

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT7155442

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

CONVEYING PARTY DATA

Name	Execution Date
BROOKS AUTOMATION US, LLC	02/01/2022

RECEIVING PARTY DATA

Name:	GOLDMAN SACHS BANK USA
Street Address:	200 WEST STREET
City:	NEW YORK
State/Country:	NEW YORK
Postal Code:	10282

PROPERTY NUMBERS Total: 354

Property Type	Number
Patent Number:	9033647
Patent Number:	7572092
Patent Number:	7712808
Patent Number:	7578649
Patent Number:	9859140
Patent Number:	6779962
Patent Number:	6769861
Patent Number:	9099506
Patent Number:	8112171
Patent Number:	8509938
Patent Number:	6944517
Patent Number:	7255524
Patent Number:	7192791
Patent Number:	8454293
Patent Number:	9670010
Patent Number:	7677859
Patent Number:	6869263
Patent Number:	7109509
Patent Number:	7677394
Patent Number:	8425172

PATENT

Property Type	Number
Patent Number:	7699573
Patent Number:	7478454
Patent Number:	6880757
Patent Number:	9601362
Patent Number:	8403619
Patent Number:	8545165
Patent Number:	7891936
Patent Number:	11121017
Patent Number:	8821099
Patent Number:	10065307
Patent Number:	8573919
Patent Number:	8651796
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Patent Number:	10204811
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Patent Number:	7039498
Patent Number:	6974782
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Patent Number:	7890194
Patent Number:	8303764
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Patent Number:	8293066
Patent Number:	9524896
Patent Number:	8419341
Patent Number:	7901539

Property Type	Number
Patent Number:	8955748
Patent Number:	6737826
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Patent Number:	6990430
Patent Number:	7245989
Patent Number:	6623235
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Patent Number:	9020617
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Patent Number:	7522267
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Patent Number:	8328495
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Patent Number:	9117859
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Patent Number:	10854478
Patent Number:	10541157
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Patent Number:	8562271

Property Type	Number
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Patent Number:	8178829

Property Type	Number
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Patent Number:	9862554
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Patent Number:	10137576
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Patent Number:	10742092
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Patent Number:	11192239
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Patent Number:	7179044

Property Type	Number
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Patent Number:	6815661
Patent Number:	6784418
Patent Number:	6765222
Patent Number:	7102124
Patent Number:	6944584
Patent Number:	6729462
Application Number:	15465326
Application Number:	16121148
Application Number:	16566730
Application Number:	16570453
Application Number:	16043757
Application Number:	16696822
Application Number:	17102811
Application Number:	17158723
Application Number:	16460676
Application Number:	17108473
Application Number:	15215143
Application Number:	14377987
Application Number:	16825663
Application Number:	16990775
Application Number:	17081811
Application Number:	16506679
Application Number:	16787184
Application Number:	16793623
Application Number:	17136661
Application Number:	16838785
Application Number:	16674933
Application Number:	16197107
Application Number:	15110130
Application Number:	17014575
Application Number:	17002587
Application Number:	17229495
Application Number:	16996409
Application Number:	15634871
Application Number:	15889811

Property Type	Number
Application Number:	16872864
Application Number:	17103243
Application Number:	17158523
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Application Number:	16668290
Application Number:	17176949
Application Number:	17341638
Application Number:	17156007
Application Number:	16899151
Application Number:	17180298
Application Number:	17108530
Application Number:	17167831
Application Number:	17362565
Application Number:	17362599
Application Number:	17382858
Application Number:	09362761
Application Number:	10991849
Application Number:	09086703
Application Number:	12580730
Application Number:	11556535
Application Number:	11876991
Application Number:	11877006
Application Number:	11877035
Application Number:	11876979
Application Number:	12180568
Application Number:	63046289
Application Number:	63046555
Application Number:	90008245
Application Number:	14445020

CORRESPONDENCE DATA

Fax Number: (312)862-2200

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: 312-862-4396

Email: noreen.gosselin@kirkland.com

Correspondent Name: NOREEN GOSSELIN

Address Line 1: KIRKLAND & ELLIS LLP

Address Line 2: 300 NORTH LASALLE

Address Line 4:	CHICAGO, ILLINOIS 60654
ATTORNEY DOCKET NUMBER:	36772-239
NAME OF SUBMITTER:	NOREEN GOSSELIN
SIGNATURE:	/NOREEN GOSSELIN/
DATE SIGNED:	02/02/2022

Total Attachments: 19

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SECOND LIEN PATENT SECURITY AGREEMENT dated as of February 1, 2022 (this “**Agreement**”), among Brooks Automation US, LLC, a Delaware limited liability company (the “**Grantor**”) and Goldman Sachs Bank USA, as collateral agent (in such capacity, the “**Collateral Agent**”).

Reference is made to (a) the Second Lien Pledge and Security Agreement dated as of the date hereof (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “**Security Agreement**”), by and among the Grantor, Altar MidCo, Inc., a corporation existing under the laws of Delaware (“**Holdings**”), Altar BidCo, Inc., a corporation existing under the laws of Delaware (the “**Borrower**”), the Subsidiaries of the Borrower from time to time party thereto, and the Collateral Agent, and (b) the Second Lien Credit Agreement dated as of the date hereof (as amended, amended and restated, supplemented or otherwise modified, refinanced and/or restated from time to time, the “**Credit Agreement**”), among the Grantor, Holdings, the Borrower, the Subsidiaries of the Borrower from time to time party thereto, the Lenders from time to time party thereto and Goldman Sachs Bank USA, as administrative agent and collateral agent for the Lenders party thereto. The Lenders have agreed to extend credit to the Borrower subject to the terms and conditions set forth in the Credit Agreement. The obligations of the Lenders to extend such credit are conditioned upon, among other things, the execution and delivery of this Agreement. The Grantor will derive substantial benefits from the extension of credit pursuant to the Credit Agreement and is willing to execute and deliver this Agreement in order to induce the Lenders to extend such credit. Accordingly, the parties hereto agree as follows:

SECTION 1. Terms. Capitalized terms used in this Agreement and not otherwise defined herein have the meanings specified in the applicable Security Agreement. The rules of construction specified in Section 1.01 of the applicable Security Agreement also apply to this Agreement.

SECTION 2. Grant of Security Interest. As security for the prompt and complete payment or performance, as the case may be, in full of the Secured Obligations, the Grantor, hereby grants to the Agent, its successors and assigns, on behalf of and for the ratable benefit of the Secured Parties, a continuing security interest (the “**Security Interest**”) in all of such Grantor’s right, title and interest in, to and under all of the following assets and properties, whether now owned by or owing to, or hereafter acquired by or arising in favor of such Grantor (collectively, the “**Patent Collateral**”): (i) all of the Patents owned by such Grantor and constituting Collateral including, without limitation, those listed on Schedule I hereto, (ii) all reissues, extensions, divisionals, continuations and continuations-in-part of any of the foregoing, and (iii) all proceeds of and revenues from the foregoing, including, without limitation, all proceeds of and revenues from any claim by such Grantor against third parties for past, present or future infringement of any Patent including, without limitation, those listed on Schedule I hereto.

SECTION 3. Purpose. This Agreement has been executed and delivered by each Grantor for the purpose of recording the grant of security interest herein with the United States Patent and Trademark Office. The Grantor authorizes and requests that the Commissioner of Patents and Trademarks record this Agreement. The security interests granted to the Agent herein are granted in furtherance, and not in limitation of, the security interests granted to the Agent pursuant to the Security Agreement. The Grantor hereby acknowledges and affirms that the rights

and remedies of the Agent with respect to the Patent Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the Security Agreement, the terms of the Security Agreement shall govern.

SECTION 4. Termination. Subject to Section 7.11 of the Security Agreement, upon the Termination Date, this Agreement shall terminate and the security interest in the Patent Collateral shall be released. Upon the termination of this Agreement, the Agent shall execute all documents, make all filings, take all other actions reasonably requested by the Grantor to evidence and record the release of the security interests in the Patent Collateral granted herein.

SECTION 5. Counterparts. This Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or by email as a “.pdf” or “.tif” attachment or other electronic transmission shall be effective as delivery of a manually executed counterpart of this Agreement.


SECTION 6. **CHOICE OF LAW. THIS AGREEMENT AND ANY CLAIM, CONTROVERSY OR DISPUTE ARISING UNDER OR RELATED TO THIS AGREEMENT, WHETHER IN TORT, CONTRACT (AT LAW OR IN EQUITY) OR OTHERWISE, SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO CONFLICT OF LAWS PRINCIPLES THAT WOULD RESULT IN THE APPLICATION OF ANY OTHER LAW OTHER THAN THE LAW OF THE STATE OF NEW YORK.**

SECTION 7. Intercreditor Agreements. Notwithstanding anything herein to the contrary, the liens and security interests granted to the Collateral Agent pursuant to this Agreement and the exercise of any right or remedy by the Collateral Agent hereunder, are subject to the provisions of any Intercreditor Agreement then in effect. In the event of any conflict between the terms of any Intercreditor Agreement then in effect and the terms of this Agreement, the terms of such Intercreditor Agreement shall govern and control. No right, power or remedy granted to the Collateral Agent hereunder shall be exercised by the Collateral Agent, and no direction shall be given by the Collateral Agent, in contravention of any such Intercreditor Agreement.

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IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

BROOKS AUTOMATION US, LLC

By: 
David Pietrantonio (Jan 31, 2022 1:55:52 PM)

Name: David Pietrantonio

Title: Treasurer and Secretary

[Signature Page to Patent Security Agreement]

PATENT
REEL: 058945 FRAME: 0761

GOLDMAN SACHS BANK USA,
as Collateral Agent,

By: _____

Name: Robert Ehudin

Title: Authorized Signatory

[Signature Page to Patent Security Agreement]

PATENT
REEL: 058945 FRAME: 0762

Schedule I

United States Patents

Country	Application Number	Application Date	Patent Number	Issue Date	Grantor
US	12/499,565	7/8/2009	9,033,647	5/19/2015	Brooks Automation US, LLC
US	10/266,072	10/7/2002	7,572,092	8/11/2009	Brooks Automation US, LLC
US	11/239,272	9/29/2005	7,712,808	5/11/2010	Brooks Automation US, LLC
US	10/159,726	5/29/2002	7,578,649	8/25/2009	Brooks Automation US, LLC
US	13/561,873	7/30/2012	9,859,140	1/2/2018	Brooks Automation US, LLC
US	10/104,846	3/22/2002	6,779,962	8/24/2004	Brooks Automation US, LLC
US	10/267,465	10/8/2002	6,769,861	8/3/2004	Brooks Automation US, LLC
US	11/093,480	3/30/2005	9,099,506	8/4/2015	Brooks Automation US, LLC
US	11/196,063	8/3/2005	8,112,171	2/7/2012	Brooks Automation US, LLC
US	13/366,968	2/6/2012	8,509,938	8/13/2013	Brooks Automation US, LLC
US	10/613,697	7/3/2003	6,944,517	9/13/2005	Brooks Automation US, LLC
US	10/413,102	4/14/2003	7,255,524	8/14/2007	Brooks Automation US, LLC
US	10/465,677	6/19/2003	7,192,791	3/20/2007	Brooks Automation US, LLC
US	12/723,837	3/15/2010	8,454,293	6/4/2013	Brooks Automation US, LLC
US	13/908,909	6/3/2013	9,670,010	6/6/2017	Brooks Automation US, LLC
US	10/623,970	7/21/2003	7,677,859	3/16/2010	Brooks Automation US, LLC
US	10/200,818	7/22/2002	6,869,263	3/22/2005	Brooks Automation US, LLC
US	10/692,047	10/23/2003	7,109,509	9/19/2006	Brooks Automation US, LLC*
US	10/339,150	1/9/2003	7,677,394	3/16/2010	Brooks Automation US, LLC
US	12/761,499	4/16/2010	8,425,172	4/23/2013	Brooks Automation US, LLC
US	10/628,980	7/29/2003	7,699,573	4/20/2010	Brooks Automation US, LLC
US	10/628,294	7/28/2003	7,478,454	1/20/2009	Brooks Automation US, LLC

Country	Application Number	Application Date	Patent Number	Issue Date	Grantor
US	10/654,107	9/3/2003	6,880,757	4/19/2005	Brooks Automation US, LLC
US	15/465,326	3/21/2017			Brooks Automation US, LLC
US	14/042,248	9/30/2013	9,601,362	3/21/2017	Brooks Automation US, LLC
US	13/030,926	2/18/2011	8,403,619	3/26/2013	Brooks Automation US, LLC
US	11/179,745	7/11/2005	8,545,165	10/1/2013	Brooks Automation US, LLC
US	11/093,479	3/30/2005	7,891,936	2/22/2011	Brooks Automation US, LLC
US	14/472,678	8/29/2014	11,121,017	9/14/2021	Brooks Automation US, LLC
US	11/178,836	7/11/2005	8,821,099	9/2/2014	Brooks Automation US, LLC
US	14/071,314	11/4/2013	10,065,307	9/4/2018	Brooks Automation US, LLC
US	16/121,148	9/4/2018			Brooks Automation US, LLC
US	11/178,830	7/11/2005	8,573,919	11/5/2013	Brooks Automation US, LLC
US	13/113,476	5/23/2011	8,651,796	2/18/2014	Brooks Automation US, LLC
US	11/697,390	4/6/2007	7,946,800	5/24/2011	Brooks Automation US, LLC
US	13/436,155	3/30/2012	8,628,288	1/14/2014	Brooks Automation US, LLC
US	14/148,785	1/7/2014	10,204,811	2/12/2019	Brooks Automation US, LLC
US	11/093,481	3/30/2005	8,167,522	5/1/2012	Brooks Automation US, LLC
US	11/453,395	6/15/2006	7,880,155	2/1/2011	Brooks Automation US, LLC
US	13/230,280	9/12/2011	8,590,956	11/26/2013	Brooks Automation US, LLC
US	14/089,439	11/25/2013	9,691,651	6/27/2017	Brooks Automation US, LLC
US	15/634,957	6/27/2017	10,615,068	4/7/2020	Brooks Automation US, LLC
US	11/045,545	1/28/2005	8,016,541	9/13/2011	Brooks Automation US, LLC
US	11/769,688	6/27/2007	8,823,294	9/2/2014	Brooks Automation US, LLC
US	15/012,425	2/1/2016	10,406,679	9/10/2019	Brooks Automation US, LLC
US	16/566,730	9/10/2019			Brooks Automation US, LLC

Country	Application Number	Application Date	Patent Number	Issue Date	Grantor
US	11/179,762	7/11/2005	9,248,568	2/2/2016	Brooks Automation US, LLC
US	11/442,511	5/26/2006	8,398,355	3/19/2013	Brooks Automation US, LLC
US	11/741,416	4/27/2007	9,437,469	9/6/2016	Brooks Automation US, LLC
US	11/769,651	6/27/2007	9,752,615	9/5/2017	Brooks Automation US, LLC
US	10/626,504	7/23/2003	7,039,498	5/2/2006	Brooks Automation US, LLC
US	10/635,231	8/6/2003	6,974,782	12/13/2005	Brooks Automation US, LLC
US	10/618,446	7/22/2002	7,002,675	2/21/2006	Brooks Automation US, LLC*
US	11/302,563	12/13/2005	7,890,194	2/15/2011	Brooks Automation US, LLC
US	13/042,407	3/7/2011	8,303,764	11/6/2012	Brooks Automation US, LLC
US	13/861,693	4/12/2013	10,204,810	2/12/2019	Brooks Automation US, LLC
US	13/286,186	10/31/2011	9,691,649	6/27/2017	Brooks Automation US, LLC
US	12/325,993	12/1/2008	8,293,066	10/23/2012	Brooks Automation US, LLC
US	12/368,241	2/9/2009	9,524,896	12/20/2016	Brooks Automation US, LLC
US	12/875,414	9/3/2010	8,419,341	4/16/2013	Brooks Automation US, LLC
US	11/523,101	9/19/2006	7,901,539	3/8/2011	Brooks Automation US, LLC
US	13/703,234	5/12/2011	8,955,748	2/17/2015	Brooks Automation US, LLC*
US	16/570,453	9/13/2019			Brooks Automation US, LLC
US	10/196,066	7/15/2002	6,737,826	5/18/2004	Brooks Automation US, LLC
US	10/196,685	7/15/2002	6,643,563	11/4/2003	Brooks Automation US, LLC
US	11/168,908	6/28/2005	8,292,563	10/23/2012	Brooks Automation US, LLC
US	10/074,411	2/12/2002	8,510,476	8/13/2013	Brooks Automation US, LLC
US	13/617,171	9/14/2012	8,747,050	6/10/2014	Brooks Automation US, LLC
US	12/117,355	5/8/2008	8,267,636	9/18/2012	Brooks Automation US, LLC
US	12/542,588	8/17/2009	8,602,706	12/10/2013	Brooks Automation US, LLC

Country	Application Number	Application Date	Patent Number	Issue Date	Grantor
US	13/195,401	8/1/2011	8,371,792	2/12/2013	Brooks Automation US, LLC
US	13/764,373	2/11/2013	8,827,617	9/9/2014	Brooks Automation US, LLC
US	14/180,876	2/14/2014	9,570,330	2/14/2017	Brooks Automation US, LLC
US	13/159,034	6/13/2011	8,651,789	2/18/2014	Brooks Automation US, LLC
US	10/962,787	10/9/2004	7,988,398	8/2/2011	Brooks Automation US, LLC
US	12/330,780	12/9/2008	8,960,099	2/24/2015	Brooks Automation US, LLC
US	11/442,509	5/26/2006	7,959,395	6/14/2011	Brooks Automation US, LLC
US	10/624,987	7/22/2003	7,575,406	8/18/2009	Brooks Automation US, LLC
US	09/935,919	8/23/2001	6,711,731	3/23/2004	Brooks Automation US, LLC
US	09/842,370	4/25/2001	7,058,627	6/6/2006	Brooks Automation US, LLC
US	16/043,757	7/24/2018			Brooks Automation US, LLC
US	13/030,856	2/18/2011	8,951,002	2/10/2015	Brooks Automation US, LLC
US	14/617,052	2/9/2015	10,029,363	7/24/2018	Brooks Automation US, LLC
US	10/434,582	5/9/2003	7,891,935	2/22/2011	Brooks Automation US, LLC
US	10/739,375	12/18/2003	6,990,430	1/24/2006	Brooks Automation US, LLC
US	10/741,146	12/19/2003	7,245,989	7/17/2007	Brooks Automation US, LLC
US	10/120,673	4/11/2002	6,623,235	9/23/2003	Brooks Automation US, LLC
US	10/121,152	4/11/2002	6,913,302	7/5/2005	Brooks Automation US, LLC
US	10/120,744	4/11/2002	6,789,328	9/14/2004	Brooks Automation US, LLC*
US	14/698,110	4/28/2015	10,488,851	11/26/2019	Brooks Automation US, LLC
US	16/696,822	11/26/2019			Brooks Automation US, LLC
US	13/011,970	1/24/2011	9,020,617	4/28/2015	Brooks Automation US, LLC
US	11/178,615	7/11/2005	7,904,182	3/8/2011	Brooks Automation US, LLC
US	13/008,559	1/18/2011	8,356,207	1/15/2013	Brooks Automation US, LLC

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US	13/739,831	1/11/2013	9,104,650	8/11/2015	Brooks Automation US, LLC
US	14/822,310	8/10/2015	10,120,374	11/6/2018	Brooks Automation US, LLC
US	16/181,208	11/5/2018	10,845,793	11/24/2020	Brooks Automation US, LLC
US	17/102,811	11/24/2020			Brooks Automation US, LLC
US	11/485,143	7/11/2006	7,882,394	2/1/2011	Brooks Automation US, LLC
US	17/158,723	1/26/2021			Brooks Automation US, LLC
US	16/201,899	11/27/2018	10,903,104	1/26/2021	Brooks Automation US, LLC
US	14/868,689	9/29/2015	10,141,214	11/27/2018	Brooks Automation US, LLC
US	13/768,495	2/15/2013	9,147,590	9/29/2015	Brooks Automation US, LLC
US	11/148,871	6/9/2005	8,376,685	2/19/2013	Brooks Automation US, LLC
US	11/154,787	6/15/2005	7,607,879	10/27/2009	Brooks Automation US, LLC
US	14/541,934	11/14/2014	9,881,825	1/30/2018	Brooks Automation US, LLC
US	11/207,231	8/19/2005	8,888,433	11/18/2014	Brooks Automation US, LLC
US	12/897,440	10/4/2010	8,678,734	3/25/2014	Brooks Automation US, LLC
US	14/223,553	3/24/2014	9,368,382	6/14/2016	Brooks Automation US, LLC
US	13/914,397	6/10/2013	8,892,248	11/18/2014	Brooks Automation US, LLC
US	12/651,160	12/31/2009	8,459,922	6/11/2013	Brooks Automation US, LLC
US	11/485,146	7/11/2006	7,522,267	4/21/2009	Brooks Automation US, LLC
US	11/485,144	7/11/2006	7,925,378	4/12/2011	Brooks Automation US, LLC
US	12/843,659	7/26/2010	8,182,192	5/22/2012	Brooks Automation US, LLC
US	11/485,145	7/11/2006	7,762,755	7/27/2010	Brooks Automation US, LLC
US	11/594,365	11/7/2006	7,798,758	9/21/2010	Brooks Automation US, LLC
US	14/976,952	12/21/2015	10,679,882	6/9/2020	Brooks Automation US, LLC
US	12/544,064	8/19/2009	8,328,495	12/11/2012	Brooks Automation US, LLC

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US	13/625,442	9/24/2012	9,224,628	12/29/2015	Brooks Automation US, LLC
US	11/803,077	5/11/2007	8,267,634	9/18/2012	Brooks Automation US, LLC
US	11/891,835	8/13/2007	8,272,827	9/25/2012	Brooks Automation US, LLC
US	13/412,392	3/5/2012	8,803,513	8/12/2014	Brooks Automation US, LLC
US	12/163,716	6/27/2008	8,129,984	3/6/2012	Brooks Automation US, LLC
US	12/163,802	6/27/2008	8,222,892	7/17/2012	Brooks Automation US, LLC
US	11/848,845	8/31/2007	9,117,859	8/25/2015	Brooks Automation US, LLC
US	11/855,484	9/14/2007	8,297,319	10/30/2012	Brooks Automation US, LLC
US	14/305,715	6/16/2014	10,335,945	7/2/2019	Brooks Automation US, LLC
US	16/460,676	7/2/2019			Brooks Automation US, LLC
US	12/117,415	5/8/2008	8,752,449	6/17/2014	Brooks Automation US, LLC
US	14/822,392	8/10/2015	9,978,623	5/22/2018	Brooks Automation US, LLC
US	15/986,710	5/22/2018			Brooks Automation US, LLC
US	12/123,391	5/19/2008	9,105,673	8/11/2015	Brooks Automation US, LLC
US	13/625,704	9/24/2012	8,662,812	3/4/2014	Brooks Automation US, LLC
US	14/195,086	3/3/2014	9,478,446	10/25/2016	Brooks Automation US, LLC
US	16/722,930	12/20/2019	10,854,478	12/1/2020	Brooks Automation US, LLC
US	17/108,473	12/1/2020			Brooks Automation US, LLC
US	15/333,021	10/24/2016	10,541,157	1/21/2020	Brooks Automation US, LLC
US	12/123,365	5/19/2008	8,272,825	9/25/2012	Brooks Automation US, LLC
US	12/901,146	10/8/2010	11,002,566	5/11/2021	Brooks Automation US, LLC
US	12/163,984	6/27/2008	7,834,618	11/16/2010	Brooks Automation US, LLC
US	12/163,993	6/27/2008	8,659,205	2/25/2014	Brooks Automation US, LLC
US	13/646,282	10/5/2012	9,024,488	5/5/2015	Brooks Automation US, LLC

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US	12/163,996	6/27/2008	8,283,813	10/9/2012	Brooks Automation US, LLC
US	14/058,436	10/21/2013	9,401,294	7/26/2016	Brooks Automation US, LLC
US	12/123,329	5/19/2008	8,562,271	10/22/2013	Brooks Automation US, LLC
US	13/219,267	8/26/2011	8,237,391	8/7/2012	Brooks Automation US, LLC
US	13/567,812	8/6/2012	8,680,803	3/25/2014	Brooks Automation US, LLC
US	12/175,278	7/17/2008	8,008,884	8/30/2011	Brooks Automation US, LLC
US	14/941,888	11/16/2015	9,751,209	9/5/2017	Brooks Automation US, LLC
US	15/695,744	9/5/2017	10,493,620	12/3/2019	Brooks Automation US, LLC
US	16/702,403	12/3/2019	11,110,598	9/7/2021	Brooks Automation US, LLC
US	13/547,786	7/12/2012	9,186,799	11/17/2015	Brooks Automation US, LLC
US	13/270,844	10/11/2011	9,656,386	5/23/2017	Brooks Automation US, LLC
US	13/036,876	2/28/2011	8,801,069	8/12/2014	Brooks Automation US, LLC
US	12/260,818	10/29/2008	7,988,399	8/2/2011	Brooks Automation US, LLC
US	14/216,829	3/17/2014	9,884,726	2/6/2018	Brooks Automation US, LLC
US	14/014,910	8/30/2013	10,086,511	10/2/2018	Brooks Automation US, LLC
US	12/030,902	2/14/2008	8,434,989	5/7/2013	Brooks Automation US, LLC
US	12/025,477	2/4/2008	8,672,605	3/18/2014	Brooks Automation US, LLC
US	12/025,516	2/4/2008	8,500,388	8/6/2013	Brooks Automation US, LLC
US	12/025,541	2/4/2008	8,197,177	6/12/2012	Brooks Automation US, LLC
US	12/032,733	2/18/2008	8,442,667	5/14/2013	Brooks Automation US, LLC
US	11/876,869	10/23/2007	8,812,150	8/19/2014	Brooks Automation US, LLC
US	11/876,876	10/23/2007	8,267,632	9/18/2012	Brooks Automation US, LLC
US	11/876,896	10/23/2007	8,602,716	12/10/2013	Brooks Automation US, LLC
US	13/616,683	9/14/2012	8,870,514	10/28/2014	Brooks Automation US, LLC

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US	13/248,386	9/29/2011	8,523,507	9/3/2013	Brooks Automation US, LLC
US	12/106,975	4/21/2008	8,950,998	2/10/2015	Brooks Automation US, LLC
US	12/239,717	9/26/2008	8,029,226	10/4/2011	Brooks Automation US, LLC
US	11/876,902	10/23/2007	8,696,298	4/15/2014	Brooks Automation US, LLC
US	11/876,915	10/23/2007	8,313,277	11/20/2012	Brooks Automation US, LLC
US	11/681,822	3/5/2007	8,403,613	3/26/2013	Brooks Automation US, LLC
US	10/985,834	11/10/2004	7,458,763	12/2/2008	Brooks Automation US, LLC
US	12/206,382	9/8/2008	8,029,225	10/4/2011	Brooks Automation US, LLC
US	13/248,600	9/29/2011	8,944,738	2/3/2015	Brooks Automation US, LLC
US	10/985,839	11/10/2004	7,422,406	9/9/2008	Brooks Automation US, LLC
US	10/985,727	11/10/2004	7,210,246	5/1/2007	Brooks Automation US, LLC
US	11/846,290	8/28/2007	7,959,403	6/14/2011	Brooks Automation US, LLC
US	13/158,883	6/13/2011	8,807,905	8/19/2014	Brooks Automation US, LLC
US	11/382,491	5/10/2006	8,439,623	5/14/2013	Brooks Automation US, LLC
US	12/434,330	5/1/2009	8,424,703	4/23/2013	Brooks Automation US, LLC
US	12/131,024	5/30/2008	10,586,722	3/10/2020	Brooks Automation US, LLC
US	12/195,095	8/20/2008	8,178,829	5/15/2012	Brooks Automation US, LLC
US	11/877,058	10/23/2007	10,444,749	10/15/2019	Brooks Automation US, LLC
US	11/877,180	10/23/2007	8,775,148	7/8/2014	Brooks Automation US, LLC
US	11/877,191	10/23/2007	8,612,198	12/17/2013	Brooks Automation US, LLC
US	11/877,214	10/23/2007	8,473,270	6/25/2013	Brooks Automation US, LLC
US	11/877,203	10/23/2007	8,972,029	3/3/2015	Brooks Automation US, LLC
US	11/877,228	10/23/2007	7,769,482	8/30/2010	Brooks Automation US, LLC
US	11/877,242	10/23/2007	7,899,562	3/1/2011	Brooks Automation US, LLC

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US	11/877,071	10/23/2007	8,639,365	1/28/2014	Brooks Automation US, LLC
US	11/877,096	10/23/2007	8,639,489	1/28/2014	Brooks Automation US, LLC
US	11/877,303	10/23/2007	7,945,348	5/17/2011	Brooks Automation US, LLC
US	15/376,119	12/12/2016	10,058,998	8/28/2018	Brooks Automation US, LLC
US	16/115,505	8/28/2018	10,967,511	4/6/2021	Brooks Automation US, LLC
US	14/342,035	2/28/2014	9,517,558	12/13/2016	Brooks Automation US, LLC
US	15/215,143	7/20/2016			Brooks Automation US, LLC
US	14/377,987	8/11/2014			Brooks Automation US, LLC
US	15/137,722	4/25/2016	10,418,261	9/17/2019	Brooks Automation US, LLC
US	13/334,181	12/22/2011	9,324,594	4/26/2016	Brooks Automation US, LLC
US	12/032,489	2/15/2008	7,859,685	12/28/2010	Brooks Automation US, LLC
US	12/875,462	9/3/2010	8,270,702	9/18/2012	Brooks Automation US, LLC
US	12/032,341	2/15/2008	7,894,657	2/22/2011	Brooks Automation US, LLC
US	12/977,514	12/29/2010	8,125,652	2/28/2012	Brooks Automation US, LLC
US	13/406,252	2/27/2012	8,253,948	8/28/2012	Brooks Automation US, LLC
US	13/617,333	9/14/2012	8,634,633	1/21/2014	Brooks Automation US, LLC
US	14/159,223	1/20/2014	8,934,706	1/13/2015	Brooks Automation US, LLC
US	11/682,306	3/5/2007	7,792,350	9/7/2010	Brooks Automation US, LLC
US	14/579,067	12/22/2014	9,230,841	1/5/2016	Brooks Automation US, LLC
US	14/988,256	1/5/2016	9,852,935	12/26/2017	Brooks Automation US, LLC
US	15/849,002	12/20/2017	10,325,795	6/18/2019	Brooks Automation US, LLC
US	16/444,225	6/18/2019	10,600,665	3/24/2020	Brooks Automation US, LLC
US	16/825,663	3/20/2020			Brooks Automation US, LLC
US	13/417,837	3/12/2012	8,918,203	12/23/2014	Brooks Automation US, LLC

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US	15/489,449	4/17/2017	10737381	8/11/2020	Brooks Automation US, LLC
US	16/990,775	8/11/2020			Brooks Automation US, LLC
US	13/293,717	11/10/2011	9,623,555	4/18/2017	Brooks Automation US, LLC
US	15/702,436	9/12/2017	10,204,817	2/12/2019	Brooks Automation US, LLC
US	16/272,974	2/11/2019	10,818,537	10/27/2020	Brooks Automation US, LLC
US	17/081,811	10/27/2020			Brooks Automation US, LLC
US	15/114,275	7/26/2016	9,761,478	9/12/2017	Brooks Automation US, LLC
US	16/506,679	7/9/2019			Brooks Automation US, LLC
US	14/540,055	11/13/2014	10,348,172	7/9/2019	Brooks Automation US, LLC
US	14/344,930	3/14/2014	9,812,343	11/7/2017	Brooks Automation US, LLC
US	15/866,215	1/9/2018	10,239,707	3/26/2019	Brooks Automation US, LLC
US	14/353,153	4/21/2014	9,862,554	1/9/2018	Brooks Automation US, LLC
US	16/201,539	11/27/2018	10,556,351	2/11/2020	Brooks Automation US, LLC
US	16/787,184	2/11/2020			Brooks Automation US, LLC
US	14/365,277	6/13/2014	10,137,576	11/27/2018	Brooks Automation US, LLC
US	13/692,749	12/3/2012	8,827,618	9/9/2014	Brooks Automation US, LLC
US	16/552,881	8/27/2019	11,121,015	9/14/2021	Brooks Automation US, LLC
US	14/161,039	1/22/2014	10,395,959	8/27/2019	Brooks Automation US, LLC
US	16/793,623	2/18/2020			Brooks Automation US, LLC
US	14/540,077	11/13/2014	10,564,221	2/18/2020	Brooks Automation US, LLC
US	15/369,573	12/5/2016	10,879,101	12/29/2020	Brooks Automation US, LLC
US	17/136,661	12/29/2020			Brooks Automation US, LLC
US	14/325,702	7/8/2014	9,514,974	12/6/2016	Brooks Automation US, LLC
US	14/469,260	8/26/2014	11201073	12/14/2021	Brooks Automation US, LLC

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US	16/838,785	4/2/2020			Brooks Automation US, LLC
US	14/540,058	11/13/2014	10,742,092	8/11/2020	Brooks Automation US, LLC
US	15/952,595	4/13/2018	10,468,936	11/5/2019	Brooks Automation US, LLC
US	16/674,933	11/5/2019			Brooks Automation US, LLC
US	14/540,072	11/13/2014	9,948,155	4/17/2018	Brooks Automation US, LLC
US	16/197,107	11/20/2018			Brooks Automation US, LLC
US	14/568,742	12/12/2014	10,134,621	11/20/2018	Brooks Automation US, LLC
US	15/110,130	7/7/2016			Brooks Automation US, LLC
US	15/103,268	6/9/2016	10,777,438	9/15/2020	Brooks Automation US, LLC
US	16/011,978	6/19/2018	10,381,252	8/13/2019	Brooks Automation US, LLC
US	16/539,819	8/13/2019	10,770,325	9/8/2020	Brooks Automation US, LLC
US	17/014,575	9/8/2020			Brooks Automation US, LLC
US	14/937,676	11/10/2015	10,002,781	6/19/2018	Brooks Automation US, LLC
US	17/002,587	8/25/2020			Brooks Automation US, LLC
US	14/928,352	10/30/2015	10,755,960	8/25/2020	Brooks Automation US, LLC
US	16/197,087	11/20/2018	10,978,330	4/13/2021	Brooks Automation US, LLC
US	17/229,495	4/13/2021			Brooks Automation US, LLC
US	15/209,497	7/13/2016	10,134,623	11/20/2018	Brooks Automation US, LLC
US	16/996,409	8/18/2020			Brooks Automation US, LLC
US	15/743,727	1/11/2018	10748799	8/18/2020	Brooks Automation US, LLC
US	15/634,871	6/27/2017			Brooks Automation US, LLC
US	15/693,871	9/1/2017	10,607,879	3/11/2020	Brooks Automation US, LLC
US	15/889,811	2/6/2018			Brooks Automation US, LLC
US	16/151,598	10/4/2018	11,020,852	6/1/2021	Brooks Automation US, LLC

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US	16/872,864	5/12/2020			Brooks Automation US, LLC
US	15/880,387	1/25/2018	10,651,067	5/12/2020	Brooks Automation US, LLC
US	17/103,243	11/24/2020			Brooks Automation US, LLC
US	15/971,827	5/4/2018	10,843,341	11/24/2020	Brooks Automation US, LLC
US	17/158,523	1/26/2021			Brooks Automation US, LLC
US	16/029,320	7/6/2018	10,903,107	1/26/2021	Brooks Automation US, LLC
US	17/398,847	8/10/2021			Brooks Automation US, LLC
US	16/257,595	1/25/2019	11,088,004	8/10/2021	Brooks Automation US, LLC
US	16/354,954	3/15/2019			Brooks Automation US, LLC
US	16/942,255	7/29/2020	11164769	11/02/2021	Brooks Automation US, LLC
US	16/592,431	10/3/2019	11192239	12/07/2021	Brooks Automation US, LLC
US	16/668,290	10/30/2019			Brooks Automation US, LLC
US	17/176,949	2/16/2021			Brooks Automation US, LLC
US	16/692,359	11/22/2019	10,923,375	2/16/2021	Brooks Automation US, LLC
US	17/341,638	6/8/2021			Brooks Automation US, LLC
US	16/692,443	11/22/2019	11,031,265	6/8/2021	Brooks Automation US, LLC
US	17/156,007	1/22/2021		02/01/2022	Brooks Automation US, LLC
US	16/899,151	6/11/2020			Brooks Automation US, LLC
US	17/180,298	2/19/2021			Brooks Automation US, LLC
US	17/108,530	12/1/2020			Brooks Automation US, LLC
US	17/167,831	2/4/2021			Brooks Automation US, LLC
US	17/362,565	6/29/2021			Brooks Automation US, LLC
US	17/362,599	6/29/2021			Brooks Automation US, LLC
US	10/438,470	5/15/2003	7,042,568	5/9/2006	Brooks Automation US, LLC

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US	10/888,819	7/10/2004	7,055,875	6/6/2006	Brooks Automation US, LLC
US	11/404,536	4/14/2006	7,293,811	11/13/2007	Brooks Automation US, LLC
US	11/870,560	10/11/2007	7,669,903	3/2/2010	Brooks Automation US, LLC
US	10/087,400	3/1/2002	7,066,707	6/27/2006	Brooks Automation US, LLC
US	10/087,638	3/1/2002	7,100,340	9/5/2006	Brooks Automation US, LLC
US	10/194,702	7/12/2002	7,419,346	9/2/2008	Brooks Automation US, LLC
US	10/624,133	7/21/2003	7,300,082	11/27/2007	Brooks Automation US, LLC
US	11/014,401	12/16/2004	7,290,813	11/6/2007	Brooks Automation US, LLC
US	11/305,256	12/16/2005	7,648,327	1/19/2010	Brooks Automation US, LLC
US	11/774,764	7/9/2007	7,585,144	9/8/2009	Brooks Automation US, LLC
US	11/644,240	12/22/2006	9,834,378	12/5/2017	Brooks Automation US, LLC
US	12/143,197	6/20/2008	7,737,567	6/15/2010	Brooks Automation US, LLC
US	12/780,761	5/14/2010	8,851,820	10/7/2014	Brooks Automation US, LLC
US	12/780,846	5/14/2010	8,882,433	11/11/2014	Brooks Automation US, LLC
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RECORDED: 02/02/2022

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