

<b>PATENT ASSIGNMENT COVER SHEET</b>
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Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7066349

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
BROOKS AUTOMATION HOLDING, LLC	10/01/2021

**RECEIVING PARTY DATA**

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

**PROPERTY NUMBERS Total: 819**

Property Type	Number
Patent Number:	6711731
Patent Number:	7058627
Application Number:	11859752
Application Number:	13557223
Application Number:	11859754
Application Number:	13632229
Application Number:	11859755
Application Number:	13284963
Application Number:	14318707
Application Number:	12025769
Application Number:	14311340
Application Number:	12103505
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Application Number:	16723009
Application Number:	17362716
Application Number:	13225547
Application Number:	15497077
Application Number:	16990812
Application Number:	12025752
Application Number:	11247622

PATENT

<b>Property Type</b>	<b>Number</b>
Application Number:	12104139
Application Number:	15765855
Application Number:	16940976
Application Number:	16328848
Application Number:	16304836
Application Number:	16619020
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Application Number:	16057480
Application Number:	13531500
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Application Number:	14740214
Application Number:	13863354
Application Number:	16119465
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Application Number:	15882735
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Application Number:	14682059
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Application Number:	15816728
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Application Number:	10234640
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Application Number:	12943198
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Application Number:	14452490
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Application Number:	11929357
Application Number:	12054160
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Application Number:	14508974
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Application Number:	13475723
Application Number:	13464923
Application Number:	13605941
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<b>Patent Number:</b>	6261048
<b>Patent Number:</b>	6485250
<b>Patent Number:</b>	6364592
<b>Patent Number:</b>	6481956
<b>Patent Number:</b>	6046435
<b>Patent Number:</b>	6464448
<b>Patent Number:</b>	5931626
<b>Patent Number:</b>	6120229
<b>Patent Number:</b>	6054688
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<b>Patent Number:</b>	6265803
<b>Patent Number:</b>	6216058
<b>Patent Number:</b>	6309161
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<b>Patent Number:</b>	6195619
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<b>Patent Number:</b>	6461094
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<b>Patent Number:</b>	6736582
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Property Type	Number
Patent Number:	6986636
Patent Number:	6567711
Patent Number:	6364593
Patent Number:	6147356
Patent Number:	6673161
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Patent Number:	7374386
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Patent Number:	6450755
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Patent Number:	6619359
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Patent Number:	6366830
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Patent Number:	6275748
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Patent Number:	6815661
Patent Number:	6784418
Patent Number:	6765222
Patent Number:	7102124
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<b>Property Type</b>	<b>Number</b>
Patent Number:	6690993
Patent Number:	6192922
Patent Number:	6050774
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Patent Number:	D425493
Patent Number:	5879461
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<b>Property Type</b>	<b>Number</b>
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<b>Patent Number:</b>	6592317
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<b>Patent Number:</b>	6612797
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<b>Patent Number:</b>	7047984
<b>Patent Number:</b>	10593576
<b>Application Number:</b>	14451422
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<b>Property Type</b>	<b>Number</b>
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<b>Property Type</b>	<b>Number</b>
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Application Number:	60264557
Application Number:	10056158
Application Number:	60906972
Application Number:	60945847
Application Number:	12184194
Application Number:	60969570
Application Number:	12244693

<b>Property Type</b>	<b>Number</b>
Application Number:	60977357
Application Number:	12253212
Application Number:	13436304
Application Number:	60980763
Application Number:	60983110
Application Number:	12348276
Application Number:	61018782
Application Number:	61042694
Application Number:	61098432
Application Number:	61332802
Application Number:	61216570
Application Number:	11483366
Application Number:	60697528
Application Number:	12432359
Application Number:	61049387
Application Number:	10927703
Application Number:	11929230
Application Number:	12776235
Application Number:	14445020
Application Number:	61481062
Application Number:	61488120
Application Number:	61483642
Application Number:	14294141
Application Number:	14274679
Application Number:	14274771
Application Number:	60380993
Application Number:	60486330
Application Number:	60316722
Application Number:	10719069
Application Number:	10618313
Application Number:	60697785
Application Number:	11352154
Application Number:	11449084
Application Number:	60819602
Application Number:	11774750
Application Number:	11774760
Application Number:	11599020
Application Number:	11774928

Property Type	Number
Application Number:	60819603

**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:** 12032591800  
**Email:** PGPATENT@PGPATENT.COM  
**Correspondent Name:** PERMAN AND GREEN LLP  
**Address Line 1:** 99 HAWLEY LANE  
**Address Line 4:** STRATFORD, CONNECTICUT 06614

<b>NAME OF SUBMITTER:</b>	JANIK MARCOVICI
<b>SIGNATURE:</b>	/jm/
<b>DATE SIGNED:</b>	12/09/2021

**Total Attachments: 39**

- source=Patent Assignment Agreement (to Company) - EXECUTED#page1.tif
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## PATENT ASSIGNMENT AGREEMENT

This PATENT ASSIGNMENT AGREEMENT ("Agreement"), effective as of immediately after 12:01 A.M. United States Eastern Time on October 1, 2021 (the "Effective Time"), is by and between Brooks Automation Holding, LLC, a Delaware limited liability company with a principal place of business of 15 Elizabeth Drive, Chelmsford, MA 01824 ("Assignor"), and Brooks Automation US, 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.

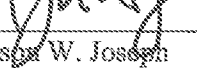
Section 5. Definitions. In addition to the definitions set forth below and herein, capitalized terms used herein or in any attachment hereto and not defined herein or therein shall have the meanings assigned to them in the Contribution Agreement.

“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]

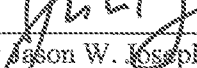
IN WITNESS WHEREOF, the Parties hereto have caused this Patent Assignment Agreement to be duly signed as of the date set forth below.

BROOKS AUTOMATION HOLDING, LLC

By   
Name: Jason W. Joseph  
Title: Secretary

Date: October 1, 2021

BROOKS AUTOMATION US, LLC

By   
Name: Jason W. Joseph  
Title: Secretary

Date: October 1, 2021

[Patent Assignment Agreement Signature Page]

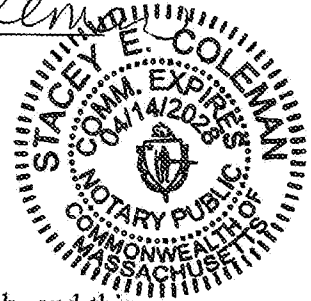
COMMONWEALTH OF MASSACHUSETTS )  
 ) SS:  
COUNTY OF MIDDLESEX )

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 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



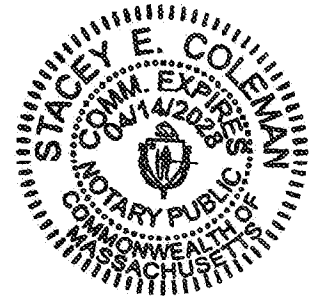
COMMONWEALTH OF MASSACHUSETTS )  
 ) SS:  
COUNTY OF MIDDLESEX )

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 US, LLC, a Delaware limited liability company; and

(b) This document was signed and delivered by Brooks Automation US, 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)
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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(CL1)
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)
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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)
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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)
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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)
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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)
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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)
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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)
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