31/2012	1681851	1/11/2020	390P014203-TW(EQV)
TW	107113574	2/8/2013	1725303	4/21/2021	390P014428-TW(D01)
TW	110109529	3/17/2021			390P014428-TW(D02)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
TW	102105348	2/8/2013	1629743	7/11/2018	390P014428-TW(EQV)
TW	106131822	3/12/2012	1691388	4/21/2020	390P014526-TW(D01)
TW	101108322	3/12/2012	1614831	2/11/2018	390P014526-TW(EQV)
TW	108127610	2/3/2020			390P014680-TW(D01)
TW	103139218	11/12/2014	1677166	11/11/2019	390P014680-TW(EQV)
TW	107126359	10/26/2012	1719331	2/21/2021	390P014750-TW(D01)
TW	101139730	10/26/2012	1637892	10/11/2018	390P014750-TW(EQV)
TW	101147857	12/17/2012	1615341	2/21/2018	390P014751-TW(EQV)
TW	099130817	9/13/2010	1458612	11/1/2014	390P014789-TW(EQV)
TW	107111520	1/22/2014	1684234	2/1/2020	390P014865-TW(D01)
TW	108148704	12/31/2019			390P014865-TW(D02)
TW	110127952	1/22/2014			390P014865-TW(D03)
TW	103102263	1/22/2014	1627696	6/21/2018	390P014865-TW(EQV)
TW	103139219	11/12/2014	1692931	5/1/2020	390P014905-TW(EQV)
TW	107104772	7/7/2014	1684229	2/1/2020	390P014906-TW(D01)
TW	103123311	7/7/2014	1623994	5/11/2018	390P014906-TW(EQV)
TW	109133389	8/25/2014			390P014912-TW(D01)
TW	103129172	8/25/2014	1709185	11/1/2020	390P014912-TW(EQV)
TW	103139220	11/12/2014	1695447	6/1/2020	390P014929-TW(EQV)
TW	109106762	11/12/2014			390P014939-TW(D01)
TW	103139221	11/12/2014	1688457	3/21/2020	390P014939-TW(EQV)
TW	108102275	12/15/2014	1700765	8/1/2020	390P014951-TW(D01)
TW	103143696	12/15/2014	1657524	4/21/2019	390P014951-TW(EQV)
TW	104137024	11/10/2015	1710440	11/21/2020	390P015016-TW(EQV)
TW	104136050	11/2/2015	1709186	11/1/2020	390P015178-TW(EQV)
TW	105122083	7/13/2016			390P015253-TW(EQV2)
TW	110127831	7/12/2016			390P015255-TW(D01)
TW	105121923	7/12/2016			390P015255-TW(EQV)
TW	106123233	7/11/2017			390P015313-TW(EQV)
TW	106130450	9/6/2017			390P015426-TW(EQV)
TW	107104305	2/7/2018			390P015469-TW(EQV)
TW	107135224	10/5/2018			390P015475-TW(EQV)
TW	107102919	1/26/2018			390P015477-TW(EQV)
TW	107115457	5/7/2018			390P015503-TW(EQV)
TW	107123728	7/9/2018			390P015542-TW(EQV)
TW	108103304	1/29/2019			390P015606-TW(EQV)
TW	108108958	3/15/2019			390P015620-TW(EQV)
TW	109125812	7/30/2020			390P015656-TW(EQV)
TW	108118963	5/31/2019			390P015661-TW(EQV)
TW	108136080	10/4/2019			390P015706-TW(EQV)
TW	108139483	10/31/2019			390P015716-TW(EQV)
TW	108143178	11/27/2019			390P015730-TW(EQV)
TW	108143179	11/27/2019			390P015731-TW(EQV)
TW	110102494	1/22/2021			390P015773-TW(EQV)
TW	109119899	6/12/2020			390P015777-TW(EQV)
TW	110105813	2/19/2021			390P015793-TW(EQV)
TW	109142271	12/1/2020			390P015826-TW(EQV)
TW	110104272	2/4/2021			390P015874-TW(EQV)
TW	110124051	6/30/2021			390P015885-TW(EQV)
TW	110124052	6/30/2021			390P015906-TW(EQV)
TW	91114515	7/1/2002	NI-184374	12/19/2003	ASTGP091.TW
TW	91113149	6/17/2002	I270149	1/1/2007	ASTGP099.TW
TW	91119815	8/30/2002	NI-197960	7/6/2004	ASTGP111.TW
TW	91119819	8/30/2002	NI-197961	7/6/2004	ASTGP112.TW
TW	91115847	7/16/2002	NI-202812	9/24/2007	ASTGP119.TW
TW	95122321	6/21/2006	I393056	4/11/2013	ASTGP140.TW
TW	91101253	1/25/2002	NI-203796	10/7/2004	ASTGP149.TW
TW	96144963	11/27/2007	I376764	11/11/2012	ASTGP151.TW
TW	97123378	6/23/2008	I407528	9/1/2013	ASTGP154.TW
TW	99115849	5/18/2010	I434797	4/21/2014	ASTGP187.CIP.TW
TW	99115854	5/18/2010	I434798	4/21/2014	ASTGP187.TW
TW	90129062	11/23/2001	NI-167227	4/2/2003	C.ASTGP080.TW
TW	91119950	9/2/2002	I272665	2/1/2007	C.ASTGP118.TW
TW	95124993	7/7/2006	I463587	12/1/2014	C.ASTGP133.TW

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
TW	101115222	4/27/2012	1538087	6/11/2016	C.ASTGPI92.TW
TW	101116230	5/7/2012	1527146	3/21/2016	C.ASTGPI94.TW
TW	102132035	9/5/2013	1604552	11/1/2017	C.ASTGPI95.TW
TW	106126301	8/4/2017	1645490	12/21/2018	C.ASTGPI95.TW.DIV
TW	103109731	3/14/2014	1629148	7/11/2018	C.ASTGPI96.TW
SG	200405138-9	2/21/2003	106407	9/29/2006	390-010535-SG(PCT)
SG	200708454-4	9/18/2007	141371	10/31/2011	390-014786-SG(EQV)
SG	201104074-8	6/3/2011	172675	3/9/2015	390P014524-SG(DI2)
PCT	PCT/US2019/022768	3/18/2019			390P015620-WO(EQV)
PCT	PCT/US2020/044237	7/30/2020			390P015656-WO(EQV)
PCT	PCT/US2019/034908	5/31/2019			390P015661-WO(EQV)
PCT	PCT/US2019/063426	11/26/2019			390P015730-WO(EQV)
PCT	PCT/US2019/063432	11/26/2019			390P015731-WO(EQV)
PCT	PCT/US/14899	1/25/2021			390P015773-WO(EQV)
PCT	PCT/US20/37788	6/15/2020			390P015777-WO(EQV)
PCT	PCT/US2021/18998	2/22/2021			390P015793-WO(EQV)
PCT	PCT/US20/62858	12/2/2020			390P015826-WO(EQV)
PCT	PCT/US2021/016855	2/5/2021			390P015874-WO(EQV)
PCT	PCT/US2021/039958	6/30/2021			390P015885-WO(EQV)
PCT	PCT/US2021/039966	6/30/2021			390P015906-WO(EQV)
NL	01954890.8	2/25/2003	1319201	3/29/2006	390-009409-NL(EPO)
NL	EP 1540459	6/23/2020			390-011420-NL(EPO)
NL	06774600.8	7/7/2006	1907173	10/3/2012	390-011658-NL(EPO)
NL	14744247.9	7/8/2014			390P014906-NL(PCT)
MY	P120071546	9/14/2007	MY-148631-A	5/15/2013	390-014786-MY(EQV)
MX	MX/A/2019/014723	6/8/2018			P0790.70003MX00
KR	10-10-7024269	10/28/2010	1096342	12/13/2011	390-007217-KR(D01)
KR	04-7008498	5/18/2004	996973	11/22/2010	390-008762-KR(PCT)
KR	04-7009278	2/21/2003	738592	7/5/2007	390-010535-KR(PCT)
KR	2014-7033479	11/27/2014	1567917	11/4/2015	390-010546-KR(D01)
KR	2007-7025002	3/29/2006	1366754	2/18/2014	390-011458-KR(PCT)
KR	08-7003015	7/7/2006	1383746	4/3/2014	390-011458-KR(PII)
KR	08-7002974	7/10/2006	10-1313231	9/24/2013	390-011657-KR(PCT)
KR	08-7002818	7/7/2006	1384141	4/4/2014	390-011658-KR(PCT)
KR	2009-7023235	11/6/2009	1475421	12/16/2014	390-011802-KR(PCT)
KR	10-04-7003617	9/13/2002	KR100872501	12/8/2008	390-012135-KR(EQV)
KR	2007-7001831	6/25/2008	1561685	10/13/2015	390-012197-KR(PCT)
KR	10-2013-7024761	9/17/2013	1519642	5/6/2015	390-012202-KR(D01)
KR	08-7031464	5/24/2007	1564359	10/23/2015	390-012406-KR(PCT)
KR	2009-7024587	11/25/2009	1475790	12/17/2014	390-012619-KR(PCT)
KR	2015-7022611	8/20/2015	1691518	12/26/2016	390-012750-KR(D01)
KR	2010-7001797	6/25/2008			390-012750-KR(PCT)
KR	10-06-0006243	1/20/2006			390-012798-KR(PAR)
KR	10-06-0008138	1/26/2006			390-012799-KR(PAR)
KR	10-06-0014064	2/14/2006			390-012801-KR(PAR)
KR	10-06-0014061	2/14/2006			390-012802-KR(PAR)
KR	10-06-0014058	2/14/2006			390-012803-KR(PAR)
KR	10-06-0014052	2/14/2006			390-012804-KR(PAR)
KR	10-06-0015236	2/16/2006			390-012805-KR(PAR)
KR	10-06-0034441	4/17/2006			390-012811-KR(PAR)
KR	2009-0017051	2/27/2009	10-178540	3/15/2017	390-014800-KR(EQV)
KR	2019-115676	9/19/2019			390-015752-KR(EQV)
KR	2009-7025511	5/8/2008	1676380	11/9/2016	390P010855-KR(PCT)
KR	2009-7024874	11/27/2009	1110207	1/19/2012	390P011010-KR(DII)
KR	07-7010483	5/8/2007	951680	3/31/2010	390P011010-KR(I01)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
KR	11-7015391	7/4/2011	1729301	4/17/2017	390P011010-KR(I02)
KR	2008-7031426	5/24/2007	1415708	6/30/2014	390P011010-KR(I04)
KR	05-7001199	1/21/2005	1028065	4/1/2011	390P011010-KR(PCT)
KR	08-7000438	1/7/2008	1359541	1/29/2014	390P011660-KR(PCT)
KR	08-7002964	7/11/2006	1322434	10/21/2013	390P011804-KR(PCT)
KR	07-7000563	6/9/2005	1398665	5/16/2014	390P011831-KR(PCT)
KR	07-7006063	3/15/2007	1233101	2/7/2013	390P011935-KR(PCT)
KR	2012-7020196	7/31/2012	1895545	8/30/2018	390P012193-KR(EQV)
KR	08-7002998	7/11/2006	1363591	2/10/2014	390P012196-KR(PCT)
KR	2017-7003883	2/10/2017	10-1841753	3/19/2018	390P012404-KR(DDI4)
KR	2015-7030855	10/26/2015	1707925	2/13/2017	390P012404-KR(DI4)
KR	08-7013732	11/7/2006			390P012404-KR(PCT)
KR	2015-7025648	9/17/2015	1660894	9/22/2016	390P012408-KR(D01)
KR	2010-7001780	6/27/2008	1659931	9/20/2016	390P012408-KR(PCT)
KR	2009-7007390	4/10/2009	1475420	12/16/2014	390P012667-KR(PCT)
KR	10-2014-7029326	10/20/2014	1629734	6/7/2016	390P012752-KR(D01)
KR	2017-7031089	10/26/2017	10-2121016	6/3/2020	390P012752-KR(D03)
KR	2020-7001085	1/13/2020	2216638	2/9/2021	390P012752-KR(D04)
KR	2014-7020420	7/21/2014	1613836	4/14/2016	390P012904-KR(D01)
KR	2016-7009733	4/12/2016	1772600	8/23/2017	390P012904-KR(D03)
KR	2017-7023439	8/22/2017	1932265	12/18/2018	390P012904-KR(D04)
KR	2018-7036800	12/18/2018			390P012904-KR(D05)
KR	09-7026465	12/18/2009	1522324	5/15/2015	390P012907-KR(PCT)
KR	10-7001534	6/27/2008	1532060	6/22/2015	390P012911-KR(PCT)
KR	2010-7001792	6/27/2008	1496654	2/23/2015	390P012912-KR(PCT)
KR	2015-7033402	11/23/2015	1651582	8/22/2016	390P012913-KR(D01)
KR	2010-7001842	6/28/2008	1651559	8/22/2016	390P012913-KR(PCT)
KR	2016-7013801	5/24/2016	1887110	8/3/2018	390P012914-KR(D02)
KR	2015-7033830	11/26/2015	1825595	1/30/2018	390P013018-KR(D01)
KR	2019-7018398	6/25/2019			390P013018-KR(D03)
KR	2019-7022183	7/26/2019	2146825	8/14/2020	390P014101-KR(D01)
KR	2014-7003720	2/12/2014	2006427	7/26/2019	390P014101-KR(PCT)
KR	2013-7011934	5/8/2013	1917335	11/5/2018	390P014102-KR(PCT)
KR	10-2014-7005807	3/4/2014	10-1570626	11/13/2015	390P014151-KR(DI2)
KR	2020-7004720	2/18/2020	2153663	9/2/2020	390P014203-KR(D01)
KR	10-2014-7007271	8/30/2012	10-2080812	2/18/2020	390P014203-KR(PCT)
KR	2016-7021551	8/5/2016	10-2096074	3/26/2020	390P014428-KR(D01)
KR	2014-7024510	2/11/2013			390P014428-KR(PCT)
KR	2019-7024110	8/16/2019			390P014526-KR(D01)
KR	2021-7013580	5/4/2021			390P014526-KR(D02)
KR	2013-7026717	10/10/2013	2047033	11/14/2019	390P014526-KR(PCT)
KR	2019-7028125	9/25/2019	2223624	2/26/2021	390P014561-KR(D01)
KR	2021-7006106	2/26/2021			390P014561-KR(D02)
KR	2013-7014921	6/10/2013	2060544	12/23/2019	390P014561-KR(PCT)
KR	2016-7023685	1/28/2015			390P014648-KR(PCT)
KR	2016-7015673	11/13/2014			390P014680-KR(PCT)
KR	2014-7009524	9/14/2012	2058985	12/18/2019	390P014702-KR(PCT)
KR	2020-7034131	11/26/2020	2244137	4/19/2021	390P014750-KR(D01)
KR	2014-7014085	10/26/2012	2185752	11/26/2020	390P014750-KR(PCT)
KR	2014-7019271	12/17/2012	2135466	7/13/2020	390P014751-KR(PCT)
KR	2010-0105257	10/27/2010	10-1829186	2/8/2018	390P014789-KR(EQV)
KR	2015-7022852	1/22/2014			390P014865-KR(PCT)
KR	2016-7015414	11/13/2014			390P014905-KR(PCT)
KR	2016-7003414	2/5/2016			390P014906-KR(PCT)
KR	2021-7024049	7/26/2021			390P014912-KR(D01)
KR	2016-7008080	8/26/2014	2285254	7/28/2021	390P014912-KR(PCT)
KR	2016-7015689	11/13/2014			390P014929-KR(PCT)
KR	2021-7006362	3/2/2021			390P014939-KR(D01)
KR	10-2016-7015709	11/13/2014			390P014939-KR(PCT)
KR	2016-7019346	12/15/2014			390P014951-KR(PCT)
KR	2016-7022339	1/16/2015			390P014988-KR(PCT)
KR	2016-7013021	10/16/2014			390P014991-KR(PCT)
KR	2017-7015932	11/10/2015			390P015016-KR(PCT)
KR	2017-7015254	6/2/2017			390P015178-KR(PCT)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
KR	2018-7004536	2/13/2018			390P015253-KR(PCT)
KR	2018-7004306	2/12/2018			390P015255-KR(PCT)
KR	2019-7004196	7/7/2017			390P015313-KR(PCT)
KR	2019-7010079	9/5/2017			390P015426-KR(PCT)
KR	2019-7026239	9/6/2019			390P015469-KR(PCT)
KR	2020-7012892	10/5/2018			390P015475-KR(PCT)
KR	2019-7024819	8/23/2019			390P015477-KR(PCT)
KR	2019-7036100	12/5/2019			390P015503-KR(PCT)
KR	2020-7003935	7/9/2018			390P015542-KR(PCT)
KR	2020-7025031	8/28/2020			390P015606-KR(PCT)
KR	2020-7029876	10/16/2020			390P015620-KR(PCT)
KR	2020-7038140	12/31/2020			390P015661-KR(PCT)
KR	2021-7013612	5/4/2021			390P015706-KR(PCT)
KR	2021-7016802	6/1/2021			390P015716-KR(PCT)
KR	2021-7020142	6/28/2021			390P015730-KR(PCT)
KR	2021-7020157	6/28/2021			390P015731-KR(PCT)
KR	7003086/2004	8/30/2002	800613	1/28/2008	ASTGP111.KR
KR	10-2011-7030282	5/14/2010	1755047	6/30/2017	ASTGP187.CIP.KR
KR	10-2017-7017992	6/29/2017	1927363	12/4/2018	ASTGP187.CIP.KR.DIV
KR	10-2011-7030281	5/14/2010	1716524	3/8/2017	ASTGP187.KR
KR	7003085/2004	8/30/2002	800612	1/28/2008	C.ASTGP116.KR
KR	2008-7000536	1/8/2008	1344118	12/16/2013	C.ASTGP133.KR
KR	10-2013-7001918	1/24/2013	1545067	8/10/2015	C.ASTGP191.KR
KR	10-2015-7008270	3/31/2015	2146768	8/14/2020	C.ASTGP195.KR
KR	10-2020-7023558	8/14/2020			C.ASTGP195.KR.DIV
KR	10-2015-7028589	10/12/2015	2196965	12/23/2020	C.ASTGP196.KR
KR	10-2020-7037172	12/23/2020	1022986120000	8/31/2021	C.ASTGP196.KR.DIV
JP	2010-019644	1/29/2010	5483556	2/28/2014	390-007134-JP(D01)
JP	2010-166098	7/23/2010	6123104	4/14/2017	390-007174-JP(D01)
JP	2016-065678	3/28/2016			390-007174-JP(D02)
JP	2008-277700	10/29/2008	5537017	5/9/2014	390-007299-JP(D01)
JP	2000-607787	9/21/2001	4633264	11/26/2010	390-007629-JP(PCT)
JP	2012-172529	8/3/2012	6240377	11/10/2017	390-008087-JP(D01)
JP	2016-201355	10/12/2016	6587355	9/20/2019	390-008087-JP(D02)
JP	2000-618050	11/16/2001			390-008447-JP(PCT)
JP	03-549212	11/26/2002	4790985	7/29/2011	390-008762-JP(PCT)
JP	2002-314956	10/29/2002			390-009015-JP(D03)
JP	2002-523101	2/27/2003	5046468	7/27/2012	390-009409-JP(PCT)
JP	2002-501770	12/5/2002	4729237	4/22/2011	390-009471-JP(PCT)
JP	03-505241	5/23/2002	4975238	4/20/2012	390-009909-JP(PCT)
JP	03-511282	1/5/2004	4472332	3/12/2010	390-010262-JP(PCT)
JP	2008-504312	3/29/2006	5751690	5/29/2015	390-010546-JP(PCT)
JP	2006-517134	5/21/2004			390-010854-JP(PCT)
JP	04-523279	7/22/2003	4542893	7/2/2010	390-011009-JP(P1)
JP	2010-142639	6/23/2010	5543285	5/16/2014	390-011110-JP(D01)
JP	2013-012443	1/25/2013	5567704	6/27/2014	390-011110-JP(D02)
JP	2004-529197	7/29/2003	4477496	3/19/2010	390-011420-JP(PCT)
JP	2006-511063	3/30/2006	4477495	3/19/2010	390-011422-JP(PCT)
JP	2013-181312	9/2/2013	5976612	7/29/2016	390-011458-JP(D01)
JP	2008-504279	3/29/2006	5820559	10/9/2015	390-011458-JP(PCT)
JP	2013-50751	3/13/2013	5732698	4/24/2015	390-011657-JP(D01)
JP	2014-158904	8/4/2014	5978261	7/29/2016	390-011657-JP(D02)
JP	2008-521470	1/10/2008	5657203	11/5/2014	390-011657-JP(PCT)
JP	2012-236949	10/26/2012	5363637	9/13/2013	390-011658-JP(D01)
JP	08-521497	7/7/2006	5209473	3/1/2013	390-011658-JP(PCT)
JP	2014-224566	11/4/2014	6027072	10/21/2016	390-011802-JP(D01)
JP	2010-502154	4/7/2008			390-011802-JP(PCT)
JP	2004-500256	4/25/2003			390-012109-JP(EQV)
JP	2003-5293987	9/13/2002	2005-503618	2/3/2005	390-012135-JP(EQV)
JP	2010-515071	6/25/2008	5517929	4/11/2014	390-012197-JP(PCT)
JP	2008-521473	1/11/2008	5186368	1/25/2013	390-012202-JP(PCT)
JP	2009-513224	5/24/2007	5706085	3/6/2015	390-012406-JP(PCT)
JP	2010-006284	1/14/2010	5518497	4/11/2014	390-012725-JP(D01)
JP	2010-515070	6/25/2008	5517928	4/11/2014	390-012750-JP(PCT)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
JP	2011-168795	8/1/2011	6109469	3/17/2017	390-012836-JP(D01)
JP	2014-023758	2/10/2014	6170843	7/7/2017	390-012836-JP(D02)
JP	2007-239922	9/14/2007	5247094	4/19/2013	390-014786-JP(EQV)
JP	2008-291966	11/14/2008	5578539	7/18/2014	390-014791-JP(EQV)
JP	2009-46027	2/27/2009	5,388,279	10/18/2013	390-014793-JP(EQV)
JP	2019-169840	9/18/2019			390-015752-JP(EQV)
JP	2010-244420	10/29/2010	5543318	5/16/2014	390P007675-JP(D01)
JP	03-512008	9/13/2004	5134182	11/16/2012	390P009913-JP(PCT)
JP	03-512827	1/13/2004	4364634	8/28/2009	390P010465-JP(PCT)
JP	2010-507453	5/8/2008	5318856	7/19/2013	390P010855-JP(PCT)
JP	2011-32153	2/17/2011	5543934	5/16/2014	390P011010-JP(D01)
JP	2014-212977	10/17/2014	6017508	10/7/2016	390P011010-JP(DI2)
JP	2007-535915	10/11/2005	5065900	8/17/2012	390P011010-JP(I01)
JP	2011-539806	6/7/2011	5,941,677	5/27/2016	390P011010-JP(I02)
JP	2009-513190	5/24/2007	5492553	3/7/2014	390P011010-JP(I04)
JP	2004-523280	7/22/2003	4712379	4/1/2011	390P011010-JP(PCT)
JP	03-584631	4/8/2003	4880200	12/9/2011	390P011298-JP(PCT)
JP	2008-515803	6/5/2006	5026413	6/29/2012	390P011660-JP(PCT)
JP	2008-521546	1/10/2008	5043839	7/20/2012	390P011804-JP(PCT)
JP	2007-527725	6/9/2005	5264171	5/10/2013	390P011831-JP(PCT)
JP	2007-528083	8/19/2005	5386082	10/11/2013	390P011935-JP(PCT)
JP	2012-547132	12/21/2010	5981848	8/5/2016	390P012193-JP(PCT)
JP	2013-050657	3/13/2013	6,282,803	2/2/2018	390P012196-JP(D01)
JP	2017-177209	9/14/2017			390P012196-JP(D02)
JP	2008-521547	1/11/2008	5336184	8/9/2013	390P012196-JP(PCT)
JP	2014-152289	7/25/2014	6356519	6/22/2018	390P012404-JP(D01)
JP	2020-097039	6/3/2020			390P012404-JP(D2D1)
JP	2016-087657	4/28/2016	6409018	9/28/2018	390P012404-JP(D2I3)
JP	2019-138208	7/26/2019	6896027	6/10/2021	390P012404-JP(D3I2)
JP	2017-000254	1/4/2017	6630296	12/13/2019	390P012404-JP(DDI2)
JP	2014-064109	3/26/2014	6073262	1/13/2017	390P012404-JP(DI2)
JP	2013-35930	8/13/2007	5930985	5/13/2016	390P012404-JP(DI3)
JP	2009-524652	8/13/2007	5543205	5/16/2014	390P012404-JP(I03)
JP	2010-515199	6/27/2008	5663304	12/12/2014	390P012408-JP(PCT)
JP	2009-528300	9/14/2007	5318765	7/19/2013	390P012667-JP(PCT)
JP	2013-061901	3/25/2013	6662559	2/17/2020	390P012752-JP(D01)
JP	2016-153840	5/8/2008	6310972	3/23/2018	390P012752-JP(D02)
JP	2018-050905	3/19/2018			390P012752-JP(D03)
JP	2020-132580	8/4/2020			390P012752-JP(D04)
JP	2014-79657	4/8/2014	6324178	4/20/2018	390P012904-JP(D01)
JP	2016-154328	8/5/2016	6482506	2/22/2019	390P012904-JP(D02)
JP	2017-230940	11/30/2017	6568921	8/9/2019	390P012904-JP(D03)
JP	2019-143973	8/5/2019			390P012904-JP(D04)
JP	2010-508635	5/19/2008	6027303	10/21/2016	390P012904-JP(PCT)
JP	2013-214185	10/11/2013	5956403	6/24/2016	390P012907-JP(D01)
JP	2015-125256	6/23/2015	6113227	3/24/2017	390P012907-JP(D02)
JP	2020-0183300	10/30/2020			390P012907-JP(D2D1)
JP	2016-042596	5/7/2016	6420271	10/19/2018	390P012907-JP(DD1)
JP	2018-158802	8/27/2018	6907166	7/2/2021	390P012907-JP(DD2)
JP	2010-509497	5/19/2008	5795162	8/21/2015	390P012907-JP(PCT)
JP	2010-515205	6/27/2008	5416104	11/22/2013	390P012911-JP(PCT)
JP	2010-515206	6/27/2008	5421255	11/29/2013	390P012912-JP(PCT)
JP	2014-204925	6/28/2008	6017506	10/7/2016	390P012913-JP(D01)
JP	2010-515207	6/27/2008	6130987	4/21/2017	390P012913-JP(PCT)
JP	2014-023394	2/10/2014	6630031	12/13/2019	390P012914-JP(D01)
JP	2017-027611	2/17/2017	6480488	2/15/2019	390P012914-JP(D02)
JP	2019-170796	9/19/2019	6898403	6/14/2021	390P012914-JP(D03)
JP	2010-509494	5/19/2008	5543336	5/16/2014	390P012914-JP(PCT)
JP	2014-027707	2/17/2014	6040182	11/11/2016	390P013018-JP(D01)
JP	2016-216382	7/17/2008	6466386	1/18/2019	390P013018-JP(D02)
JP	2018-161314	8/30/2018	6800925	11/27/2020	390P014101-JP(D01)
JP	2020-130724	7/31/2020			390P014101-JP(D02)
JP	2014-520351	7/13/2012	6396797	9/7/2018	390P014101-JP(PCT)
JP	2016-254043	12/27/2016	6603204	10/18/2019	390P014102-JP(D01)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
JP	2013-533015	10/11/2011	6525499	5/17/2019	390P014102-JP(PCT)
JP	2013-111441	5/28/2013	5689920	2/6/2015	390P014151-JP(DI1)
JP	2008-558497	3/5/2007	5,959,138	7/1/2016	390P014151-JP(I02)
JP	2010-293470	12/28/2010	5373760	9/27/2013	390P014159-JP(D01)
JP	2006-539863	11/10/2004	5226215	3/22/2013	390P014159-JP(PCT)
JP	2017-136687	7/13/2017	6510589	4/12/2019	390P014203-JP(D01)
JP	2019-072240	4/4/2019	6748257	8/11/2020	390P014203-JP(D02)
JP	2014-528572	8/30/2012	6178791	7/21/2017	390P014203-JP(PCT)
JP	2016-156373	8/9/2016	6325612	4/20/2018	390P014428-JP(D01)
JP	2020-156696	9/17/2020			390P014428-JP(D02)
JP	2014-556771	2/11/2013	6843493	2/26/2021	390P014428-JP(PCT)
JP	2016-238593	12/8/2016	6571629	8/16/2019	390P014526-JP(D01)
JP	2019-146549	8/8/2019			390P014526-JP(D02)
JP	2013-557942	3/12/2012	6059156	12/16/2016	390P014526-JP(PCT)
JP	2016-251575	12/26/2016	6581072	9/6/2019	390P014561-JP(D01)
JP	2019-118908	6/26/2019	6766227	9/18/2020	390P014561-JP(D02)
JP	2020-155790	9/16/2020			390P014561-JP(D03)
JP	2020-019040	1/28/2015	6888132	5/21/2021	390P014648-JP(D01)
JP	2016-548667	1/28/2015	6705750	6/3/2020	390P014648-JP(PCT)
JP	2019-215538	11/28/2019			390P014680-JP(D01)
JP	2014-530824	9/14/2012	6,106,176	3/10/2017	390P014702-JP(PCT)
JP	2020-115001	7/2/2020			390P014750-JP(D02)
JP	2014-547548	12/17/2012	6282980	2/2/2018	390P014751-JP(PCT)
JP	2010-248999	11/5/2010	5984036	8/12/2016	390P014789-JP(EQV)
JP	2019-002875	1/10/2019	6740394	7/28/2020	390P014865-JP(D01)
JP	2020-125542	7/22/2020			390P014865-JP(D02)
JP	2015-555233	1/22/2014	6510423	4/12/2019	390P014865-JP(PCT)
JP	2019-229581	12/19/2019			390P014905-JP(D01)
JP	2016-531066	11/13/2014	6679482	3/23/2020	390P014905-JP(PCT)
JP	2019-153221	8/23/2019			390P014906-JP(D01)
JP	2016-525419	7/8/2014	6577944	8/30/2019	390P014906-JP(PCT)
JP	2020-026510	2/19/2020			390P014912-JP(D01)
JP	2016-537775	8/26/2014	6665095	3/13/2020	390P014912-JP(PCT)
JP	2020-186510	11/9/2020			390P014929-JP(D01)
JP	2016-531061	11/13/2014	6820198	1/6/2021	390P014929-JP(PCT)
JP	2020-019826	2/7/2020			390P014939-JP(D01)
JP	2016-531047	11/13/2014	6708546	5/25/2020	390P014939-JP(PCT)
JP	2019-215618	11/28/2019			390P014951-JP(D01)
JP	2016-540517	12/15/2014			390P014951-JP(PCT)
JP	2021-063106	4/1/2021			390P014988-JP(D01)
JP	2016-546929	1/16/2015	6863744	4/5/2021	390P014988-JP(PCT)
JP	2016-523293	10/16/2014	6594304	10/4/2019	390P014991-JP(PCT)
JP	2017-525009	11/10/2015	6,833,685	2/5/2021	390P015016-JP(PCT)
JP	2020-135273	8/7/2020			390P015178-JP(D01)
JP	2017-542815	11/2/2015	6779892	10/16/2020	390P015178-JP(PCT)
JP	2021-120958	7/21/2021			390P015253-JP(D01)
JP	2018-501292	7/13/2016	6918770	7/27/2021	390P015253-JP(PCT)
JP	2021-110082	7/1/2021			390P015255-JP(D01)
JP	2018-501291	7/11/2016	6908585	7/5/2021	390P015255-JP(PCT)
JP	2019-501426	7/7/2017			390P015313-JP(PCT)
JP	2019-513363	3/8/2019			390P015426-JP(PCT)
JP	2019-542592	2/7/2018			390P015469-JP(PCT)
JP	2020-519405	10/5/2018			390P015475-JP(PCT)
JP	2019-540413	1/26/2018			390P015477-JP(PCT)
JP	2019-560201	11/1/2019			390P015503-JP(PCT)
JP	2020-501110	7/9/2018			390P015542-JP(PCT)
JP	2020-541513	7/29/2020			390P015606-JP(PCT)
JP	2020-549654	9/15/2020			390P015620-JP(PCT)
JP	2020-566636	11/27/2020			390P015661-JP(PCT)
JP	2021-518777	4/5/2021			390P015706-JP(PCT)
JP	2021-523853	4/30/2021			390P015716-JP(PCT)
JP	2021-531019	6/3/2021			390P015730-JP(PCT)
JP	2021-531016	6/3/2021			390P015731-JP(PCT)
JP	2003-513017	7/10/2002	4226469	12/5/2008	ASTGP091.JP

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
JP	2003-525893	8/30/2002	4287271	4/3/2009	ASTGP111.JP
JP	2003-522990	8/30/2002	4309263	5/15/2009	ASTGP112.JP
JP	2014-208833	10/10/2014	5860118	12/25/2015	ASTGP140.JP.DIV2
JP	2013-106924	5/21/2013	5506979	3/28/2014	ASTGP151.JP.DIV
JP	2012-511921	4/2/2015	5757466	4/10/2015	ASTGP187.CIP.JP
JP	2015-075728	8/13/2015	6025274	10/21/2016	ASTGP187.CIP.JP.DIV
JP	2012-511918	5/14/2010	5721701	4/3/2015	ASTGP187.JP
JP	2014-181601	9/5/2014	6084594	2/3/2017	ASTGP187.JP.DIV1
JP	2016-184528	9/21/2016	6342461	5/25/2018	ASTGP187.JP.DIV2
JP	2018-094645	5/14/2010	6621868	11/29/2019	ASTGP187.JP.DIV3
JP	2003-525891	8/30/2002	4309264	5/15/2009	C.ASTGP116.JP
JP	2008-520376	7/7/2006	5123851	11/2/2012	C.ASTGP133.JP
JP	2012-090294	4/11/2012	5676516	1/9/2015	C.ASTGP133.JP.DIV1
JP	2013-96861	3/24/2008	5760034	6/12/2015	C.ASTGP190.JP.DIV
JP	2013-518671	12/28/2012	5732132	4/17/2015	C.ASTGP191.JP
JP	2015-81055	6/29/2011	6101302	3/3/2017	C.ASTGP191.JP.DIV1
JP	2015-531138	8/30/2013	6329546	4/27/2018	C.ASTGP195.JP
JP	2018-081458	4/20/2018	6686062	4/3/2020	C.ASTGP195.JP.DIV
JP	2016-501853	9/14/2015	6678570	3/19/2020	C.ASTGP196.JP
JP	2020-002759	1/10/2020			C.ASTGP196.JP.DIV
GB	01954890.8	2/25/2003	1319201	3/29/2006	390-009409-GB(EPO)
FR	01954890.8	2/25/2003	1319201	3/29/2006	390-009409-FR(EPO)
FR	03771999.4	7/28/2003	1539386	1/24/2007	390-011422-FR(EPO)
FR	06837141.8	11/7/2006	1945541	4/10/2013	390P012404-FR(EPO)
FR	14744247.9	7/8/2014			390P014906-FR(PCT)
EP	03788279.2	7/29/2003	EP 1540459	5/28/2020	390-011420-EP(PCT)
EP	02777094.0	9/13/2002	EP1425705	6/9/2004	390-012135-EP(EQV)
EP	17156206.9	7/10/2006			390-012202-EP(D01)
EP	06 774577.8	7/10/2006			390-012202-EP(PCT)
EP	08253702.8	11/12/2008	2187433	10/24/2018	390-014788-EP(EQV)
EP	03765906.7	7/22/2003	1535313	10/31/2018	390P011010-EP(PCT)
EP	15182425.7	8/25/2015			390P011660-EP(D02)
EP	14862058.6	11/13/2014			390P014680-EP(PCT)
EP	12857460.5	12/17/2012	2791034	2/8/2021	390P014751-EP(PCT)
EP	14862821.7	11/13/2014			390P014905-EP(PCT)
EP	14744247.9	7/8/2014	3020065	1/17/2018	390P014906-EP(PCT)
EP	14766047.6	8/26/2014			390P014912-EP(PCT)
EP	14862636.9	11/13/2014	3069380	12/30/2020	390P014929-EP(PCT)
EP	14862208.7	11/13/2014			390P014939-EP(PCT)
EP	15801039.7	11/10/2015	3218925	12/30/2020	390P015016-EP(PCT)
EP	16825130.4	2/8/2018			390P015253-EP(PCT)
EP	16824976.1	2/8/2018			390P015255-EP(PCT)
EP	17768909.8	9/5/2017			390P015426-EP(PCT)
EP	EP18864263.1	10/5/2018			390P015475-EP(PCT)
EP	18831077.5	7/9/2018			390P015542-EP(PCT)
EP	EP19746723.6	7/30/2020			390P015606-EP(PCT)
EP	19766580.5	9/16/2020			390P015620-EP(PCT)
EP	19868791.5	4/6/2021			390P015706-EP(PCT)
EP	19889663.1	5/28/2021			390P015730-EP(PCT)
EP	19890201.7	5/28/2021			390P015731-EP(PCT)
EP	10778180.9	5/14/2010	2433300	7/7/2021	ASTGP187.CIP.EP
EP	10778177.5	5/14/2010			ASTGP187.EP
EP	18737075.4	6/8/2018			P0790.70003EP00
DE	60118391.6-08	2/25/2003	1319201	3/29/2006	390-009409-DE(EPO)
DE	EP 1540459	6/23/2020			390-011420-DE(EPO)
DE	603 11 479.2-08	7/28/2003	1539386	1/24/2007	390-011422-DE(EPO)
DE	60 2006 042 041.2	3/29/2006	1866958	6/25/2014	390-011458-DE(EPO)
DE	06786631.9	7/10/2006	1901983	3/4/2015	390-011657-DE(PCT)
DE	06774600.8	7/7/2006	1907173	10/3/2012	390-011658-DE(EPO)
DE	10301076.9	1/14/2003			390-012109-DE(EQV)
DE	102005016026.3	4/7/2005	102005016026.3	11/22/2012	390-013831-DE(EQV)
DE	202007016268.5	11/21/2007	DE 20 2007 016 268	3/26/2009	390-013832-DE(EQV)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
DE	05807523.5	10/11/2005			390P011010-DE(I01)
DE	06786953.7	7/11/2006	1904893	11/28/2012	390P012196-DE(EPO)
DE	06837141.8	11/7/2006	1945541	4/10/2013	390P012404-DE(EPO)
DE	04818697.7	11/10/2004	1684951	5/7/2014	390P014159-DE(EPO)
DE	14744247.9	7/8/2014			390P014906-DE(PCT)
CN	03806683.1	2/21/2003	ZL03806683.	11/7/2007	390-010535-CN(PCT)
CN	200680019260.7	3/29/2006	ZL200680019260.7	3/28/2012	390-010546-CN(PCT)
CN	201010516708.4	10/13/2010	ZL201010516708.4	12/26/2012	390-011458-CN(D01)
CN	200680019061	3/29/2006	0680019061	12/15/2010	390-011458-CN(PCT)
CN	200680033307.5	7/7/2006	ZL200680033307.5	12/12/2012	390-011458-CN(PII)
CN	200680033266.X	7/10/2006	ZL200680033266.X	7/17/2013	390-011657-CN(PCT)
CN	200680032500	7/7/2006	ZL0680032500	6/8/2011	390-011658-CN(PCT)
CN	0880019066.8	4/7/2008	CN101711429	11/16/2011	390-011802-CN(PCT)
CN	0880104667.9	6/25/2008	ZL200880104667.9	9/24/2014	390-012197-CN(PCT)
CN	200680033040.X	7/10/2006	ZL200680033040.X	11/14/2012	390-012202-CN(PCT)
CN	0880104666.4	6/25/2008	ZL200880104666.4	12/5/2012	390-012750-CN(PCT)
CN	200710192971.0	9/19/2007	200710192971.0	6/2/2010	390-014786-CN(EQV)
CN	200810184751.8	11/14/2008	ZL200810184751.8	5/7/2014	390-014790-CN(EQV)
CN	200580041738	10/11/2005	0580041738.	8/3/2011	390P011010-CN(I01)
CN	03822550.6	7/22/2003	ZL03822550.6	1/8/2014	390P011010-CN(PCT)
CN	0680029377.3	6/5/2006	ZL200680029377.3	6/20/2012	390P011660-CN(PCT)
CN	200680033247.7	7/11/2006	ZL200680033247.7	3/27/2013	390P011804-CN(PCT)
CN	201310692043.6	8/19/2005	ZL201310692043.6	6/29/2016	390P011935-CN(D01)
CN	200580035790.6	8/19/2005	ZL200580035790.6	4/2/2014	390P011935-CN(PCT)
CN	201080065082.8	12/21/2010	ZL201080065082.8	3/23/2016	390P012193-CN(PCT)
CN	US06/026975	7/11/2006	ZL680032452	7/6/2011	390P012196-CN(PCT)
CN	0780026236.0	5/11/2007	ZL200780026236.0	8/14/2013	390P012404-CN(I02)
CN	0780039010.4	8/13/2007	ZL200780039010.4	11/14/2012	390P012404-CN(I03)
CN	0680050581.3	11/7/2006	80050581.3	4/20/2011	390P012404-CN(PCT)
CN	0880104668.3	6/27/2008	ZL200880104668.3	6/18/2014	390P012408-CN(PCT)
CN	0880104585.4	6/27/2008	ZL200880104585.4	8/28/2013	390P012911-CN(PCT)
CN	0880104621.7	6/27/2008	ZL200880104621.7	11/20/2013	390P012912-CN(PCT)
CN	0880104622.1	6/28/2008	ZL00880104622.1	1/27/2015	390P012913-CN(PCT)
CN	0880108254.8	7/17/2008	ZL200880108254.8	7/22/2015	390P013018-CN(PCT)
CN	201610095653.1	7/13/2012	ZL201610095653.1	1/15/2019	390P014101-CN(D01)
CN	201280044529.2	7/13/2012	ZL201280044529.2	3/23/2016	390P014101-CN(PCT)
CN	201180059144.9	10/11/2011	ZL201180059144.9	12/14/2016	390P014102-CN(PCT)
CN	201280054282.2	8/30/2012	ZL201280054282.2	2/15/2017	390P014203-CN(PCT)
CN	201710826869.5	2/11/2013			390P014428-CN(D01)
CN	201380019263.0	2/11/2013	ZL201380019263.0	10/13/2017	390P014428-CN(PCT)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
CN	201280022639.9	3/12/2012	ZL201280022639.9	5/11/2016	390P014526-CN(PCT)
CN	201180064669.1	11/10/2011	ZL201180064669.1	8/10/2016	390P014561-CN(PCT)
CN	201580017265.5	1/28/2015	ZL201580017265.5	9/10/2019	390P014648-CN(PCT)
CN	202110645759.5	11/13/2014			390P014680-CN(D01)
CN	201480073103.9	11/13/2014			390P014680-CN(PCT)
CN	201280055812.5	9/14/2012	ZL201280055812.5	1/4/2019	390P014702-CN(PCT)
CN	201280069898.7	12/17/2012	ZL201280069898.7	1/9/2018	390P014751-CN(PCT)
CN	201010545380.9	11/9/2010	ZL201010545380.9	8/24/2016	390P014789-CN(EQV)
CN	201810456586.0	1/22/2014			390P014865-CN(D01)
CN	201480017533.9	1/22/2014	ZL201480017533.9	6/12/2018	390P014865-CN(PCT)
CN	201910984128.9	11/13/2014			390P014905-CN(D01)
CN	201480073094.3	11/13/2014	ZL201480073094.3	11/5/2019	390P014905-CN(PCT)
CN	201480049487.0	7/8/2014	ZL201480049487.0	9/15/2020	390P014906-CN(PCT)
CN	201910881331.3	9/18/2019			390P014912-CN(D01)
CN	201480058849.2	8/26/2014	ZL201480058849.2	10/22/2019	390P014912-CN(PCT)
CN	201480073062.3	11/13/2014	ZL201480073062.3	11/6/2020	390P014929-CN(PCT)
CN	201480073095.8	11/13/2014	ZL201480073095.8	6/14/2019	390P014939-CN(PCT)
CN	201910424298.1	5/21/2019			390P014951-CN(D01)
CN	201480075737.8	12/15/2014	ZL201480075737.8	6/14/2019	390P014951-CN(PCT)
CN	20210464317.0	4/28/2021			390P014988-CN(D01)
CN	201580014344.0	1/16/2015			390P014988-CN(PCT)
CN	201480069864.7	10/16/2014	ZL201480069864.7	6/18/2019	390P014991-CN(PCT)
CN	201580072914.1	11/10/2015	ZL201580072914.1	12/8/2020	390P015016-CN(PCT)
CN	201580072362.4	11/2/2015	ZL201580072362.4	6/4/2021	390P015178-CN(PCT)
CN	201680053111.6	7/13/2016			390P015253-CN(PCT)
CN	201680053113.5	7/11/2016			390P015255-CN(PCT)
CN	201780055988.3	7/7/2017			390P015313-CN(PCT)
CN	201780069173.0	9/5/2017			390P015426-CN(PCT)
CN	201880023289.5	2/7/2018			390P015469-CN(PCT)
CN	201880078979.0	10/5/2018			390P015475-CN(PCT)
CN	201880021563.5	1/26/2018			390P015477-CN(PCT)
CN	201880044617.X	5/7/2018			390P015503-CN(PCT)
CN	201880059024.0	7/9/2018			390P015542-CN(PCT)
CN	201980023974.2	9/30/2020			390P015606-CN(PCT)
CN	201980032815.9	11/16/2020			390P015620-CN(PCT)
CN	201980050938.5	1/29/2021			390P015661-CN(PCT)
CN	201980080880.9	10/4/2019			390P015706-CN(PCT)
CN	201980087404.x	10/31/2019			390P015716-CN(PCT)
CN	201980090640.7	11/26/2019			390P015730-CN(PCT)
CN	201980090653.4	11/26/2019			390P015731-CN(PCT)
CN	2816096.7	7/10/2002	ZL02816096.7	9/17/2008	ASTGP091.CN
CN	2819331.8	8/30/2002	ZL02819331.8	8/1/2007	ASTGP111.CN
CN	200710007932.9	8/30/2002	ZL200710007932.9	9/5/2012	ASTGP111.CN2
CN	2819377.6	8/30/2002	ZL02819377.6	1/2/2008	ASTGP112.CN
CN	201080031793.3	5/14/2010	ZL201080031793.3	4/29/2015	ASTGP187.CIP.CN

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
CN	201080031797.1	5/14/2010	ZL201080031797.1	5/27/2015	ASTGP187.CN
CN	2820488.3	8/30/2002	ZL02820488.3	7/18/2007	C.ASTGP116.CN
CN	200680031413.X	2/27/2008	ZL200680031413.X	2/2/2011	C.ASTGP133.CN
CN	201010578622.4	2/27/2008	ZL201010578622.4	5/14/2014	C.ASTGP133.CN.D
CN	201010202703.4	6/4/2010	ZL201010202703.4	5/1/2013	C.ASTGP189.CN.DIV1
CN	201180041909.6	2/28/2013	ZL201180041909.6	8/3/2016	C.ASTGP191.CN
CN	201610416629.3	6/14/2016	ZL201610416629.3	2/19/2019	C.ASTGP191.CN.DIV1
CN	201280032280.3	4/27/2012	ZL201280032280.3	5/4/2016	C.ASTGP192.CN
CN	201280032965.8	5/7/2012	ZL201280032965.8	4/5/2017	C.ASTGP194.CN
CN	201380056379.1	8/30/2013	ZL201380056379.1	11/17/2017	C.ASTGP195.CN
CN	201480021125.0	10/14/2015	ZL201480021125.0	9/26/2017	C.ASTGP196.CN
CN	201710499453.7	3/13/2014	ZL201710499453.7	1/7/2020	C.ASTGP196.CN.DIV1
CN	201911256394.6	3/13/2014			C.ASTGP196.CN.DIV2
CH	01954890.8	2/25/2003	1319201	3/29/2006	390-009409-CH(EPO)
CH	1328-02	7/29/2002	695872.	9/29/2006	390-011420-CH(PAR)
CH	03771999.4	7/28/2003	1539386	1/24/2007	390-011422-CH(EPO)
CH	1330-02	7/29/2002	696188	2/15/2007	390-011422-CH(PAR)
CA	3064027	6/8/2018			P0790.70003CA00
PCT	PCT/US2020/044275	7/30/2020			390P015656-PCT(EQV)
US	09/228,305	1/12/1999	6,158,941	12/12/2000	390-006116-US(C01)
US	09/435,702	11/8/1999	6,261,048	7/17/2001	390-006404-US(C01)
US	09/223,508	12/30/1998	6,485,250	11/26/2002	390-007093-US(PAR)
US	09/452,306	12/1/1999	6,364,592	4/2/2002	390-007173-US(PAR)
US	09/044,820	3/20/1998	6,481,956	11/19/2002	390-007174-US(PAR)
US	09/274,067	3/22/1999	6,046,435	4/4/2000	390-007217-US(D01)
US	09/145,008	9/1/1998	6,464,448	10/15/2002	390-007394-US(PAR)
US	09/008,615	1/16/1998	5,931,626	8/3/1999	390-007395-US(PAR)
US	09/243,516	2/1/1999	6,120,229	9/19/2000	390-007628-US(PAR)
US	09/280,751	3/29/1999	6,054,688	4/25/2000	390-007629-US(PAR)
US	09/863,775	5/23/2001			390-007630-US(I01)
US	09/145,928	9/3/1998			390-007630-US(PAR)
US	09/072,097	5/4/1998	6,547,510	4/15/2003	390-007802-US(PAR)
US	09/437,628	11/10/1999	6,265,803	7/24/2001	390-007941-US(PAR)
US	09/322,858	5/28/1999	6,216,058	4/10/2001	390-008087-US(PAR)
US	09/433,260	11/4/1999	6,309,161	10/30/2001	390-008103-US(PAR)
US	09/163,844	9/30/1998	6,960,057	11/1/2005	390-008105-US(PAR)
US	09/318,993	5/26/1999	6,352,265	3/5/2002	390-008444-US(PAR)
US	09/362,490	7/28/1999	6,318,945	11/20/2001	390-008445-US(PAR)
US	09/363,159	7/28/1999	6,195,619	2/27/2001	390-008446-US(PAR)
US	09/314,654	5/19/1999	6,279,412	8/28/2001	390-008447-US(PAR)
US	09/362,761	7/28/1999			390-008584-US(PAR)
US	09/003,025	1/5/1998	6,071,059	6/6/2000	390-009015-US(C01)
US	09/497,057	2/2/2000	6,375,403	4/23/2002	390-009015-US(C02)
US	09/496,865	2/2/2000	6,461,094	10/8/2002	390-009015-US(D01)
US	10/012,142	11/13/2001	6,609,876	8/26/2003	390-009015-US(DC2)
US	10/460,698	6/12/2003	6,837,663	1/4/2005	390-009015-US(DC3)
US	10/991,849	11/18/2004			390-009015-US(DC4)
US	09/184,562	11/2/1998	6,403,945	6/11/2002	390-009020-US(PAR)
US	09/158,559	9/22/1998	6,099,059	8/8/2000	390-009024-US(PAR)
US	09/158,560	9/22/1998	6,510,688	1/28/2003	390-009025-US(PAR)
US	09/184,561	11/2/1998	6,641,348	11/4/2003	390-009026-US(PAR)
US	09/773,143	1/31/2001	6,551,049	4/22/2003	390-009027-US(D01)
US	09/170,575	10/13/1998	6,205,881	3/27/2001	390-009027-US(PAR)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	09/170,557	10/13/1998	6,033,175	3/7/2000	390-009028-US(PAR)
US	09/003,542	1/6/1998	6,138,058	10/24/2000	390-009030-US(PAR)
US	09/958,504	10/9/2001	6,736,582	5/18/2004	390-009031-US(PCT)
US	09/086,703	5/28/1998			390-009056-US(PAR)
US	09/541,284	4/3/2000	6,409,448	6/25/2002	390-009236-US(PAR)
US	09/592,471	6/9/2000	6,418,350	7/9/2002	390-009305-US(PAR)
US	10/297,485	12/6/2002	6,986,636	1/17/2006	390-009396-US(PAR)
US	09/649,374	8/28/2000	6,567,711	5/20/2003	390-009409-US(PAR)
US	09/588,392	6/6/2000	6,364,593	4/2/2002	390-009471-US(PAR)
US	09/263,618	3/5/1999	6,147,356	11/14/2000	390-009897-US(PAR)
US	09/898,693	7/3/2001	6,673,161	1/6/2004	390-009906-US(PAR)
US	09/884,824	6/19/2001	6,585,470	7/1/2003	390-009909-US(PAR)
US	11/104,397	4/12/2005	7,374,386	5/20/2008	390-010262-US(C01)
US	12/148,346	4/18/2008	8,231,322	7/31/2012	390-010262-US(C02)
US	09/897,202	7/2/2001	6,918,731	7/19/2005	390-010262-US(PAR)
US	10/009,218	11/8/2001	7,134,825	11/14/2006	390-010641-US(PCT)
US	10/244,852	9/16/2002	7,179,044	2/20/2007	390-011110-US(D01)
US	09/603,295	6/23/2000	6,632,065	10/14/2003	390-011110-US(I01)
US	09/113,599	7/10/1998	6,450,755	9/17/2002	390-011110-US(PAR)
US	09/113,784	7/10/1998	6,224,319	5/1/2001	390-011112-US(PAR)
US	09/216,011	12/16/1998	6,165,268	12/26/2000	390-011113-US(PAR)
US	09/809,598	3/15/2001	6,452,503	9/17/2002	390-011115-US(PAR)
US	09/574,127	5/19/2000	6,405,843	6/18/2002	390-011117-US(PAR)
US	09/918,973	7/31/2001	6,732,207	5/4/2004	390-011125-US(PAR)
US	09/924,146	8/7/2001	6,609,874	8/26/2003	390-011132-US(EQV)
US	10/267,008	10/8/2002	6,813,543	11/2/2004	390-011137-US(PAR)
US	10/223,122	8/19/2002	6,827,546	12/7/2004	390-011245-US(PAR)
US	09/788,034	2/16/2001	6,619,359	9/16/2003	390-011261-US(PAR)
US	09/882,215	6/15/2001			390-011262-US(PAR)
US	10/106,571	3/26/2002	6,751,834	6/22/2004	390-011567-US(PAR)
US	11/070,443	3/2/2005			390-012040-US(PAR)
US	10/509,664	9/29/2004			390-012109-US(PAR)
US	10/489,627	8/16/2004			390-012135-US(PAR)
US	09/841,539	4/24/2001	6,366,830	4/2/2002	390-012833-US(C01)
US	09/224,134	12/31/1998	6,360,144	3/19/2002	390-012833-US(PAR)
US	09/312,343	5/14/1999	6,275,748	8/14/2001	390-012835-US(C01)
US	09/890,839	8/2/2001	6,453,214	9/17/2002	390-012835-US(C02)
US	09/920,353	8/1/2001	6,438,460	8/20/2002	390-012835-US(C03)
US	10/223,075	8/15/2002	6,618,645	9/9/2003	390-012835-US(C04)
US	10/649,116	8/26/2003	6,898,487	5/24/2005	390-012835-US(C05)
US	11/136,078	5/23/2005	7,233,842	6/19/2007	390-012835-US(C06)
US	09/204,747	12/2/1998	6,256,555	7/3/2001	390-012835-US(PAR)
US	09/612,757	7/10/2000	6,501,070	12/31/2002	390-012836-US(C01)
US	10/328,853	12/24/2002	6,815,661	11/9/2004	390-012836-US(C02)
US	10/328,749	12/24/2002	6,784,418	8/31/2004	390-012836-US(C03)
US	10/335,134	12/30/2002	6,765,222	7/20/2004	390-012836-US(D01)
US	10/895,484	7/20/2004	7,102,124	9/5/2006	390-012836-US(D02)
US	09/352,155	7/12/1999	6,281,516	8/28/2001	390-012836-US(PAR)
US	10/622,261	7/18/2003			390-013013-US(PAR)
US	09/892,945	6/27/2001	6,690,993	2/10/2004	390-013014-US(PAR)
US	09/323,591	6/1/1999	6,192,922	2/27/2001	390-013491-US(PAR)
US	09/172,945	10/14/1998	6,050,774	4/18/2000	390-013493-US(PAR)
US	09/097,561	6/15/1998	6,186,744	2/13/2001	390-013495-US(PAR)
US	10/202,401	7/22/2002			390-013497-US(PAR)
US	11/386,446	3/21/2006			390-014162-US(I01)
US	11/301,653	12/13/2005			390-014163-US(PAR)
US	D/101,461	3/2/1999	D425,493	5/23/2000	390D013496-US(PAR)
US	09/049,315	3/27/1998	5,879,461	3/9/1999	390P007203-US(PAR)
US	09/049,314	3/27/1998	6,059,507	5/9/2000	390P007204-US(PAR)
US	09/084,457	5/26/1998	6,530,732	3/11/2003	390P007410-US(PAR)
US	09/559,720	4/26/2000	6,231,289	5/15/2001	390P007411-US(D01)
US	09/084,754	5/26/1998	6,079,928	6/27/2000	390P007411-US(PAR)
US	09/089,752	6/2/1998	6,257,827	7/10/2001	390P007675-US(PAR)
US	60/069,033				390P009021-US(-#1)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	09/207,957	12/9/1998	6,418,352	7/9/2002	390P009022-US(PAR)
US	60/305,384	7/14/2001			390P009911-US(-#1)
US	12/580,730	10/16/2009			390P009911-US(C01)
US	10/196,679	7/15/2002			390P009911-US(PAR)
US	60/305,052	7/13/2001			390P009913-US(-#1)
US	60/305,177	7/13/2001			390P010465-US(-#1)
US	60/583,497	6/28/2004			390P010545-US(-#1)
US	60/269,084	2/15/2001			390P010777-US(-#1)
US	60/916,724	5/8/2007			390P010855-US(-#1)
US	60/397,895	7/22/2002			390P011010-US(-#1)
US	11/441,711	5/26/2006			390P011010-US(I05)
US	60/076,223	2/27/1998			390P011096-US(-#1)
US	09/641,996	8/18/2000	6,447,233	9/10/2002	390P011096-US(C01)
US	09/185,222	11/3/1998	6,106,213	8/22/2000	390P011096-US(PAR)
US	60/071,299	1/16/1998			390P011100-US(-#1)
US	09/227,177	1/7/1999	5,970,621	10/26/1999	390P011100-US(PAR)
US	60/125,023	3/18/1999			390P011104-US(-#1)
US	10/253,735	9/24/2002			390P011104-US(D01)
US	09/527,537	3/16/2000	6,454,512	9/24/2002	390P011104-US(PAR)
US	60/122,673	3/3/1999			390P011107-US(-#1)
US	60/142,000	7/1/1999			390P011107-US(-#2)
US	09/517,377	3/2/2000	6,520,726	2/18/2003	390P011107-US(D01)
US	60/179,784	2/2/2000			390P011109-US(-#1)
US	60/262,884	1/19/2001			390P011109-US(-#2)
US	60/349,441	1/18/2002			390P011109-US(-#3)
US	60/138,714	6/11/1999			390P011111-US(-#1)
US	60/216,194	7/6/2000			390P011118-US(-#1)
US	09/900,526	7/6/2001	6,562,094	5/13/2003	390P011118-US(PAR)
US	60/227,408	8/23/2000			390P011119-US(-#1)
US	60/199,453	4/25/2000			390P011120-US(-#1)
US	60/378,983	5/9/2002			390P011126-US(-#1)
US	60/129,820	4/16/1999			390P011131-US(-#1)
US	09/549,268	4/14/2000	6,944,584	9/13/2005	390P011131-US(PAR)
US	60/379,097	5/5/2002			390P011144-US(-#1)
US	60/379,095	5/9/2002			390P011145-US(-#1)
US	60/379,063	5/9/2002			390P011146-US(-#1)
US	60/417,993	10/11/2002			390P011150-US(-#1)
US	60/435,552	12/20/2002			390P011178-US(-#1)
US	60/435,556	12/20/2002			390P011179-US(-#1)
US	60/282,021	4/6/2001			390P011239-US(-#1)
US	60/283,513	4/11/2001			390P011243-US(-#1)
US	60/283,521	4/11/2001			390P011244-US(-#1)
US	60/284,396	4/17/2001			390P011298-US(-#1)
US	60/515,235	10/28/2003			390P011560-US(-#1)
US	10/975,824	10/28/2004			390P011560-US(PAR)
US	10/179,916	6/24/2002			390P011593-US(C01)
US	60/688,636	6/8/2005			390P011660-US(-#1)
US	11/917,117	12/10/2007			390P011660-US(PCT)
US	60/698,521	7/11/2005			390P011804-US(-#1)
US	60/578,571	6/9/2004			390P011831-US(-#1)
US	60/579,862	6/15/2004			390P011838-US(-#1)
US	60/603,361	8/19/2004			390P011935-US(-#1)
US	11/211,236	8/24/2005			390P011936-US(PAR)
US	11/210,918	8/23/2005	7,806,643	10/5/2010	390P011937-US(PAR)
US	61/281,188	11/13/2009			390P012193-US(-#1)
US	60/698,223	7/11/2005			390P012196-US(-#1)
US	60/693,564	6/24/2005			390P012297-US(-#1)
US	60/698,536	7/11/2005			390P012319-US(-#1)
US	60/698,222	7/11/2005			390P012320-US(-#1)
US	60/733,813	11/7/2005			390P012404-US(-#1)
US	60/794,047	4/20/2006			390P012404-US(-#2)
US	60/799,908	5/11/2006			390P012404-US(-#3)
US	60/838,906	8/18/2006			390P012404-US(-#4)
US	11/556,535	11/3/2006			390P012404-US(C02)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	12/886,301	9/20/2010			390P012404-US(C03)
US	11/787,981	4/18/2007			390P012404-US(I01)
US	11/556,584	11/3/2006			390P012404-US(PAR)
US	60/946,542	6/27/2007			390P012408-US(-#1)
US	60/946,547	6/27/2007			390P012430-US(-#1)
US	60/841,399	8/31/2006			390P012654-US(-#1)
US	60/825,704	9/14/2006			390P012667-US(-#1)
US	60/916,781	5/8/2007			390P012752-US(-#1)
US	60/930,634	5/17/2007			390P012904-US(-#1)
US	60/916,912	5/9/2007			390P012904-US(-#2)
US	61/024,152	1/28/2008			390P012904-US(-#3)
US	61/043,097	4/7/2008			390P012904-US(-#4)
US	60/938,922	5/18/2007			390P012907-US(-#1)
US	60/946,686	6/27/2007			390P012911-US(-#1)
US	60/946,693	6/27/2007			390P012912-US(-#1)
US	60/946,687	6/27/2007			390P012913-US(-#1)
US	60/938,913	5/18/2007			390P012914-US(-#1)
US	60/950,331	7/17/2007			390P013018-US(-#1)
US	61/507,276	7/13/2011			390P014101-US(-#1)
US	61/510,819	7/22/2011			390P014101-US(-#2)
US	61/391,380	10/8/2010			390P014102-US(-#1)
US	61/490,864	5/27/2011			390P014102-US(-#2)
US	61/308,449	2/26/2010			390P014145-US(-#1)
US	60/913,257	4/20/2007			390P014151-US(-#1)
US	60/975,350	9/7/2007			390P014151-US(-#2)
US	60/779,478	3/5/2006			390P014151-US(-#3)
US	60/779,463	3/5/2006			390P014151-US(-#4)
US	60/779,609	3/5/2006			390P014151-US(-#5)
US	60/746,163	5/1/2006			390P014151-US(-#6)
US	60/807,189	7/12/2006			390P014151-US(-#7)
US	12/030,707	2/13/2008			390P014151-US(CI1)
US	12/030,736	2/13/2008			390P014151-US(CI2)
US	12/030,897	2/14/2008			390P014151-US(CI3)
US	12/025,582	2/4/2008			390P014151-US(CI8)
US	12/030,922	2/14/2008			390P014151-US(CI9)
US	12/032,341	2/15/2008			390P014151-US(CIA)
US	12/032,405	2/15/2008			390P014151-US(CIB)
US	12/032,436	2/15/2008			390P014151-US(CIC)
US	12/032,463	2/15/2008			390P014151-US(CID)
US	12/032,489	2/15/2008			390P014151-US(CIE)
US	12/032,567	2/15/2008			390P014151-US(CIF)
US	11/876,854	10/23/2007			390P014151-US(CIH)
US	11/876,860	10/23/2007			390P014151-US(CII)
US	11/876,865	10/23/2007			390P014151-US(CIJ)
US	11/876,886	10/23/2007			390P014151-US(CIM)
US	11/876,887	10/23/2007			390P014151-US(CIN)
US	11/876,904	10/23/2007			390P014151-US(CIP)
US	11/876,910	10/23/2007			390P014151-US(CIQ)
US	11/876,991	10/23/2007			390P014151-US(CIR)
US	11/877,006	10/23/2007			390P014151-US(CIS)
US	11/877,035	10/23/2007			390P014151-US(CIT)
US	11/679,829	2/27/2007			390P014151-US(I01)
US	11/682,306	3/5/2007	7,792,350	9/7/2010	390P014151-US(I02)
US	11/681,978	3/5/2007			390P014151-US(I05)
US	11/681,809	3/5/2007			390P014151-US(I06)
US	11/743,105	5/1/2007			390P014151-US(I07)
US	11/876,979	10/23/2007			390P014151-US(I10)
US	10/985,844	11/10/2004			390P014152-US(PAR)
US	10/985,730	11/10/2010			390P014153-US(PAR)
US	14/611,697	2/2/2015			390P014155-US(C03)
US	10/985,843	11/10/2004			390P014157-US(PAR)
US	10/985,846	11/10/2004			390P014158-US(PAR)
US	60/518,823	11/10/2003			390P014159-US(-#1)
US	60/607,649	9/7/2004			390P014159-US(-#2)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	60/912,137	4/16/2007			390P014168-US(-#1)
US	12/104,193	4/16/2008			390P014168-US(PAR)
US	60/940,811	5/30/2007			390P014169-US(-#1)
US	61/049,440	5/1/2008			390P014169-US(-#2)
US	61/057,170	5/29/2008			390P014169-US(-#3)
US	60/952,502	7/27/2007			390P014170-US(-#1)
US	60/957,112	8/21/2007			390P014170-US(-#2)
US	12/180,568	7/28/2008			390P014170-US(PAR)
US	60/957,406	8/22/2007			390P014171-US(-#1)
US	60/957,144	8/21/2007			390P014172-US(-#1)
US	60/956,834	8/20/2007			390P014173-US(-#1)
US	61/113,896	11/12/2008			390P014174-US(-#1)
US	61/114,345	11/13/2008			390P014175-US(-#1)
US	11/877,153	10/23/2007			390P014180-US(CI2)
US	11/877,170	10/23/2007			390P014180-US(CI3)
US	11/877,279	10/23/2007			390P014180-US(CIA)
US	11/877,264	10/23/2007			390P014180-US(I03)
US	11/877,294	10/23/2007			390P014180-US(I04)
US	61/530,651	9/2/2011			390P014203-US(-#1)
US	61/597,507	2/10/2012			390P014428-US(-#1)
US	61/660,900	6/18/2012			390P014428-US(-#2)
US	61/662,690	6/21/2012			390P014428-US(-#3)
US	61/426,138	12/22/2010			390P014520-US(-#1)
US	12/032,405	2/15/2008			390P014524-US(C02)
US	12/032,436	2/15/2008			390P014524-US(C05)
US	12/032,463	2/15/2008			390P014524-US(C06)
US	61/451,912	3/11/2011			390P014526-US(-#1)
US	61/412,218	11/10/2010			390P014561-US(-#1)
US	61/932,538	1/28/2014			390P014648-US(-#1)
US	61/903,792	11/13/2013			390P014680-US(-#1)
US	61/534,681	9/14/2011			390P014702-US(-#1)
US	61/555,826	11/4/2011			390P014726-US(-#1)
US	61/551,779	10/26/2011			390P014750-US(-#1)
US	16/364,034	3/25/2019			390P014750-US(C02)
US	61/576,450	12/16/2011			390P014751-US(-#1)
US	61/566,443	12/2/2011			390P014781-US(-#1)
US	61/259,928	11/10/2009			390P014789-US(-#1)
US	61/432,534	1/13/2011			390P014794-US(-#1)
US	61/586,420	1/13/2012			390P014794-US(-#2)
US	61/491,856	5/31/2011			390P014804-US(-#1)
US	61/492,767	6/2/2011			390P014805-US(-#1)
US	61/492,763	6/2/2011			390P014806-US(-#1)
US	61/755,156	1/22/2013			390P014865-US(-#1)
US	61/903,745	11/13/2013			390P014905-US(-#1)
US	61/843,685	7/8/2013			390P014906-US(-#1)
US	61/869,870	8/26/2013			390P014912-US(-#1)
US	61/903,726	11/13/2013			390P014929-US(-#1)
US	61/903,813	11/13/2013			390P014939-US(-#1)
US	61/917,056	12/17/2013			390P014951-US(-#1)
US	61/928,681	1/17/2014			390P014988-US(-#1)
US	61/892,849	10/18/2013			390P014991-US(-#1)
US	61/904,908	11/15/2013			390P014991-US(-#2)
US	62/077,775	11/10/2014			390P015016-US(-#1)
US	62/078,345	11/11/2014			390P015016-US(-#2)
US	62/191,829	7/13/2015			390P015016-US(-#3)
US	62/247,647	10/28/2015			390P015016-US(-#4)
US	62/075,014	11/4/2014			390P015178-US(-#1)
US	62/191,863	7/13/2015			390P015253-US(-#1)
US	62/320,142	4/8/2016			390P015253-US(-#2)
US	62/191,836	7/13/2015			390P015255-US(-#1)
US	62/361,325	7/12/2016			390P015313-US(-#1)
US	62/385,150	9/8/2016			390P015426-US(-#1)
US	62/455,874	2/7/2017			390P015469-US(-#1)
US	62/568,541	10/5/2017			390P015475-US(-#1)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	62/450,818	1/26/2017			390P015477-US(-#1)
US	62/502,292	5/5/2017			390P015503-US(-#1)
US	62/531,218	7/11/2017			390P015542-US(-#1)
US	62/623,843	1/30/2018			390P015606-US(-#1)
US	62/644,053	3/16/2018			390P015620-US(-#1)
US	62/880,521	7/30/2019			390P015656-US(-#1)
US	62/678,963	5/31/2018			390P015661-US(-#1)
US	62/742,000	10/5/2018			390P015706-US(-#1)
US	62/754,465	11/1/2018			390P015716-US(-#1)
US	62/772,376	11/28/2018			390P015730-US(-#1)
US	62/772,481	11/28/2018			390P015731-US(-#1)
US	62/964,817	1/23/2020			390P015773-US(-#1)
US	62/861,543	6/14/2019			390P015777-US(-#1)
US	62/979,195	2/20/2020			390P015793-US(-#1)
US	62/942,530	12/2/2019			390P015826-US(-#1)
US	62/942,544	12/2/2019			390P015826-US(-#2)
US	63/081,186	9/21/2020			390P015826-US(-#3)
US	62/970,565	2/5/2020			390P015874-US(-#1)
US	63/046,289	6/30/2020			390P015885-US(-#1)
US	63/046,555	6/30/2020			390P015906-US(-#1)
US	90008245	9/29/2006			ASTGP021.RE
US	9083834	5/22/1998	5,931,631	8/3/1999	ASTGP054
US	9049461	3/27/1998	5,988,233	11/23/1999	ASTGP058
US	9204320	12/2/1998	6,056,026	5/2/2000	ASTGP059
US	9050321	3/30/1998	6,077,026	6/20/2000	ASTGP060
US	9343110	6/29/1999	6,086,323	7/11/2000	ASTGP062
US	9176476	10/21/1998	6,120,371	9/19/2000	ASTGP063
US	9346166	7/1/1999	6,135,698	10/24/2000	ASTGP064
US	60131758	4/30/1999			ASTGP064C
US	9145704	9/2/1998	6,138,721	10/31/2000	ASTGP065
US	9049330	3/27/1998	6,164,664	12/26/2000	ASTGP066
US	9461151	12/14/1999	6,168,085	1/2/2001	ASTGP067
US	9127278	7/31/1998	6,187,182	2/13/2001	ASTGP068
US	9115526	7/13/1998	6,220,808	4/24/2001	ASTGP070
US	9130254	8/6/1998	6,261,044	7/17/2001	ASTGP074
US	9162334	9/28/1998	6,298,280	10/2/2001	ASTGP075
US	9351986	7/12/1999	6,318,953	11/20/2001	ASTGP077
US	9547551	4/12/2000	6,326,755	12/4/2001	ASTGP078
US	9247695	2/10/1999	6,364,595	4/2/2002	ASTGP079
US	9114711	7/13/1998	6,430,877	8/13/2002	ASTGP081
US	9873691	6/4/2001	6,473,668	10/29/2002	ASTGP085
US	9039808	3/16/1998			ASTGP085C
US	9452059	11/30/1999	6,478,532	11/12/2002	ASTGP086
US	9115414	7/14/1998			ASTGP089
US	9115414	7/14/1998	6,502,869	1/7/2003	ASTGP089C
US	9547829	4/12/2000	6,520,727	2/18/2003	ASTGP090
US	9905339	7/13/2001	6,530,736	3/11/2003	ASTGP091
US	9729737	12/4/2000	6,575,687	6/10/2003	ASTGP093
US	9729463	12/4/2000	6,591,160	7/8/2003	ASTGP094
US	9641032	8/16/2000	6,591,162	7/8/2003	ASTGP096
US	9943555	8/30/2001	6,591,960	7/15/2003	ASTGP097
US	9593245	6/13/2000	6,592,317	7/15/2003	ASTGP098
US	9905490	7/13/2001	6,592,679	7/15/2003	ASTGP099
US	9313945	5/18/1999	6,612,797	9/2/2003	ASTGP100
US	9483625	1/14/2000	6,634,851	10/21/2003	ASTGP101
US	9507556	2/18/2000	6,709,225	3/23/2004	ASTGP103
US	10444327	5/22/2003	6,729,462	5/4/2004	ASTGP106
US	60380993	5/16/2002			ASTGP109+
US	60486330	7/11/2003			ASTGP110+
US	60316722	8/31/2001			ASTGP112+
US	10719069	11/21/2003			ASTGP117
US	10618313	7/10/2003			ASTGP120
US	60697785	7/8/2005			ASTGP131+
US	11352154	2/10/2006			ASTGP138

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
US	11449084	6/8/2006	7,515,049	4/7/2009	ASTGP140
US	60819602	7/10/2006			ASTGP143+
US	11774750	7/9/2007	7,597,523	10/6/2009	ASTGP143A
US	11774760	7/9/2007			ASTGP143B
US	11599020	11/13/2006			ASTGP145
US	11774928	7/9/2007			ASTGP147
US	60819603	7/10/2006			ASTGP147+
US	10056158	1/24/2002			ASTGP149
US	60264557	1/26/2001			ASTGP149+
US	10056158	1/24/2002			ASTGP149C
US	60906972	3/14/2007			ASTGP153+
US	60945847	6/22/2007			ASTGP154+
US	12184194	7/31/2008			ASTGP155
US	60969570	8/31/2007			ASTGP157+
US	12244693	10/2/2008			ASTGP159
US	60977357	10/3/2007			ASTGP159+
US	12253212	10/16/2008			ASTGP160
US	13436304	3/30/2012			ASTGP160.C1
US	60980763	10/17/2007			ASTGP160+
US	60983110	10/26/2007			ASTGP161+
US	12348276	1/2/2009			ASTGP163
US	61018782	1/3/2008			ASTGP163+
US	61042694	4/4/2008			ASTGP175+
US	61098432	9/19/2008			ASTGP183+
US	61332802	5/9/2010			ASTGP187.CIP+
US	61216570	5/18/2009			ASTGP187+
US	9173710	10/15/1998	6,188,323	2/13/2001	C.ASTGP069
US	9723629	11/28/2000	6,419,438	7/16/2002	C.ASTGP080
US	9461498	12/14/1999	6,468,021	10/22/2002	C.ASTGP083
US	11483366	7/7/2006			C.ASTGP133
US	60697528	7/8/2005			C.ASTGP133+
US	12432359	4/29/2009			C.ASTGP179
US	61049387	4/30/2008			C.ASTGP179+
US	10927703	8/27/2004			C.ASTGP189
US	11929230	10/30/2007		8/2/2010	C.ASTGP189.DIV1
US	12776235	5/7/2010			C.ASTGP189.DIV1.C
US	14445020	7/28/2014			C.ASTGP189.DIV1.C2
US	61481062	4/29/2011			C.ASTGP192+
US	61488120	5/19/2011			C.ASTGP193+
US	61483642	5/7/2011			C.ASTGP194+
TW	87100329	1/7/1998			390-006574-TW(EQV)
TW	87106504	4/28/1998	115300	9/21/2000	390-007091-TW(EQV)
TW	87114605	9/3/1998	114467	8/30/2000	390-007092-TW(EQV)
TW	87109006	6/6/1998	135545	10/26/2001	390-007134-TW(EQV)
TW	89124320	11/17/2000	185095	1/7/2004	390-007173-TW(EQV)
TW	88102703	2/24/1999			390-007174-TW(EQV)
TW	87110056	6/23/1998	108376	3/4/2000	390-007216-TW(EQV)
TW	87109372	6/12/1998	132187	9/7/2001	390-007299-TW(EQV)
TW	89109885	5/23/2000	139202	12/17/2002	390-008087-TW(EQV)
TW	88114455	8/24/1999	137516	11/21/2001	390-008105-TW(EQV)
TW	89109884	5/23/2000	155528	9/5/2002	390-008444-TW(EQV)
TW	89109058	5/12/2000	167870	4/10/2003	390-008447-TW(EQV)
TW	87112737	8/3/1998	104,033	10/20/1999	390-009020-TW(EQV)
TW	87112793	8/4/1998	110334		390-009024-TW(EQV)
TW	87113617	8/19/1998	118,776	12/15/2000	390-009025-TW(EQV)
TW	87113710	8/20/1998	128,547	3/21/2001	390-009026-TW(EQV)
TW	92114532	5/29/2003			390-009059-TW(EQV)
TW	90107280	3/28/2001	170317	5/21/2003	390-009236-TW(EQV)
TW	90113122	5/31/2001	235941	7/11/2005	390-009305-TW(EQV)
TW	90113121	5/31/2001	170872	5/26/2003	390-009471-TW(EQV)
TW	88100957	1/22/1999	112633	3/21/2000	390-009897-TW(EQV)
TW	91114474	7/1/2002	182495	11/20/2003	390-009906-TW(EQV)
TW	91112584	6/11/2002	182488	11/20/2003	390-009909-TW(EQV)
TW	91114473	7/1/2002	NI-195202	5/14/2004	390-010262-TW(EQV)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
TW	089108697	5/10/2000	167869	11/11/2002	390-010641-TW(EQV)
TW	89123814	11/10/2000	NI-152858	7/18/2002	390-011108-TW(EQV)
TW	92127916	10/8/2003			390-011137-TW(EQV)
TW	92120590	7/29/2003			390-011420-TW(EQV)
TW	92120591	7/29/2003			390-011422-TW(EQV)
TW	92124274	9/3/2003			390-011423-TW(EQV)
TW	089102830	3/9/2000	NI-164698	3/3/2003	390-014231-TW(EQV)
TW	97143616	11/12/2008			390-014792-TW(EQV)
TW	87105604	4/14/1998	116904	11/2/2000	390P007203-TW(EQV)
TW	87111420	7/14/1998	133630	10/4/2001	390P007410-TW(EQV)
TW	87118241	11/3/1998	128932	7/13/2001	390P007675-TW(EQV)
TW	87120743	3/6/1999	137880	11/27/2001	390P009022-TW(EQV)
TW	91115657	7/15/2002	230115	4/1/2005	390P009911-TW(EQV)
TW	089102830	3/9/2000	505610	3/3/2003	390P011103-TW(EQV)
TW	89104981	3/21/2000			390P011104-TW(EQV)
TW	89103810	3/20/2000	NI-146071	4/1/2002	390P011107-TW(EQV)
TW	90116608	7/6/2001	NI-173055	7/2/2003	390P011118-TW(EQV)
TW	92136069	12/19/2003			390P011178-TW(EQV)
TW	93132672	10/28/2004			390P011560-TW(EQV)
TW	96130278	8/16/2007			390P012404-TW(I03)
TW	108106846	5/8/2008			390P012752-TW(D04)
TW	97116939	5/8/2008			390P012752-TW(EQV)
TW	88121035	2/9/2000	NI-138393	12/4/2001	ASTGP059.TW
TW	89108147	7/24/2000	NI-146272	4/2/2002	ASTGP064.TW
TW	88113040	10/15/1999	135741	10/27/2001	ASTGP068.TW
TW	88111892	8/13/1999	NI-131590	8/30/2001	ASTGP070.TW
TW	89113727	1/9/2001	NI-149407	5/17/2002	ASTGP077.TW
TW	90108683	4/11/2001	NI-166225	3/18/2003	ASTGP078.TW
TW	88104061	5/13/1999	NI-128569	7/6/2001	ASTGP085.TW
TW	89125350	11/22/2000	NI-152242	7/9/2002	ASTGP086.TW
TW	88111853	8/13/1999	NI-133053	9/24/2001	ASTGP089.TW
TW	90108682	4/11/2001	NI-202322	9/24/2001	ASTGP090.TW
TW	89125737	2/13/2001	NI-184023	12/18/2003	ASTGP093.TW
TW	90129815	12/3/2001	NI-165433	3/5/2003	ASTGP094.TW
TW	90119938	8/14/2001	NI-182818	11/27/2003	ASTGP096.TW
TW	90121593	8/31/2001	NI-168423	4/16/2003	ASTGP097.TW
TW	89109452	11/9/2000	NI-181712	11/11/2003	ASTGP100.TW
TW	89100615	3/27/2000	NI-153790	8/6/2002	ASTGP101.TW
TW	96125007	7/10/2007			ASTGP143A.TW
TW	96125008	7/10/2007			ASTGP143B.TW
TW	96125012	7/10/2007			ASTGP143C.TW
TW	96125017	7/10/2007			ASTGP147.TW
TW	97138151				ASTGP159.TW
TW	97139856				ASTGP160.TW
TW	88117810	12/16/1999	NI-135748	10/27/2001	C.ASTGP069.TW
TW	88122312	12/17/1999	NI-137763	11/23/2001	C.ASTGP083.TW
TW	93126013	8/30/2004			C.ASTGP189.TW
SG	9803279-0	8/24/1998	67544	3/20/2001	390-009020-SG(EQV)
SG	9803278-2	8/24/1998	0071146	8/22/2000	390-009024-SG(EQV)
SG	98 03282-4	8/24/1998	0070115	8/22/2000	390-009025-SG(EQV)
SG	9803764-1	9/19/1998	068689	8/22/2000	390-009026-SG(EQV)
SG	9900565-4	2/12/1999	68,710	5/22/2001	390-009897-SG(EQV)
SG	200103146-7	12/2/1999	81116	5/31/2004	390-012835-SG(EQV)
SG	201101424-8	2/27/2007			390P014151-SG(DI1)
SG	200806290-3	2/27/2007			390P014151-SG(I01)
SG	200808029-3	5/1/2007			390P014151-SG(I07)
SG	200703351-7	11/10/2004			390P014159-SG(D01)
SG	200603119-9	11/10/2004			390P014159-SG(PCT)
SG	200806745-6	3/5/2007			390P014524-SG(I02)
PCT	US98/08220	4/24/1998			390-007091-WO(EQV)
PCT	US98/17961	8/28/1998			390-007092-WO(EQV)
PCT	US99/27743	11/23/1999			390-007093-WO(EQV)
PCT	US98/11188	6/2/1998			390-007134-WO(EQV)
PCT	US00/41922	11/6/2000			390-007173-WO(EQV)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
PCT	US99/03331	2/17/1999			390-007174-WO(EQV)
PCT	US98/10879	5/28/1998			390-007216-WO(EQV)
PCT	US98/10244	5/19/1998			390-007217-WO(EQV)
PCT	US98/11756	6/8/1998			390-007299-WO(EQV)
PCT	US00/00031	1/3/2000			390-007628-WO(EQV)
PCT	US00/04252	2/18/2000			390-007629-WO(EQV)
PCT	US99/07526	4/6/1999			390-007802-WO(EQV)
PCT	US00/41460	10/23/2000			390-007941-WO(EQV)
PCT	US00/13362	5/15/2000			390-008087-WO(EQV)
PCT	US00/29991	10/31/2000			390-008103-WO(EQV)
PCT	US99/19097	8/18/1999			390-008105-WO(EQV)
PCT	US00/13014	5/12/2000			390-008444-WO(EQV)
PCT	US00/16289	6/14/2000			390-008445-WO(EQV)
PCT	US00/40209	6/15/2000			390-008446-WO(EQV)
PCT	US00/12184	5/5/2000			390-008447-WO(EQV)
PCT	US00/16288	6/14/2000			390-008584-WO(EQV)
PCT	US02/37709	11/26/2002			390-008762-WO(EQV)
PCT	US00/08088	3/28/2000			390-009031-WO(EQV)
PCT	US03/16761	5/28/2003			390-009059-WO(EQV)
PCT	US01/14285	5/3/2001			390-009305-WO(EQV)
PCT	US01/15193	5/10/2001			390-009396-WO(EQV)
PCT	US01/23157	7/23/2001			390-009409-WO(EQV)
PCT	US01/14177	5/3/2001			390-009471-WO(EQV)
PCT	US02/20594	6/26/2002			390-009906-WO(EQV)
PCT	US02/16433	5/23/2002			390-009909-WO(EQV)
PCT	US02/20595	6/26/2002			390-010262-WO(EQV)
PCT	US03/05191	2/21/2003			390-010535-WO(EQV)
PCT	US03/31577	10/7/2003			390-010536-WO(EQV)
PCT	US06/011461	3/29/2006			390-010546-WO(EQV)
PCT	EP00/03324	4/13/2000			390-010641-WO(EQV)
PCT	US03/022880	7/22/2003			390-011009-WO(I01)
PCT	US00/28845	10/29/2000			390-011108-WO(EQV)
PCT	US99/15484	7/9/1999			390-011110-WO(EQV)
PCT	US02/04348	2/14/2002			390-011115-WO(EQV)
PCT	US02/01765	1/22/2002			390-011121-WO(EQV)
PCT	US02/04159	2/13/2002			390-011122-WO(EQV)
PCT	US03/28391	9/10/2003			390-011137-WO(EQV)
PCT	US03/31865	10/8/2003			390-011137-WO(I01)
PCT	US04/05035	2/20/2004			390-011218-WO(EQV)
PCT	US04/00481	1/9/2004			390-011307-WO(EQV)
PCT	US04/25800	8/10/2004			390-011338-WO(EQV)
PCT	US02/33853	10/23/2002			390-011345-WO(I01)
PCT	US03/23445	7/29/2003			390-011420-WO(EQV)
PCT	US03/23598	7/28/2003			390-011422-WO(EQV)
PCT	US03/27100	8/28/2003			390-011423-WO(EQV)
PCT	US06/011400	3/29/2006			390-011458-WO(EQV)
PCT	06/26747	7/6/2006			390-011458-WO(I01)
PCT	US04/040055	12/1/2004			390-011542-WO(EQV)
PCT	US03/32200	10/9/2003			390-011543-WO(EQV)
PCT	07/021792	10/12/2007			390-011543-WO(I01)
PCT	PCT2006/US26543	7/10/2006			390-011657-WO(EQV)
PCT	US06/26730	7/7/2006			390-011658-WO(EQV)
PCT	US08/004470	4/7/2008			390-011802-WO(EQV)
PCT	US08/068167	6/25/2008			390-012197-WO(EQV)
PCT	06/26584	7/10/2006			390-012202-WO(EQV)
PCT	US07/12582	5/24/2007			390-012406-WO(EQV)
PCT	US08/05438	4/28/2008			390-012619-WO(EQV)
PCT	US08/68160	6/25/2008			390-012750-WO(EQV)
PCT	US99/28737	12/2/1999			390-012835-WO(EQV)
PCT	06/061960	3/21/2006			390-014162-WO(EQV)
PCT	US98/06351	4/1/1998			390P007203-WO(EQV)
PCT	US98/14308	7/10/1998			390P007410-WO(EQV)
PCT	US98/22240	10/21/1998			390P007675-WO(EQV)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
PCT	IB98/02147	12/10/1998			390P009022-WO(EQV)
PCT	US02/22478	7/15/2002			390P009911-WO(EQV)
PCT	US02/22476	7/15/2002			390P009913-WO(EQV)
PCT	US02/22594	7/15/2002			390P010465-WO(EQV)
PCT	US02/04907	2/14/2002			390P010777-WO(EQV)
PCT	US2008/005881	5/8/2008			390P010855-WO(EQV)
PCT	US03/22881	7/22/2003			390P011010-WO(EQV)
PCT	US05/36650	10/11/2005			390P011010-WO(I01)
PCT	US09/067309	12/9/2009			390P011010-WO(I02)
PCT	US99/04307	2/26/1999			390P011096-WO(EQV)
PCT	US99/00415	1/7/1999			390P011100-WO(EQV)
PCT	US99/23882	10/14/1999			390P011101-WO(EQV)
PCT	US00/04132	2/17/2000			390P011102-WO(EQV)
PCT	US00/04266	2/18/2000			390P011103-WO(EQV)
PCT	US00/06896	3/16/2000			390P011104-WO(EQV)
PCT	US00/18381	6/30/2000			390P011105-WO(EQV)
PCT	US00/05533	3/2/2000			390P011106-WO(EQV)
PCT	US00/05425	3/2/2000			390P011107-WO(EQV)
PCT	US00/16027	6/12/2000			390P011111-WO(EQV)
PCT	US01/21376	7/6/2001			390P011118-WO(EQV)
PCT	US01/41851	8/23/2001			390P011119-WO(EQV)
PCT	US01/13349	4/25/2001			390P011120-WO(EQV)
PCT	US03/08528	3/20/2003			390P011148-WO(EQV)
PCT	US03/40410	12/18/2003			390P011178-WO(EQV)
PCT	US03/10705	4/8/2003			390P011298-WO(EQV)
PCT	US00/01093	1/14/2000			390P011589-WO(EQV)
PCT	US99/24172	10/15/1999			390P011593-WO(EQV)
PCT	US06/21749	6/5/2006			390P011660-WO(EQV)
PCT	PCT/2006/026974	7/11/2006			390P011804-WO(EQV)
PCT	US05/20304	6/9/2005			390P011831-WO(EQV)
PCT	US05/29757	8/19/2005			390P011935-WO(EQV)
PCT	US05/30617	8/24/2005			390P011936-WO(EQV)
PCT	US05/29840	8/23/2005			390P011937-WO(EQV)
PCT	PCT/US10/61407	12/21/2010			390P012193-WO(EQV)
PCT	US06/26975	7/11/2006			390P012196-WO(EQV)
PCT	06/26973	7/11/2006			390P012319-WO(EQV)
PCT	US06/043462	11/7/2006			390P012404-WO(EQV)
PCT	US07/011443	5/11/2007			390P012404-WO(I02)
PCT	US2007/017924	8/13/2007			390P012404-WO(I03)
PCT	US2008/068661	6/27/2008			390P012408-WO(EQV)
PCT	US07/19951	9/14/2007			390P012667-WO(EQV)
PCT	US2008/005884	5/8/2008			390P012752-WO(EQV)
PCT	US2008/064163	5/19/2008			390P012904-WO(EQV)
PCT	US2008/064166	5/19/2008			390P012907-WO(EQV)
PCT	US2008/068680	6/27/2008			390P012911-WO(EQV)
PCT	US08/068682	6/27/2008			390P012912-WO(EQV)
PCT	US2008/068684	6/28/2008			390P012913-WO(EQV)
PCT	US2008/064144	5/19/2008			390P012914-WO(EQV)
PCT	US08/070346	7/17/2008			390P013018-WO(EQV)
PCT	PCT/US12/046587	7/13/2012			390P014101-WO(EQV)
PCT	PCT/US2011/055825	10/11/2011			390P014102-WO(EQV)
PCT	US07/062921	2/27/2007			390P014151-WO(I01)
PCT	US2007/063345	3/5/2007			390P014151-WO(I02)
PCT	07/063333	3/5/2007			390P014151-WO(I03)
PCT	US07/067965	5/1/2007			390P014151-WO(I07)
PCT	04/037672	11/10/2004			390P014159-WO(EQV)
PCT	US09/42549	5/1/2009			390P014169-WO(I01)
PCT	US08/65442	5/30/2008			390P014169-WO(EQV)
PCT	US08/73726	8/20/2008			390P014171-WO(EQV)
PCT	PCT/US2012/52977	8/30/2012			390P014203-WO(EQV)
PCT	PCT/US2013/025513	2/11/2013			390P014428-WO(EQV)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
PCT	PCT/US12/28790	3/12/2012			390P014526-WO(EQV)
PCT	US2011/060174	11/10/2011			390P014561-WO(EQV)
PCT	PCT/US2015/013280	1/28/2015			390P014648-WO(EQV)
PCT	PCT/US2014/065432	11/13/2014			390P014680-WO(EQV)
PCT	PCT/US2012/055374	9/14/2012			390P014702-WO(EQV)
PCT	PCT/IB2012/002688	10/26/2012			390P014750-WO(EQV)
PCT	PCT/US2012/070095	12/17/2012			390P014751-WO(EQV)
PCT	PCT/US14/12517	1/22/2014			390P014865-WO(EQV)
PCT	PCT/US2014/065422	11/13/2014			390P014905-WO(EQV)
PCT	PCT/US2014/045725	7/8/2014			390P014906-WO(EQV)
PCT	PCT/US2014/052739	8/26/2014			390P014912-WO(EQV)
PCT	PCT/US2014/065392	11/13/2014			390P014929-WO(EQV)
PCT	PCT/US2014/065414	11/13/2014			390P014939-WO(EQV)
PCT	PCT/US2014/70349	12/15/2014			390P014951-WO(EQV)
PCT	PCT/US15/011764	1/16/2015			390P014988-WO(EQV)
PCT	PCT/US2014/60893	10/16/2014			390P014991-WO(EQV)
PCT	PCT/US2015/060016	11/10/2015			390P015016-WO(EQV)
PCT	PCT/US2015/058556	11/2/2015			390P015178-WO(EQV)
PCT	PCT/US2016/042142	7/13/2016			390P015253-WO(EQV)
PCT	PCT/US2016/041683	7/11/2016			390P015255-WO(EQV)
PCT	PCT/US2017/041177	7/7/2017			390P015313-WO(EQV)
PCT	PCT/US2017/050085	9/5/2017			390P015426-WO(EQV)
PCT	PCT/US2018/017272	2/7/2018			390P015469-WO(EQV)
PCT	PCT/US2018/054525	10/5/2018			390P015475-WO(EQV)
PCT	PCT/US2018/015512	1/26/2018			390P015477-WO(EQV)
PCT	PCT/US2018/031422	5/7/2018			390P015503-WO(EQV)
PCT	PCT/US2018/041327	7/9/2018			390P015542-WO(EQV)
PCT	PCT/US2019/015553	1/29/2019			390P015606-WO(EQV)
PCT	PCT/US2019/054780	10/4/2019			390P015706-WO(EQV)
PCT	PCT/US2019/059001	10/31/2019			390P015716-WO(EQV)
PCT	PCT/US90/05315				ASTGP021.P
PCT	PCT/US90/07366				ASTGP022.P
PCT	PCT/US00/11067	4/25/2000			ASTGP064.P
PCT	PCT/US99/16649	7/22/1999			ASTGP068.P
PCT	PCT/US99/21619	10/13/1999			ASTGP069.P
PCT	PCT/US99/17698	8/5/1999			ASTGP074.P
PCT	PCT/US00/18784	7/10/2000			ASTGP077.P
PCT	PCT/US00/02655	2/2/2000			ASTGP079.P
PCT	PCT/US01/43760	11/16/2001			ASTGP080.P

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
PCT	PCT/US99/29796				ASTGP083.P
PCT	PCT/US00/32170	11/22/2000			ASTGP086.P
PCT	PCT/US99/15726	7/12/1999			ASTGP089.P
PCT	PCT/US01/11823	4/10/2001			ASTGP090.P
PCT	PCT/US02/21968	7/10/2002			ASTGP091.P
PCT	PCT/US00/32944				ASTGP093.P
PCT	PCT/US01/44393	11/28/2001			ASTGP094.P
PCT	PCT/US01/25344	8/14/2001			ASTGP096.P
PCT	PCT/US01/27090	8/29/2001			ASTGP097.P
PCT	PCT/US02/21828	7/10/2002			ASTGP099.P
PCT	PCT/US00/13083	5/11/2000			ASTGP100.P
PCT	PCT/US03/15588				ASTGP109.P
PCT	PCT/US02/27909				ASTGP111.P
PCT	PCT/US02/30297				ASTGP112.P
PCT	PCT/US02/27769	8/30/2002			ASTGP116.P
PCT	PCT/US02/27979	9/3/2002			ASTGP118.P
PCT	PCT/US02/22097	7/11/2002			ASTGP119.P
PCT	PCT/US05/45923	12/15/2005			ASTGP128.P
PCT	PCT/US06/26281	7/7/2006			ASTGP133.P
PCT	PCT/US06/22263	6/8/2006			ASTGP140.P
PCT	PCT/US2007/073085	7/9/2007			ASTGP143A.P
PCT	PCT/US07/073086	7/9/2007			ASTGP143B.P
PCT	PCT/US2007/073088	7/9/2007			ASTGP143C.P
PCT	PCT/US2007/073091	7/9/2007			ASTGP147.P
PCT	PCT/US02/02092	1/24/2002			ASTGP149.P
PCT	PCT/US2007/024201	11/19/2007			ASTGP151.P
PCT	PCT/US08/67810	6/21/2008			ASTGP154.P
PCT	PCT/US08/78856	10/3/2008			ASTGP159.P
PCT	PCT/US08/80376	10/17/2008			ASTGP160.P
PCT	PCT/US2009/30060	1/3/2009			ASTGP163.P
PCT	PCT/US2010/035038	5/21/2010			ASTGP187.CIP.P
PCT	PCT/US10/035018	5/14/2010			ASTGP187.P
PCT	PCT/US09/42415	4/30/2009			C.ASTGP179.P
PCT	PCT/US2004/028212				C.ASTGP189.P
PCT	PCT/US11/42455	6/29/2011			C.ASTGP191.P
PCT	PCT/US12/35639	4/27/2012			C.ASTGP192.P
PCT	PCT/US12/36851	5/7/2012			C.ASTGP194.P
PCT	PCT/US13/57728	8/30/2013			C.ASTGP195.P
PCT	PCT/US2014/025447	3/13/2014			C.ASTGP196.P
PCT	PCT/US18/36669	6/8/2018			
NL	99942580.4	2/17/1999	1094921	4/11/2012	390-007174-NL(EPO)
NL	1011609	3/19/1999	1011609	2/4/2000	390-009897-NL(EQV)
NL	98965305.0	12/10/1998	1040511	3/12/2003	390P009022-NL(EPO)
NL	15801039.7				390P015016-NL(EPO)
NL	99968062.2	12/1/1999	1154929	2/1/2006	ASTGP059.NL
NL	1924933.3	4/10/2001			ASTGP090.NL
KR	98-705730	7/24/1998	499324	6/24/2005	390-005884-KR(PCT)
KR	7002634	3/26/1999			390-006478-KR(PCT)
KR	7002410	3/20/1999	1115838	2/6/2012	390-006715-KR(PCT)
KR	1999-7011597	4/24/1998	514242	9/5/2005	390-007091-KR(PCT)
KR	2000-7003413	8/28/1998	0649388	11/17/2006	390-007092-KR(PCT)
KR	10-01-7008354	11/23/1999			390-007093-KR(PCT)
KR	10-00-7010427	2/17/1999			390-007174-KR(PCT)
KR	10-00-7000322	1/11/2000	0626275	9/13/2006	390-007216-KR(PCT)
KR	10-99-7012151	12/22/1999	1017217	2/16/2011	390-007217-KR(PCT)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
KR	2000-700069	6/8/1998			390-007299-KR(PCT)
KR	10-00-7012200	4/6/1999			390-007802-KR(PCT)
KR	01-7015297	5/15/2000	0640019	10/24/2006	390-008087-KR(PCT)
KR	2001-7004014	3/29/2001	1244008	3/8/2013	390-008105-KR(PCT)
KR	10-01-7014698	5/5/2000			390-008447-KR(PCT)
KR	98-34638	8/26/1998	0263334	5/15/2000	390-009020-KR(EQV)
KR	98-34639	8/26/1998	0282046	11/23/2000	390-009024-KR(EQV)
KR	98-34640	8/26/1998	0276181	9/27/2000	390-009025-KR(EQV)
KR	98-41535	10/2/1998	0304345	7/20/2001	390-009026-KR(EQV)
KR	99-0043335	10/8/1999			390-009027-KR(EQV)
KR	99-0043334	10/8/1999			390-009028-KR(EQV)
KR	2003-7003059	7/23/2001	0806998	2/18/2008	390-009409-KR(PCT)
KR	99-6143	2/24/1999	304346	7/20/2001	390-009897-KR(EQV)
KR	2007-7024974	3/29/2006			390-010546-KR(PCT)
KR	01-7014216	4/13/2000	100774045	10/31/2007	390-010641-KR(PCT)
KR	10200170110	8/29/2001	10-355480	9/24/2002	390-010773-KR(EQV)
KR	2001-7000444	7/9/1999	651305	11/22/2006	390-011110-KR(EQV)
KR	10-04-7008376	4/25/2003			390-012109-KR(EQV)
KR	10-2008-7003013	7/10/2006			390-012202-KR(PCT)
KR	10-06-0006243	1/20/2006			390-012544-KR(PAR)
KR	10-06-0008138	1/26/2006			390-012545-KR(PAR)
KR	10-06-0010630	2/3/2006			390-012546-KR(PAR)
KR	10-06-0014064	2/14/2006			390-012547-KR(PAR)
KR	10-06-0014061	2/14/2006			390-012548-KR(PAR)
KR	10-06-0014058	2/14/2006			390-012549-KR(PAR)
KR	10-06-0014052	2/14/2006			390-012550-KR(PAR)
KR	10-06-0015236	2/16/2006			390-012551-KR(PAR)
KR	10-06-0019979	3/2/2006			390-012552-KR(PAR)
KR	10-06-0019988	3/2/2006			390-012553-KR(PAR)
KR	10-06-0019994	3/2/2006			390-012554-KR(PAR)
KR	10-06-0010630	2/3/2006			390-012800-KR(PAR)
KR	10-06-0019979	3/2/2006			390-012806-KR(PAR)
KR	10-06-0019988	3/2/2006			390-012807-KR(PAR)
KR	10-06-0019994	3/2/2006			390-012808-KR(PAR)
KR	10-06-0025526	3/21/2006			390-012809-KR(PAR)
KR	10-06-0027574	3/27/2006			390-012810-KR(PAR)
KR	10-03-0082999	11/21/2003	10-0583701	5/19/2006	390-012812-KR(PAR)
KR	10-04-0073475	9/14/2004	10-0609385	7/28/2006	390-012813-KR(PAR)
KR	10-03-0066310	9/24/2003	10-661075	12/18/2006	390-012814-KR(PAR)
KR	10-05-0037065	5/3/2005	10-0555340	2/20/2006	390-012815-KR(PAR)
KR	10-03-0037222	6/10/2003	10-0523277	10/14/2005	390-012816-KR(PAR)
KR	10-2001-7006882	12/2/1999	10-2007-499050000	8/9/2007	390-012835-KR(EQV)
KR	10-03-7000304	7/10/2001	10-1163216	6/29/2012	390-012836-KR(EQV)
KR	2008-0111278	11/10/2008			390-014786-KR(EQV)
KR	2011-0026881	3/25/2011			390-014788-KR(D01)
KR	2008-111278	11/10/2008			390-014788-KR(EQV)
KR	1999-7009680	4/1/1998	10-1148276	5/11/2012	390P007203-KR(PCT)
KR	00-7005919	10/21/1998			390P007675-KR(PCT)
KR	2000-7006428	12/10/1998			390P009022-KR(PCT)
KR	10-03-7000063	7/6/2001	729,472	6/11/2007	390P011118-KR(PCT)
KR	2014-7017257	6/23/2014			390P012404-KR(D01)
KR	2014-7012729	5/12/2014			390P012404-KR(D13)
KR	2009-7005502	8/13/2007			390P012404-KR(I03)
KR	2016-7014985	6/3/2016			390P012752-KR(D02)
KR	09-7025576	5/8/2008			390P012752-KR(PCT)
KR	2015-7033677	11/25/2015			390P012904-KR(D02)
KR	09-7026242	12/16/2009			390P012904-KR(PCT)
KR	2015-7004933	2/25/2015			390P012914-KR(D01)
KR	2009-7026390	12/17/2009			390P012914-KR(PCT)
KR	2018-7002939	1/30/2018			390P013018-KR(D02)
KR	10-7003353	7/17/2008			390P013018-KR(PCT)
KR	2008-7024330	3/5/2007			390P014151-KR(I02)
KR	1020067011218	11/10/2004			390P014159-KR(PCT)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
KR	7009416/1999	3/26/1998	608391	7/26/2006	ASTGP056.KR
KR	7010687/2000	3/22/1999	687306	2/20/2007	ASTGP058.KR
KR	7006887/2001	12/1/1999	575550	4/25/2006	ASTGP059.KR
KR	7013917/2001	4/25/2000	688436	2/22/2007	ASTGP064.KR
KR	7002235/2000	9/3/1998	559447	3/3/2006	ASTGP065.KR
KR	10-2001-7001322	7/22/1999			ASTGP068.KR
KR	7000570/2001	7/12/1999	616125	8/18/2006	ASTGP070.KR
KR	7001603/2001	8/5/1999	575549	4/25/2006	ASTGP074.KR
KR	7000489/2002	7/10/2000			ASTGP077.KR
KR	10-2002-7013757	4/10/2001	10-0570357	4/5/2006	ASTGP078.KR
KR	7010251/2000	3/15/1999	626857	9/14/2006	ASTGP085.KR
KR	7000511/2001	7/12/1999	615102	8/16/2006	ASTGP089.KR
KR	10-2002-7013756	4/10/2001	562542	3/13/2006	ASTGP090.KR
KR	7007045/2002	12/4/2000			ASTGP093.KR
KR	7002262/2003	8/14/2001			ASTGP096.KR
KR	7003192/2003	8/29/2001	885082	2/16/2009	ASTGP097.KR
KR	7014757/2001	5/11/2000	663322	12/22/2006	ASTGP100.KR
KR	7008994/2001	1/14/2000			ASTGP101.KR
KR	7003050/2004	8/30/2002	809107	2/25/2008	ASTGP112.KR
KR	7004782/2001	10/13/1999	589753	6/7/2009	C.ASTGP069.KR
KR	7007203/2003	11/16/2001	883683	2/6/2009	C.ASTGP080.KR
KR	7026304/2008				C.ASTGP080.KR.DIV
KR	2001-7007674	12/15/1999			C.ASTGP083.KR
KR	10-2000-7007095	12/14/1998	10-0571589	4/10/2006	C.ASTGP102.KR
KR	7003145/2004	9/3/2002			C.ASTGP118.KR
KR	10-2006-7004098	8/27/2004			C.ASTGP189.KR
JP	03-271249	7/7/2003			390-005516-JP(D01)
JP	02-323543	11/7/2002	3739738	11/11/2005	390-005531-JP(D01)
JP	08-151727	6/10/2008			390-006404-JP(D01)
JP	2011-75610	3/30/2011			390-006404-JP(D02)
JP	11-502400	4/28/1998	4361973	8/21/2009	390-007091-JP(PCT)
JP	2000-514237	3/14/2000	4362008	8/21/2009	390-007092-JP(PCT)
JP	2000-592114	11/23/1999	4866504	11/18/2011	390-007093-JP(PCT)
JP	2000-502241	1/7/2000	4620863	11/5/2010	390-007134-JP(PCT)
JP	2001-541785	11/6/2000			390-007173-JP(PCT)
JP	2000-537681	9/20/2000			390-007174-JP(PCT)
JP	2000-502240	5/28/1998	4508412	5/14/2010	390-007216-JP(PCT)
JP	11-504424	5/19/1998			390-007217-JP(PCT)
JP	2013-261324	12/18/2013			390-007299-JP(D02)
JP	2000-502471	1/7/2000			390-007299-JP(PCT)
JP	11-8642	1/18/1999			390-007395-JP(EQV)
JP	2000-546922	11/2/2000	4620866	11/5/2010	390-007802-JP(PCT)
JP	2001-537136	10/23/2000			390-007941-JP(PCT)
JP	2001-500199	5/15/2000	5550201	5/30/2014	390-008087-JP(PCT)
JP	2000-572055	8/18/1999	4959053	3/30/2012	390-008105-JP(PCT)
JP	2001-500146	11/5/2001			390-008444-JP(PCT)
JP	2001-514228	1/28/2002			390-008445-JP(PCT)
JP	2001-514588	1/28/2002	4465518	3/5/2010	390-008446-JP(PCT)
JP	2001-514221	1/28/2002			390-008584-JP(PCT)
JP	8-145635	1/19/1998	3,091,412	7/21/2000	390-009014-JP(C01)
JP	2000-373484	12/7/2000	4642218	12/10/2010	390-009015-JP(D02)
JP	09-113005	5/7/2009	5020994	6/22/2012	390-009015-JP(D04)
JP	10-234227	8/20/1998	4262803	2/20/2009	390-009020-JP(EQV)
JP	10-224947	8/7/1998			390-009024-JP(EQV)
JP	10-214096	7/29/1998			390-009025-JP(EQV)
JP	10-286580	10/8/1998	4653863	12/24/2010	390-009026-JP(EQV)
JP	11-288755	10/8/1999			390-009027-JP(EQV)
JP	11-288756	10/8/1999			390-009028-JP(EQV)
JP	2002-510916	5/10/2001			390-009396-JP(PCT)
JP	03-581335	2/21/2003			390-010535-JP(PCT)
JP	2013-222380	10/25/2013			390-010546-JP(D01)
JP	2000-617479	4/13/2000	4474052	3/12/2010	390-010641-JP(PCT)
JP	2000-559040	7/9/1999			390-011110-JP(EQV)
JP	2002-574622	2/14/2002			390-011115-JP(PCT)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
JP	2008-521500	7/7/2006			390-011458-JP(P11)
JP	2010-506290	4/28/2008			390-012619-JP(PCT)
JP	2000-585915	12/2/1999			390-012725-JP(EQV)
JP	2000-585915	12/2/1999			390-012835-JP(EQV)
JP	2002-509093	7/10/2001			390-012836-JP(EQV)
JP	10-546052	4/1/1998	5046429	7/27/2012	390P007203-JP(PCT)
JP	10-228397	8/12/1998	4283914	3/27/2009	390P007411-JP(EQV)
JP	2000-523138	10/21/1998	5046435	7/27/2012	390P007675-JP(PCT)
JP	2000-539514	12/10/1998	4698833	3/11/2011	390P009022-JP(PCT)
JP	03-513748	1/14/2004			390P009911-JP(PCT)
JP	2010-249093	11/5/2010			390P009913-JP(D01)
JP	2000-540062	1/7/1999	3,998,418	8/17/2007	390P011100-JP(PCT)
JP	2002-514469	7/6/2001	4825396	9/16/2011	390P011118-JP(PCT)
JP	2011-221201	10/5/2011			390P011935-JP(D01)
JP	2008-521545	1/11/2008			390P012319-JP(PCT)
JP	2016-161567	8/19/2016			390P012404-JP(D02)
JP	2018-058131	3/26/2018			390P012404-JP(DD1)
JP	2009-509884	11/11/2008			390P012404-JP(I02)
JP	2008-540154	11/7/2006			390P012404-JP(PCT)
JP	2010-507454	5/8/2008			390P012752-JP(PCT)
JP	2010-517162	7/17/2008			390P013018-JP(PCT)
JP	2013-538886	11/10/2011			390P014561-JP(PCT)
JP	2016-530909	11/13/2014			390P014680-JP(PCT)
JP	2018-122273	6/27/2018			390P014750-JP(D01)
JP	2014-537746	4/25/2014			390P014750-JP(PCT)
JP	10-543930	3/26/1998	4068160	1/18/2008	ASTGP056.JP
JP	2000-541069	3/22/1999			ASTGP058.JP
JP	2000-585127	12/1/1999			ASTGP059.JP
JP	2000-616082	4/25/2000	4098476	3/21/2008	ASTGP064.JP
JP	2000-509103	9/3/1998	4287040	4/3/2009	ASTGP065.JP
JP	2000-562129	7/22/1999			ASTGP068.JP
JP	2000-559041	7/12/1999			ASTGP070.JP
JP	2000-563553	8/5/1999			ASTGP074.JP
JP	2001-509654	7/10/2000			ASTGP077.JP
JP	2001-576362	4/10/2001	5483791	2/28/2014	ASTGP078.JP
JP	2012-197718	9/7/2012	6306812	3/16/2018	ASTGP078.JP.DIV
JP	2017-224781	4/10/2001	6558780	7/26/2019	ASTGP078.JP.DIV2
JP	2000-537015	3/15/1999			ASTGP085.JP
JP	2000-560345	7/12/1999	4436973	1/8/2010	ASTGP089.JP
JP	2001-576361	4/10/2001			ASTGP090.JP
JP	2001-541787	12/4/2000			ASTGP093.JP
JP	2000-501973	7/9/1998	4208411	10/31/2008	ASTGP095.JP
JP	2002-520273	8/14/2001	5054879	8/3/2012	ASTGP096.JP
JP	2002-523062	8/29/2001	5259907	5/2/2013	ASTGP097.JP
JP	2012-096032	8/29/2001	5579773	7/18/2014	ASTGP097.JP.DIV1
JP	2000-618188	5/11/2000			ASTGP100.JP
JP	2000-593452	1/14/2000			ASTGP101.JP
JP	2003-514594	7/11/2002			ASTGP119.JP
JP	2009-514245				ASTGP140.JP
JP	2012-257944	11/26/2012			ASTGP140.JP.DIV
JP	2009-542775				ASTGP151.JP
JP	2000-576424	10/13/1999	4616477	10/29/2010	C.ASTGP069.JP
JP	2002-546010	11/16/2001			C.ASTGP080.JP
JP	2000-589422	12/15/1999	5147149	12/7/2012	C.ASTGP083.JP
JP	2000-526425	12/14/1998			C.ASTGP102.JP
JP	2003-541027	9/3/2002			C.ASTGP118.JP
JP	2009-554791	3/24/2008			C.ASTGP190.JP
IN	1617Kolmp2006	11/10/2004			390P014159-IN(PCT)
IL	166018	12/2/1999	166018	4/30/2012	390-012835-IL(D01)
IL	166019	12/2/1999	166019	7/30/2010	390-012835-IL(D02)
IL	143467	12/2/1999	143467	1/15/2006	390-012835-IL(EQV)
IL	175518	11/10/2004			390P014159-IL(PCT)
IE	98912061.3	3/26/1998	1028905	5/2/2007	ASTGP056.IE
HK	02102462.3	12/2/1999	1041104	7/7/2006	390-012725-HK(EQV)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
HK	4103060.5	7/10/2001	1060215	11/10/2006	390-012836-HK(EQV)
HK	1104614.7	3/22/1999			ASTGP058.HK
HK	2101361.7	12/1/1999	HK1040073	7/14/2006	ASTGP059.HK
HK	12105396.7	11/23/2001			ASTGP064.HK
HK	2101411.7	1/25/2002			ASTGP070.HK
HK	2100416.4	1/18/2002			ASTGP074.HK
HK	2105397.6	7/10/2000			ASTGP077.HK
HK	1104531.7	3/15/1999			ASTGP085.HK
HK	1108678.1	5/27/2002			ASTGP089.HK
HK	3103502.2	4/10/2001			ASTGP090.HK
HK	3103110.6	4/30/2003			ASTGP093.HK
HK	2101410.8				ASTGP101.HK
HK	2100273.6	12/15/1999			C.ASTGP083.HK
GB	9818134.0	8/19/1998	2,332,057	2/23/2000	390-009020-GB(EQV)
GB	9818136.5	8/19/1998	2334246B	4/26/2000	390-009024-GB(EQV)
GB	9818132.4	8/19/1998	2,334,563	1/12/2000	390-009025-GB(EQV)
GB	9821123.8	9/29/1998	2335791	5/3/2000	390-009026-GB(EQV)
GB	9906720.9	3/23/1999	2335979	7/12/2002	390-009897-GB(EQV)
GB	98965305.0	12/10/1998	1040511	3/12/2003	390P009022-GB(EPO)
GB	15801039.7				390P015016-GB(EPO)
GB	98912061.3	3/26/1998	1028905	5/2/2007	ASTGP056.UK
GB	99968062.2	12/1/1999	1154929	2/1/2006	ASTGP059.UK
GB	99935511.8	7/12/1999	1105605	11/15/2006	ASTGP089.UK
GB	1924933.3	4/10/2001			ASTGP090.UK
GB	986267.3	12/4/2000	1252079	1/17/2007	ASTGP093.UK
FR	94914144.4	2/11/1999	0696242	12/23/1998	390-00517-FR(PEP)
FR	9809460	7/24/1998	2,771,501	10/6/2000	390-009020-FR(EQV)
FR	9809461	7/24/1998			390-009024-FR(EQV)
FR	98 09459	7/24/1998			390-009025-FR(EQV)
FR	9810248	8/10/1998			390-009026-FR(EQV)
FR	99 01548	2/10/1999	99 01548	10/20/2000	390-009897-FR(EQV)
FR	00926908.4	4/13/2000	1177570	2/13/2008	390-010641-FR(EPO)
FR	69938360.9-08	12/2/1999	1135795	3/12/2008	390-012835-FR(EPO)
FR	01958901.9	7/10/2001	1356500	12/12/2007	390-012836-FR(EPO)
FR	98965305.0	12/10/1998	1040511	3/12/2003	390P009022-FR(EPO)
FR	99968062.2	12/1/1999	1154929	2/1/2006	ASTGP059.FR
FR	1924933.3	4/10/2001			ASTGP090.FR
EPO	6786438.9	7/7/2006			C.ASTGP133.EP
EPC	98912061.3	3/26/1998	1028905	5/2/2007	ASTGP056.EP
EPC	99914037.9	3/22/1999			ASTGP058.EP
EPC	99968062.2	12/1/1999	1154929	2/1/2006	ASTGP059.EP
EPC	928361.5	4/25/2000			ASTGP064.EP
EPC	99937401	7/22/1999			ASTGP068.EP
EPC	99933900.5	7/12/1999			ASTGP070.EP
EPC	99940889.1	8/5/1999			ASTGP074.EP
EPC	947175.6	7/10/2000			ASTGP077.EP
EPC	1924934.1	4/10/2001			ASTGP078.EP
EPC	99912462.1	3/15/1999			ASTGP085.EP
EPC	99935511.8	7/12/1999	1105605	11/15/2006	ASTGP089.EP
EPC	1924933.3	4/10/2001			ASTGP090.EP
EPC	986267.3	12/4/2000	1252079	1/17/2007	ASTGP093.EP
EPC	98933313.3	7/9/1998			ASTGP094.EP
EPC	1963957.4	8/14/2001			ASTGP096.EP
EPC	1966433.3	8/29/2001			ASTGP097.EP
EPC	932361.9	5/11/2000			ASTGP100.EP
EPC	904352.2	1/14/2000			ASTGP101.EP
EPC	99954634.4	10/13/1999			C.ASTGP069.EP
EPC	1998498.8	11/16/2001			C.ASTGP080.EP
EPC	99966286.9	12/15/1999			C.ASTGP083.EP
EPC	98962091.9	12/14/1998			C.ASTGP102.EP
EP	96937698.7	4/9/1998			390-005741-EP(PCT)
EP	96943745.8	6/9/1998			390-005742-EP(PCT)
EP	97902010.4	6/16/1998			390-005884-EP(PCT)
EP	97902015.3	7/2/1998			390-006116-EP(PCT)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
EP	97940553.7	3/22/1999			390-006478-EP(PCT)
EP	97952662.1	6/28/1999			390-006574-EP(PCT)
EP	97940554.5	3/8/1999			390-006715-EP(PCT)
EP	98918647.3	4/24/1998			390-007091-EP(PCT)
EP	98942314.0	8/28/1998			390-007092-EP(PCT)
EP	99961771.5	11/23/1999			390-007093-EP(PCT)
EP	98923890.2	6/2/1998	0 996 765	9/12/2007	390-007134-EP(PCT)
EP	99942580.4	2/17/1999	1094921	4/11/2012	390-007174-EP(PCT)
EP	98924954.5	5/28/1998			390-007216-EP(PCT)
EP	98922437.3	5/19/1998			390-007217-EP(PCT)
EP	98926383.5	6/8/1998			390-007299-EP(PCT)
EP	99915293.7	4/6/1999			390-007802-EP(PCT)
EP	00932457.5	5/15/2000			390-008087-EP(PCT)
EP	99943821.1	8/18/1999			390-008105-EP(PCT)
EP	00957979.8	1/16/2002			390-008446-EP(PCT)
EP	02789859.2	5/18/2004			390-008762-EP(PCT)
EP	01937297.8	5/10/2001			390-009396-EP(PCT)
EP	01954890.8	2/25/2003	1319201	3/29/2006	390-009409-EP(PCT)
EP	03716105.6	2/21/2003			390-010535-EP(PCT)
EP	00926908.5	4/13/2000	1177570	2/13/2008	390-010641-EP(PCT)
EP	99932361.1	7/9/1999			390-011110-EP(EQV)
EP	03024416.4	10/23/2003			390-011251-EP(EQV)
EP	03771999.4	7/28/2003	1539386	1/24/2007	390-011422-EP(PCT)
EP	06748850.2	3/29/2006	1866958	6/25/2014	390-011458-EP(PCT)
EP	06 786787.9	7/7/2006			390-011458-EP(PII)
EP	06786631.9	7/10/2006	1901983	3/4/2015	390-011657-EP(PCT)
EP	06774600.8	7/7/2006	1907173	10/3/2012	390-011658-EP(PCT)
EP	03732295.5	4/25/2003			390-012109-EP(EQV)
EP	99964097.2	12/2/1999	1135795	3/12/2008	390-012835-EP(EQV)
EP	01958901.9	7/10/2001	1,356,500	12/12/2007	390-012836-EP(EQV)
EP	07253711.1	9/19/2007			390-014786-EP(EQV)
EP	98914376.3	4/1/1998			390P007203-EP(PCT)
EP	98953820.2	10/21/1998			390P007675-EP(PCT)
EP	98965305.0	12/10/1998	1040511	3/12/2003	390P009022-EP(PCT)
EP	05807523.5	10/11/2005	1805792	12/23/2015	390P011010-EP(I01)
EP	99909655.5	2/26/1999			390P011096-EP(PCT)
EP	99902119.9	1/7/1999			390P011100-EP(PCT)
EP	01952466.9	7/6/2001	1303729	11/21/2007	390P011118-EP(PCT)
EP	03721566.2	4/8/2003			390P011298-EP(PCT)
EP	12158816.4	6/5/2006			390P011660-EP(D01)
EP	06760684.8	6/5/2006			390P011660-EP(PCT)
EP	15189923.4	7/11/2006	2998894	9/8/2021	390P011804-EP(D01)
EP	06786952.9	7/11/2006			390P011804-EP(PCT)
EP	05791673.6	3/23/2007			390P011935-EP(PCT)
EP	06 786953.7	7/11/2006	1904893	11/28/2012	390P012196-EP(PCT)
EP	US2007/017924	8/13/2007			390P012404-EP(I03)
EP	06837141.8	11/7/2006	1945541	4/10/2013	390P012404-EP(PCT)
EP	4818697.7	11/10/2004	1684951	5/17/2014	390P014159-EP(PCT)
EP	14702735.3	1/22/2014	2948980	8/25/2021	390P014865-EP(PCT)
EP	17743430.5	7/7/2017			390P015313-EP(PCT)
DE	69225908.2	7/17/1998	69225908	12/10/1998	390-005531-DE(PEP)
DE	69838423.7		0996765		390-007134-DE(EPO)
DE	99942580.4	2/17/1999	69944144.7	4/11/2012	390-007174-DE(EPO)
DE	19806231.1-15	2/16/1998	19806231	7/22/1999	390-009024-DE(PAR)
DE	19806852.2-26	2/19/1998	19806852C1	8/12/1999	390-009025-DE(PAR)
DE	19813684.6-09	3/27/1998	19813684	8/16/2001	390-009026-DE(PAR)
DE	19916932.2-22	4/9/1999	19916932	10/12/2000	390-009031-DE(PAR)
DE	10028569.4	6/9/2000			390-009396-DE(PAR)
DE	19814046.0-52	3/30/1998	19814046 C1	11/18/1999	390-009897-DE(EQV)
DE	00926908.5	4/13/2000	1177570	2/13/2008	390-010641-DE(EPO)
DE	DE19921072.1	5/8/1999			390-010641-DE(PAR)
DE	10039482.5	8/8/2000			390-011132-DE(PAR)
DE	10250353.2	10/25/2002			390-011251-DE(PAR)
DE	29824212.5	11/13/1998	29824212.5		390-012108-DE(C01)

Country	Application Number	Application Date	Patent Number	Issue Date	Docket Number
DE	298236997.4	11/13/1998	29823697.4		390-012108-DE(EQV)
DE	DE2001145498	9/14/2001	10145498.8	4/17/2003	390-012135-DE(EQV)
DE	69938360.9-08	12/2/1999	1135795	3/12/2008	390-012835-DE(EPO)
DE	60131895.1-08	7/10/2001	60131895.1	11/27/2008	390-012836-DE(EPO)
DE	98965305.0	12/10/1998	P69812168.6	3/12/2003	390P009022-DE(EPO)
DE	01952466.9	7/6/2001		11/21/2007	390P011118-DE(EPO)
DE	15801039.7				390P015016-DE(EPO)
DE	98912061.3	3/26/1998	1028905	5/2/2007	ASTGP056.DE
DE	99968062.2	12/1/1999	P69929714.1	2/1/2006	ASTGP059.DE
DE	19882665.6	9/3/1998			ASTGP065.DE
DE	99935511.8	7/12/1999	DE69934014	11/15/2006	ASTGP089.DE
DE	1924933.3	4/10/2001			ASTGP090.DE
DE	10297171.4	8/30/2002			ASTGP111.DE
DE	10297170.6	8/30/2002			ASTGP112.DE
DE	10297169.2	8/30/2002			C.ASTGP116.DE
DE	10297167.6	9/3/2002			C.ASTGP118.DE
CN	816521.1	12/4/2000	ZL00816521.1	2/27/2004	ASTGP093.CN
CN	1818061.2	8/29/2001	ZL01818061.2	7/2/2008	ASTGP097.CN
CN	ZL02819312.1	9/3/2002	ZL02819312.1	12/6/2006	C.ASTGP118.CN
CN	99815293.5	11/23/1999		10/20/2006	390-007093-CN(PCT)
CN	00810812.9	5/15/2000	ZL00810812	2/1/2006	390-008087-CN(PCT)
CN	00810286.4	5/5/2000		3/29/2006	390-008447-CN(PCT)
CN	01817781.6	7/23/2001	01817781.6	11/21/2007	390-009409-CN(PCT)
CN	03809076.7	4/25/2003			390-012109-CN(EQV)
CN	200510137638.	12/26/2005	051037638.8	3/5/2008	390-012835-CN(D01)
CN	99814032.5	12/2/1999	99814032.5	1/25/2006	390-012835-CN(EQV)
CN	ZL1814749.6	7/10/2001	01814749.6	4/5/2006	390-012836-CN(EQV)
CN	0780041428.9	9/14/2007			390P012667-CN(PCT)
CN	200480040124	6/10/2006			390P014159-CN(PCT)
CN	201280064498.7	10/26/2012	ZL201280064498.7	5/11/2018	390P014750-CN(PCT)
CN	99815317.6	12/1/1999	ZL99815317.6	3/28/2003	ASTGP059.CN
CN	808427	4/25/2000	302956	1/10/2007	ASTGP064.CN
CN	99810228.8	7/22/1999			ASTGP068.CN
CN	810160.4	7/10/2000	176878	10/20/2004	ASTGP077.CN
CN	1803302.4	4/10/2001	233972	11/2/2005	ASTGP078.CN
CN	PCT/US99/15726	7/12/1999			ASTGP089.CN
CN	ZL01803318.0	4/10/2001	278207	8/16/2006	ASTGP090.CN
CN	1816308.4	8/14/2001	252180	3/1/2006	ASTGP096.CN
CN	809546.9	5/11/2000	ZL00809546.9	2/15/2006	ASTGP100.CN
CN	803652.7	1/14/2000	ZL00803652.7	6/2/2004	ASTGP101.CN
CN	200710007933.3	8/30/2002			ASTGP112.CN2
CN	ZL01819707.8	11/16/2001	234000	11/2/2005	C.ASTGP080.CN
CN	99815727.9	12/15/1999	ZL99815727.9	8/20/2003	C.ASTGP083.CN
CN	200480024808.8	8/27/2004			C.ASTGP189.CN
CN	201010202694.9	6/4/2010			C.ASTGP189.CN.DIV2
CH	99942580.4	2/17/1999	1094921	4/11/2012	390-007174-CH(EPO)
CH	00926908.5	4/13/2000	1177570	2/13/2008	390-010641-CH(EPO)
CH	1329-02	7/29/2002			390-011421-CH(PAR)
CH	1505-02	9/4/2002			390-011423-CH(PAR)
CH	98965305.0	12/10/1998	1040511	3/12/2003	390P009022-CH(EPO)
CH	99968062.2	12/1/1999	1154929	2/1/2006	ASTGP059.CH
CH	1924933.3	4/10/2001			ASTGP090.CH
CA	2,346,268	10/15/1999			390P011593-CA(PCT)
CA	2355093	12/15/1999			C.ASTGP083.CA
AT	E275759		0735573	2/7/1996	390-009015-AT(EPO)
JP	2007-247731	9/25/2007			390-005741-JP(PCT)