PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT6379679

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
TIBCO SOFTWARE INC.	10/30/2020

RECEIVING PARTY DATA

Name:	JPMORGAN CHASE BANK, N.A., AS COLLATERAL AGENT
Street Address:	10 SOUTH DEARBORN
City:	CHICAGO
State/Country:	ILLINOIS
Postal Code:	60603

PROPERTY NUMBERS Total: 131

Property Type	Number
Application Number:	09443778
Application Number:	09518480
Application Number:	09583244
Application Number:	09746757
Application Number:	09784988
Application Number:	10058152
Application Number:	10063834
Application Number:	10271916
Application Number:	10278728
Application Number:	10305759
Application Number:	10432791
Application Number:	10439411
Application Number:	10611232
Application Number:	10687951
Application Number:	10728732
Application Number:	10898017
Application Number:	10992230
Application Number:	11173991
Application Number:	11180075
Application Number:	11361697

Property Type	Number
Application Number:	11395586
Application Number:	11400070
Application Number:	11458062
Application Number:	11468753
Application Number:	11487130
Application Number:	11623010
Application Number:	11644189
Application Number:	11644217
Application Number:	11675987
Application Number:	11734105
Application Number:	11784209
Application Number:	11824471
Application Number:	11824502
Application Number:	11866337
Application Number:	11981137
Application Number:	12011956
Application Number:	12433094
Application Number:	12433742
Application Number:	12522907
Application Number:	12536444
Application Number:	12576186
Application Number:	12762249
Application Number:	12840205
Application Number:	12906862
Application Number:	13077918
Application Number:	13084288
Application Number:	13098435
Application Number:	13104369
Application Number:	13116528
Application Number:	13117113
Application Number:	13117115
Application Number:	13173345
Application Number:	13225147
Application Number:	13225174
Application Number:	13225261
Application Number:	13298230
Application Number:	13298232
Application Number:	13298234

Property Type	Number
Application Number:	13298236
Application Number:	13298237
Application Number:	13333993
Application Number:	13357246
Application Number:	13357265
Application Number:	13452654
Application Number:	13464814
Application Number:	13536720
Application Number:	13562047
Application Number:	13594589
Application Number:	13668847
Application Number:	13685489
Application Number:	13782958
Application Number:	13837252
Application Number:	13842389
Application Number:	13842443
Application Number:	13946592
Application Number:	13957280
Application Number:	13975000
Application Number:	14012712
Application Number:	14188371
Application Number:	14300051
Application Number:	14336173
Application Number:	14479090
Application Number:	14540996
Application Number:	14665292
Application Number:	14666918
Application Number:	14690600
Application Number:	14702500
Application Number:	14718804
Application Number:	14826770
Application Number:	14919493
Application Number:	14925901
Application Number:	14925903
Application Number:	14951469
Application Number:	14952884
Application Number:	14976237
Application Number:	15067643

Property Type	Number
Application Number:	15076296
Application Number:	15139672
Application Number:	15186877
Application Number:	15214622
Application Number:	15217907
Application Number:	15237978
Application Number:	15274120
Application Number:	15344138
Application Number:	15357924
Application Number:	15382269
Application Number:	15406058
Application Number:	15417635
Application Number:	15427818
Application Number:	15582336
Application Number:	15647237
Application Number:	15662140
Application Number:	15674861
Application Number:	15812784
Application Number:	15831077
Application Number:	15908552
Application Number:	15941911
Application Number:	15942050
Application Number:	15994686
Application Number:	16104050
Application Number:	16116771
Application Number:	16141635
Application Number:	16168661
Application Number:	16352608
Application Number:	16385411
Application Number:	16596641
Application Number:	16691407
Application Number:	16706326
Application Number:	16738999
Application Number:	16751051
Application Number:	16809142

CORRESPONDENCE DATA

Fax Number: (800)914-4240

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.

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Correspondent Name:	CT CORPORATION
Address Line 1:	4400 EASTON COMMONS WAY
Address Line 2:	SUITE 125
Address Line 4:	COLUMBUS, OHIO 43219

NAME OF SUBMITTER:	DORIS KA
SIGNATURE:	/Doris Ka/
DATE SIGNED:	11/02/2020

Total Attachments: 16
source=04. TIBCO - Term Loan Patent Security Agreement#page1.tif
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source=04. TIBCO - Term Loan Patent Security Agreement#page16.tif

RECORDATION FORM COVER SHEET
PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)

TIBCO Software Inc.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☑ No

2. Name and address of receiving party(ies)

Name: JPMorgan Chase Bank, N.A., as Collateral Agent

Internal Address: _____

Street Address: 10 South Dearborn

City: Chicago

State: IL

Country: USA   Zip: 60603

Additional name(s) & address(es) attached? ☐ Yes ☑ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s) October 30, 2020

☐ Assignment   ☐ Merger
☑ Security Agreement   ☐ Change of Name
☐ Joint Research Agreement
☐ Government Interest Assignment
☐ Executive Order 9424, Confirmatory License
☐ Other_____

4. Application or patent number(s):   ☐ This document serves as an Oath/Declaration (37 CFR 1.63).

A. Patent Application No.(s)

See attached Schedule 1

B. Patent No.(s)

See attached Schedule 1

Additional numbers attached? ☑ Yes ☐ No

5. Name and address to whom correspondence concerning document should be mailed:

Name: Doris Ka, Senior Paralegal (IP)

Internal Address: Cahill Gordon & Reindel LLP

Street Address: 32 Old Slip

City: New York

State: NY   Zip: 10005

Phone Number: (212) 701-3569

Docket Number: 57320.1850 (Term)

Email Address: dka@cahill.com

6. Total number of applications and patents involved: 131

7. Total fee (37 CFR 1.21(h) & 3.41) $_____

☐ Authorized to be charged to deposit account
☐ Enclosed
☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account Number _____

Authorized User Name_____

9. Signature:

Doris Ka

Signature   October 30, 2020
                                   Date

Doris Ka

Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: **16**

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

**PATENT
REEL: 054275 FRAME: 0980**

PATENT SECURITY AGREEMENT

This Patent Security Agreement, dated as of October 30, 2020 (this "Patent Security Agreement"), is made by each Pledgor that is a signatory hereto, in favor of JPMorgan Chase Bank, N.A., in its capacity as collateral agent for the secured parties (in such capacity, the "Collateral Agent") pursuant to that certain Term Loan Credit Agreement, dated as of October 30, 2020 (as amended, restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among TIBCO Software Inc., a Delaware corporation (the "Borrower"), Balboa Intermediate Holdings, LLC, a Delaware limited liability company ("Holdings"), certain other Subsidiaries of Holdings from time to time party thereto, the Lenders from time to time party thereto and the several agents party thereto, including the Collateral Agent.

WITNESSETH:

WHEREAS, the Pledgors are party to a Term Loan Security Agreement of even date with the Credit Agreement (as amended, amended and restated, supplemented, waived or otherwise modified from time to time, the "Security Agreement") in favor of the Collateral Agent pursuant to which the Pledgors are required to execute and deliver this Patent Security Agreement.

NOW, THEREFORE, in consideration of the premises and to induce the Collateral Agent, for the benefit of the Secured Parties, to enter into the Credit Agreement, the Pledgors hereby agree with the Collateral Agent as follows:

SECTION 1.   Defined Terms. Unless otherwise defined herein, terms defined in the Security Agreement and used herein have the meaning given to them in the Security Agreement, or if not defined therein, in the Credit Agreement.

SECTION 2.   Grant of Security Interest in Patent Collateral. Each Pledgor hereby pledges and grants to the Collateral Agent for the benefit of the Secured Parties a Lien on and security interest in and to all of its right, title and interest in, to and under all the following Pledged Collateral of such Pledgor, in each case excluding Excluded Property (collectively, the "Patent Collateral"):

    (a)   all Patents of such Pledgor, including, without limitation, the United States patents and patent applications listed on Schedule 1 attached hereto; and

    (b)   all Proceeds of any and all of the foregoing.

SECTION 3.   Security Agreement. The security interest granted pursuant to this Patent Security Agreement is granted in conjunction with the security interest granted to the Collateral Agent pursuant to the Security Agreement, and the Pledgors hereby acknowledge and affirm that the rights and remedies of the Collateral Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Patent Security Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 4.   Termination. Upon the termination of the Commitments and full payment and performance of the Obligations (other than contingent indemnification obligations and unasserted expense reimbursement obligations), the security interest granted therein and the security interest granted herein shall automatically and immediately terminate and be deemed automatically and immediately released, and the Collateral Agent shall on the date thereof and, upon any request by any Pledgor, promptly execute, acknowledge, and deliver to the Pledgors an instrument in writing in recordable form releasing the collateral pledge, grant, assignment, lien and security interest in the Patents under this Patent Security Agreement. Any portion of the Patent Collateral shall be released automatically as set forth in the Pari Passu Intercreditor Agreement.

SECTION 5.   Recordation.   Each Pledgor authorizes and requests that the Commissioner for Patents and any other applicable government officer record this Patent Security Agreement.

SECTION 6.   Counterparts. This Patent Security Agreement may be executed in any number of counterparts, all of which shall constitute one and the same instrument, and any party hereto may execute this Patent Security Agreement by signing and delivering one or more counterparts. Delivery of an executed counterpart of this Patent Security Agreement by facsimile or other electronic means shall be effective as delivery of a manually executed counterpart of this Patent Security Agreement.

SECTION 7.   Governing Law.   This Patent Security Agreement and the transactions contemplated hereby, and all disputes between the parties under or relating to this Patent Security Agreement or the facts or circumstances leading to its execution, whether in contract, tort or otherwise, shall be construed in accordance with and governed by the laws (including statutes of limitation) of the State of New York, without regard to conflicts of law principles that would require the application of the laws of another jurisdiction.

SECTION 8.   Pari Passu Intercreditor Agreement Governs. Notwithstanding anything herein to the contrary, the lien and security interest granted to the Collateral Agent, pursuant to this Patent Security Agreement and the exercise of any right or remedy by the Collateral Agent hereunder will be subject to the limitations and provisions of the Pari Passu Intercreditor Agreement, upon and during the effectiveness thereof. In the event of any conflict between the terms of the First Lien Intercreditor, upon and during the effectiveness thereof, and this Patent Security Agreement, the terms of the Pari Passu Intercreditor Agreement shall govern and control.

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

PLEDGOR(S):

                                       TIBCO SOFTWARE INC.,
a Delaware corporation

By: _____
Name: Thomas Berquist
Title: Chief Financial Officer

[TIBCO - Signature Page to Patent Security Agreement (1L)]

PLEDGOR(S) (*continued*):

NETRICS.COM LLC,
a Delaware limited liability company

By: TIBCO Software Inc.
Its: Managing Member

By: _____
Name: Thomas Berquist
Title: Chief Financial Officer

[TIBCO - Signature Page to Patent Security Agreement (1L)]

PLEDGOR(S) (*continued*):

TIBCO KABIRA LLC,
a Delaware limited liability company

By: TIBCO Software Inc.
Its: Managing Member

By: _____
Name: Thomas Berquist
Title: Chief Financial Officer

[TIBCO - Signature Page to Patent Security Agreement (1L)]

Accepted and Agreed:

JPMORGAN CHASE BANK, N.A.,
as Collateral Agent

By: _____

      Name: Matthew Cheung
      Title: Vice President

SCHEDULE 1
to
PATENT SECURITY AGREEMENT

UNITED STATES PATENTS AND PATENT APPLICATIONS

United States Patent Applications and Patents:

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
1.	TIBCO Software Inc.	Contest server	09443778	11/19/1999	6532448	03/11/2003
2.	TIBCO Software Inc.	Intelligent console for content-based interactivity	09518480	03/03/2000	7823066	10/26/2010
3.	TIBCO Software Inc.	Method, apparatus and articles-of-manufacture for network-based distributed computing	09583244	05/31/2000	6757730	06/29/2004
4.	TIBCO Software Inc.	Method and apparatus for anonymous subject-based addressing	09746757	12/21/2000	7051118	05/23/2006
5.	TIBCO Software Inc.	Intra-process message switch	09784988	02/15/2001	7039050	05/02/2006
6.	TIBCO Software Inc.	Single applet to communicate with multiple HTML elements contained inside of multiple categories on a page	10058152	01/25/2002	7107543	09/12/2006
7.	TIBCO Software Inc.	System and method for determining convergence of image set registration	10063834	05/16/2002	7106891	09/12/2006
8.	TIBCO Software Inc.	System and method for mining quantitive information from medical images	10271916	10/15/2002	7158692	01/02/2007
9.	TIBCO Software Inc.	Delivery of data and formatting information to allow client-side manipulation	10278728	10/22/2002	8136109	03/13/2012
10.	TIBCO Software Inc.	Method and apparatus to maintain consistency between an object store and a plurality of caches utilizing transactional updates to data caches	10305759	11/27/2002	6970981	11/29/2005
11.	TIBCO Software Inc.	Multistage intelligent database search method	10432791	05/22/2003	7107263	09/12/2006
12.	TIBCO Software Inc.	Interactive SAR table	10439411	05/15/2003	7805437	09/28/2010

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
13.	TIBCO Software Inc.	Efficient transformation of information between a source schema and a target schema	10611232	06/30/2003	7225411	05/29/2007
14.	TIBCO Software Inc.	Method and system to communicate messages in a computer network	10687951	10/17/2003	8606859	12/10/2013
15.	TIBCO Software Inc.	Score-based scheduling of service requests in a grid services computing platform	10728732	12/05/2003	7130891	10/31/2006
16.	TIBCO Software Inc.	System and method for storing raw log data	10898017	07/23/2004	7599939	10/06/2009
17.	TIBCO Software Inc.	System and method for parsing, summarizing and reporting log data	10992230	11/18/2004	8234256	07/31/2012
18.	TIBCO Software Inc.	Automatic guide for data analysis	11173991	06/30/2005	8296654	10/23/2012
19.	TIBCO Software Inc.	Inferential state machines	11180075	07/12/2005	7472101	12/30/2008
20.	TIBCO Software Inc.	Unified interactive data analysis system	11361697	02/24/2006	9043266	05/26/2015
21.	TIBCO Software Inc.	Adaptive shared computing infrastructure for application server-based deployments	11395586	03/30/2006	7870568	01/11/2011
22.	TIBCO Software Inc.	Method and system for handling large data sets in a statistical language	11400070	04/07/2006	7739311	06/15/2010
23.	TIBCO Software Inc.	Certified message delivery and queuing in multipoint publish/subscribe communications	11458062	07/17/2006	7530078	05/05/2009
24.	TIBCO Software Inc.	Methods for efficient data version verification	11468753	08/30/2006	7606836	10/20/2009
25.	TIBCO Software Inc.	Method for allocating shared computing infrastructure for application server-based deployments	11487130	07/14/2006	7584281	09/01/2009
26.	TIBCO Software Inc.	Customized reporting and mining of event data	11623010	01/12/2007	7925678	04/12/2011
27.	TIBCO Software Inc.	Stream processor with compiled programs	11644189	12/22/2006	9038041	05/19/2015
28.	TIBCO Software Inc.	Data parallelism and parallel operations in stream processing	11644217	12/22/2006	8769485	07/01/2014
29.	TIBCO Software Inc.	Systems and methods for automating certification authority practices	11675987	02/16/2007	8984280	03/17/2015

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
30.	TIBCO Software Inc.	Efficient transformation of information between a source schema and a target schema	11734105	04/11/2007	8392356	03/05/2013
31.	TIBCO Software Inc.	Method and system for providing a visual debugger for an interpreted statistical language	11784209	04/04/2007	8087002	12/27/2011
32.	TIBCO Software Inc.	Multi-source data visualization system	11824471	06/29/2007	8190619	05/29/2012
33.	TIBCO Software Inc.	Data visualization system with axis binding	11824502	06/29/2007	8566334	10/22/2013
34.	TIBCO Software Inc.	Searching for associated events in log data	11866337	10/02/2007	8306967	11/06/2012
35.	TIBCO Software Inc.	Adaptive polling	11981137	10/31/2007	8195739	06/05/2012
36.	TIBCO Software Inc.	Methods for analyzing, limiting, and enhancing access to an internet API, web service, and data	12011956	01/29/2008	9027039	05/05/2015
37.	TIBCO Software Inc.	Java virtual machine having integrated transaction management system	12433094	04/30/2009	8219852	07/10/2012
38.	TIBCO Software Inc.	Java virtual machine having integrated transaction management system	12433742	04/30/2009	8606877	12/10/2013
39.	TIBCO Software Inc.	Monitoring a message associated with an action	12522907	05/07/2010	8510467	08/13/2013
40.	TIBCO Software Inc.	Message descriptions	12536444	08/05/2009	8386498	02/26/2013
41.	TIBCO Software Inc.	JAVA virtual machine having integrated transaction management system and facility to query managed objects	12576186	10/08/2009	8407723	03/26/2013
42.	TIBCO Software Inc.	Policy-based storage structure distribution	12762249	04/16/2010	9235623	04/16/2010
43.	TIBCO Software Inc.	Joining of machines in a connected instance group of a networked computing environment	12840205	07/20/2010	8996609	03/31/2015
44.	TIBCO Software Inc.	Intelligent console for content-based interactivity	12906862	10/18/2010	8966368	02/24/2015
45.	TIBCO Software Inc.	Systems and methods for searching multiple related tables	13077918	03/31/2011	9607044	03/28/2017
46.	TIBCO Software Inc.	Customized reporting and mining of event data	13084288	04/11/2011	8380752	02/19/2013

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
47.	TIBCO Software Inc.	Integrated phonetic matching methods and systems	13098435	04/30/2011	10275518	04/30/2019
48.	TIBCO Software Inc.	Managing static data structures of legacy software in dynamic class loader environments	13104369	05/10/2011	8789010	07/22/2014
49.	TIBCO Software Inc.	Distillation and reconstruction of provisioning components	13116528	05/26/2011	8560895	10/15/2013
50.	TIBCO Software Inc.	Capability model for deploying componentized applications	13117113	05/26/2011	8930941	01/06/2015
51.	TIBCO Software Inc.	Capability model for deploying componentized applications	13117115	05/26/2011	8930942	01/06/2015
52.	TIBCO Software Inc.	Suffix array candidate selection and index data structure	13173345	06/30/2011	8745061	06/03/2014
53.	TIBCO Software Inc.	Adaptive Data Transmission	13225147	09/02/2011	9191323	11/17/2015
54.	TIBCO Software Inc.	Dynamic Parsing Rules	13225174	09/02/2011	8484230	07/09/2013
55.	TIBCO Software Inc.	Random Access Data Compression	13225261	09/02/2011	8433823	04/30/2013
56.	TIBCO Software Inc.	Fast matching for content-based addressing	13298230	11/16/2011	8694536	04/08/2014
57.	TIBCO Software Inc.	Fast content-based routing	13298232	11/16/2011	8732320	05/20/2014
58.	TIBCO Software Inc.	Compression of message information transmitted over a network	13298234	11/16/2011	9049162	11/16/2011
59.	TIBCO Software Inc.	Hierarchical bitmasks for indicating the presence or absence of serialized data fields	13298236	11/16/2011	8751671	06/10/2014
60.	TIBCO Software Inc.	Locking and signaling for implementing messaging transports with shared memory	13298237	11/16/2011	8898399	11/25/2014
61.	TIBCO Software Inc.	Method and system for providing a visual debugger for an interpreted statistical language	13333993	12/21/2011	8286142	10/09/2012
62.	TIBCO Software Inc.	Data mining and model generation using an in-database analytic flow generator	13357246	01/24/2012	9043337	05/26/2015
63.	TIBCO Software Inc.	Data mining and model generation using an in-database analytic flow generator	13357265	01/24/2012	9043344	05/26/2015

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
64.	TIBCO Software Inc.	System and method for loading objects for object-relational mapping	13452654	04/20/2012	8903797	12/02/2014
65.	TIBCO Software Inc.	Java virtual machine having integrated transaction management system	13464814	05/04/2012	8438421	05/07/2013
66.	TIBCO Software Inc.	Method and Apparatus For Retrieving and Combining Summarized Log Data In a Distributed Log Data Processing System	13536720	06/28/2012	9298691	06/28/2012
67.	TIBCO Software Inc.	System and method for parsing, summarizing and reporting log data	13562047	07/30/2012	8903836	12/02/2014
68.	TIBCO Software Inc.	Collaborative, contextual enterprise networking systems and methods	13594589	08/24/2012	8892670	11/18/2014
69.	TIBCO Software Inc.	Searching for associated events in log data	13668847	11/05/2012	9171037	11/05/2012
70.	TIBCO Software Inc.	Database query optimization and cost estimation	13685489	11/26/2012	8880511	11/04/2014
71.	TIBCO Software Inc.	Virtual clusters to provide fault containment	13782958	03/01/2013	9444694	09/13/2016
72.	TIBCO Software Inc.	Predictive System for Designing Enterprise Applications	13837252	03/15/2013	9317808	03/15/2013
73.	TIBCO Software Inc.	Data replication protocol with efficient update of replica machines	13842389	03/15/2013	9418130	08/16/2016
74.	TIBCO Software Inc.	Data replication protocol with steady state data distribution and quorum formation	13842443	03/15/2013	9081843	07/14/2015
75.	TIBCO Software Inc.	Semantics-oriented analysis of log message content	13946592	07/19/2013	9336203	07/19/2013
76.	TIBCO Software Inc.	Systems and methods for analysis of data at disparate data sources	13957280	08/01/2013		
77.	TIBCO Software Inc.	Just in time compilation (JIT) for business process execution	13975000	08/23/2013	9519879	12/13/2016
78.	TIBCO Software Inc.	Message matching	14012712	08/28/2013	10051438	08/14/2018
79.	TIBCO Software Inc.	Modularized XML namespaces	14188371	02/14/2014	9323501	02/24/2014
80.	TIBCO Software Inc.	Hierarchical bitmasks for indicating the presence or absence of serialized data fields	14300051	06/09/2014	9137337	06/09/2014

	Assignee	Patent Title	Serial No.	Filing Date	Patent No.	Issue Date
81.	TIBCO Software Inc.	Data mapping service	14336173	07/21/2014		
82.	TIBCO Software Inc.	Visual development environment for implementing logic modules	14479090	09/15/2014	9141349	09/05/2014
83.	TIBCO Software Inc.	Collaborative, contextual enterprise networking systems and methods	14540996	11/13/2014	9497263	11/15/2016
84.	TIBCO Software Inc.	Automatic Optimization of Continuous Processes	14665292	03/23/2015	10481919	11/19/2019
85.	TIBCO Software Inc.	Adaptive Sampling via Adaptive Optimal Experimental Designs to Extract Maximum Information from Large Data Repositories	14666918	03/24/2015	10007681	06/26/2018
86.	TIBCO Software Inc.	Graph Theory and Network Analytics and Diagnostics for Process Optimization in Manufacturing	14690600	04/20/2015	9952577	04/24/2018
87.	TIBCO Software Inc.	Compression of message information transmitted over a network	14702500	05/01/2015	9736097	08/15/2017
88.	TIBCO Software Inc.	System and Method for Agglomerative Clustering	14718804	05/21/2015	10162878	12/25/2018
89.	TIBCO Software Inc.	Method for Performing In-Database Distributed Advanced Predictive Analytics Modeling via Common Queries	14826770	08/14/2015	10649973	05/12/2020
90.	TIBCO Software Inc.	Method and systems for selecting a data transmission path for navigating a dynamic data structure	14919493	10/21/2015	10255568	04/09/2019
91.	TIBCO Software Inc.	Context aware recommendation of analytic components	14925901	10/28/2015		
92.	TIBCO Software Inc.	Time-based aggregation to feed a rete engine	14925903	10/28/2015		
93.	TIBCO Software Inc.	Policy-based Storage Structure Distribution	14951469	11/24/2015		
94.	TIBCO Software Inc.	Policy-based Storage Structure Distribution	14952884	11/25/2015	9367600	11/25/2015
95.	TIBCO Software Inc.	Authoring and consuming offline an interactive data analysis document	14976237	12/21/2015	9983774	05/29/2018
96.	TIBCO Software Inc.	Auto Query Construction for In-Database Predictive Analytics	15067643	03/11/2016	10671603	06/02/2020

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97.	TIBCO Software Inc.	Modularized xml namespaces	15076296	03/21/2016	9864581	01/09/2018
98.	TIBCO Software Inc.	Method for in-database feature selection in high-dimensional inputs	15139672	04/27/2016	10467226	11/05/2019
99.	TIBCO Software Inc.	Detecting important variables and their interactions in big data	15186877	06/20/2016		
100.	TIBCO Software Inc.	System for managing effective self-service analytic workflows	15214622	07/20/2016		
101.	TIBCO Software Inc.	Parameter driven execution of advanced analytic workflows	15217907	07/22/2016		
102.	TIBCO Software Inc.	System for rapid identification of sources of variation in complex manufacturing processes	15237978	08/16/2016	10386822	08/20/2019
103.	TIBCO Software Inc.	Custom-built process engine with minimal memory and disk resource consumption	15274120	09/23/2016	10216498	02/26/2019
104.	TIBCO Software Inc.	Just in time compilation (JIT) for business process execution	15344138	11/04/2016	10311392	06/04/2019
105.	TIBCO Software Inc.	Using a b-tree to store graph information in a database	15357924	11/21/2016	10579680	03/03/2020
106.	TIBCO Software Inc.	Virtual working memory	15382269	12/16/2016		
107.	TIBCO Software Inc.	Process modification	15406058	01/13/2017		
108.	TIBCO Software Inc.	Stepback mechanism to develop and diagnose process applications	15417635	01/27/2017	10635160	04/28/2020
109.	TIBCO Software Inc.	Systems and methods for searching multiple related tables	15427818	02/08/2017	10496648	12/03/2019
110.	TIBCO Software Inc.	Execution manager for binary objects operating across private address spaces	15582336	04/28/2017	10528391	01/07/2020
111.	TIBCO Software Inc.	Compression of message information transmitted over a network	15647237	07/11/2017	10097487	10/09/2018
112.	TIBCO Software Inc.	Auto-generation of api documentation via implementation-neutral analysis of api traffic	15662140	07/27/2017		

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113.	TIBCO Software Inc.	Platform-agnostic predictive models based on database management system instructions	15674861	08/11/2017	10540155	01/21/2020
114.	TIBCO Software Inc.	Adaptive page replacement	15812784	11/14/2017	10691614	06/23/2020
115.	TIBCO Software Inc.	Modularized xml namespaces	15831077	12/04/2017	10095483	10/09/2018
116.	TIBCO Software Inc.	Distributed processing of a large matrix data set	15908552	02/28/2018		
117.	TIBCO Software Inc.	Graph theory and network analytics and diagnostics for process optimization in manufacturing	15941911	03/30/2018	10248110	04/02/2019
118.	TIBCO Software Inc.	Compression of message information transmitted over a network	15942050	03/30/2018	10560406	02/11/2020
119.	TIBCO Software Inc.	Patching json documents that contain arrays undergoing concurrent modification	15994686	05/31/2018		
120.	TIBCO Software Inc.	An interpreter for interpreting a data model algorithm and creating a data shema	16104050	08/18/2018		
121.	TIBCO Software Inc.	System and method for managing tasks and task workload items between address spaces and logical partitions	16116771	08/29/2018		
122.	TIBCO Software Inc.	Predictive engine for generating multivariate predictive responses	16141635	09/25/2018		
123.	TIBCO Software Inc.	Predictive engine for multistage pattern discovery and visual analytics recommendations	16168661	10/23/2018		
124.	TIBCO Software Inc.	Process control tool for processing big and wide data	16352608	03/13/2019		
125.	TIBCO Software Inc.	Just in time compilation (JIT) for business process execution	16385411	04/16/2019	10657476	05/19/2020
126.	TIBCO Software Inc.	System for efficient information extraction from streaming data via experimental designs	16596641	10/08/2019		
127.	TIBCO Software Inc.	Using a b-tree to store graph information in a database	16691407	11/21/2019		

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128.	TIBCO Software Inc.	Execution manager for binary objects operating across private address spaces	16706326	12/06/2019		
129.	TIBCO Software Inc.	A system for rapid interactive exploration of big data	16738999	01/09/2020		
130.	TIBCO Software Inc.	Adaptive filtering and modeling via adaptive experimental designs to identify emerging data patterns from large volume, high dimensional, high velocity streaming data	16751051	01/23/2020		
131.	TIBCO Software Inc.	An algorithmic learning engine for dynamically generating predictive analytics from high volume, high velocity streaming data	16809142	03/04/2020		