PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

Assignment ID: PATI615033

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	Grant of First Lien Security Interest in Patent Rights
SEQUENCE:	1

CONVEYING PARTY DATA

Name	Execution Date
BMC Software, Inc.	07/30/2024
BladeLogic, Inc.	07/30/2024

RECEIVING PARTY DATA

Company Name:	Goldman Sachs Bank USA, as Collateral Agent
Street Address:	200 West Street
City:	New York
State/Country:	NEW YORK
Postal Code:	10282

PROPERTY NUMBERS Total: 432

Property Type	Number
Patent Number:	7934126
Patent Number:	8151141
Patent Number:	7114104
Patent Number:	7509672
Patent Number:	7730471
Patent Number:	7676695
Patent Number:	8782638
Patent Number:	9002902
Patent Number:	9489451
Patent Number:	10528457
Patent Number:	10990515
Patent Number:	7774458
Patent Number:	9037536
Patent Number:	7877783
Patent Number:	7194728
Patent Number:	8151261
Patent Number:	7680833
Patent Number:	7287068

Property Type	Number
Patent Number:	7996501
Patent Number:	7617073
Patent Number:	7062683
Patent Number:	7882213
Patent Number:	7496572
Patent Number:	7809762
Patent Number:	8000932
Patent Number:	7133884
Patent Number:	7769718
Patent Number:	7555491
Patent Number:	7742423
Patent Number:	7664790
Patent Number:	8645331
Patent Number:	7930291
Patent Number:	9449067
Patent Number:	7925635
Patent Number:	7689628
Patent Number:	7502844
Patent Number:	7716353
Patent Number:	7685167
Patent Number:	7730044
Patent Number:	8121992
Patent Number:	7765346
Patent Number:	8117361
Patent Number:	7801865
Patent Number:	8239343
Patent Number:	7996515
Patent Number:	8560684
Patent Number:	8818953
Patent Number:	7933927
Patent Number:	9137115
Patent Number:	10534577
Patent Number:	10795643
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Patent Number:	9967162
Patent Number:	10523543
Patent Number:	7941506
Patent Number:	8612408

Property Type	Number
Patent Number:	8862631
Patent Number:	9239857
Patent Number:	8443438
Patent Number:	9792348
Patent Number:	10585918
Patent Number:	10339159
Patent Number:	8887133
Patent Number:	9152413
Patent Number:	11132192
Patent Number:	9122719
Patent Number:	10235435
Patent Number:	8555287
Patent Number:	9065783
Patent Number:	9405587
Patent Number:	10169095
Patent Number:	10942781
Patent Number:	8671076
Patent Number:	8306945
Patent Number:	9779181
Patent Number:	8301755
Patent Number:	8051164
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Patent Number:	8463899
Patent Number:	8190579
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Patent Number:	8775456
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Patent Number:	8464246
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Patent Number:	9753811
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Patent Number:	8554750
Patent Number:	10671593

Property Type	Number
Patent Number:	8082222
Patent Number:	8380749
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Patent Number:	8353013
Patent Number:	8171005
Patent Number:	8601489
Patent Number:	8352947
Patent Number:	8352948
Patent Number:	9477518
Patent Number:	9158572
Patent Number:	8682872
Patent Number:	8700566
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Patent Number:	8180728
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Patent Number:	9122536
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Patent Number:	8589554
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Patent Number:	9467344

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Patent Number:	10198476
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Patent Number:	8674992
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Patent Number:	9356846
Patent Number:	9350627
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Patent Number:	9300624
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Patent Number:	10366074
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Patent Number:	8447791
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Patent Number:	10367878
Patent Number:	9251026
Patent Number:	10372586
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Patent Number:	10289705
Patent Number:	9135076
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Patent Number:	9734237
Patent Number:	10706088

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Patent Number:	9261372
Patent Number:	9631934
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Patent Number:	9760396
Patent Number:	9003233
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Patent Number:	9679059
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Patent Number:	9852165
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Patent Number:	10824993
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Patent Number:	9710525
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Patent Number:	10104079
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Property Type	Number
Patent Number:	9946528
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Patent Number:	10826974
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Patent Number:	10802878
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Property Type	Number
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Patent Number:	11449412
Patent Number:	11640329

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Patent Number:	9740461
Patent Number:	10754733
Application Number:	16434937
Application Number:	16352161
Application Number:	16949477
Application Number:	17301143
Application Number:	18332336
Application Number:	18310288
Application Number:	17449538
Application Number:	17646706
Application Number:	17452398
Application Number:	17649489
Application Number:	17450686
Application Number:	17657625
Application Number:	18519822
Application Number:	17657628
Application Number:	17657617

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Application Number:	17657347
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Application Number:	17809486
Application Number:	17649543
Application Number:	17810215
Application Number:	18743641
Application Number:	17656557
Application Number:	18148166
Application Number:	17934992
Application Number:	17810264
Application Number:	17937254
Application Number:	17937261
Application Number:	18194612
Application Number:	18171104
Application Number:	18147937
Application Number:	18194190
Application Number:	18194547
Application Number:	18241095
Application Number:	18345878
Application Number:	18511530
Application Number:	18511543
Application Number:	18511550
Application Number:	18478930
Application Number:	18478933
Application Number:	18523804
Application Number:	17832328
Application Number:	18649521
Application Number:	18622568
Application Number:	18588845
Application Number:	18401293
Application Number:	18592367
Application Number:	18622305
Application Number:	18634853
Application Number:	18622841

CORRESPONDENCE DATA

Fax Number:

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:	(202)835-7507
Email:	jramos@milbank.com,DCIP@milbank.com
Correspondent Name:	Javier J. Ramos
Address Line 1:	1850 K Street, NW
Address Line 2:	Suite 1100
Address Line 4:	Washington, DISTRICT OF COLUMBIA 20006

ATTORNEY DOCKET NUMBER:	30045.00671
NAME OF SUBMITTER:	JAVIER RAMOS
SIGNATURE:	JAVIER RAMOS
DATE SIGNED:	11/13/2024

Total Attachments: 27

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GRANT OF FIRST LIEN
SECURITY INTEREST IN PATENT RIGHTS

This GRANT OF FIRST LIEN SECURITY INTEREST IN PATENT RIGHTS (this "Agreement"), dated as of July 30, 2024, is made by BMC Software, Inc., a Delaware corporation, and BladeLogic, Inc., a Delaware corporation (each, a "Grantor" and collectively, the "Grantors"), in favor of Goldman Sachs Bank USA, as collateral agent (in such capacity, the "Agent") for the benefit of the Secured Parties in connection with that certain Credit Agreement, dated as of October 2, 2018 (as amended by that certain Incremental Revolving Joinder Agreement, dated as of June 1, 2020, that certain Amendment No. 1, dated as of February 24, 2021, that certain Additional Borrowers Joinder Agreement, dated as of April 16, 2021, that certain Amendment No. 2, dated as of September 30, 2021, that certain Amendment No. 3, dated as of June 30, 2022, that certain Amendment No. 4, dated as of June 23, 2023, that certain Incremental Revolving Joinder Agreement No. 2, dated as of December 29, 2023, that certain Amendment No. 5, dated as of December 29, 2023, that certain Incremental Term Loan Joinder Agreement No. 1, dated as of January 31, 2024, that certain Resignation, Waiver, Amendment and Appointment Agreement, dated as of February 29, 2024, and that certain Amendment No. 6, dated as of July 30, 2024, and as further amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Credit Agreement"), by and among Banff Guarantor Inc., a Delaware corporation ("Holdings"), Boxer Parent Company Inc., a Delaware corporation, BMC Software, Inc., a Delaware corporation, and BladeLogic, Inc., a Delaware corporation (collectively, the "Borrower"), the lenders from time to time party thereto (each, a "Lender" and collectively, the "Lenders"), the Letter of Credit Issuers from time to time party thereto and Goldman Sachs Bank USA, as the Administrative Agent and the Collateral Agent.

W I T N E S S E T H:

WHEREAS, pursuant to the Credit Agreement, the Lenders have severally agreed to make their respective extensions of credit to the Borrower upon the terms and subject to the conditions set forth therein;

WHEREAS, in connection with the Credit Agreement, each Grantor and any Subsidiaries that become a party thereto, have executed and delivered the Security Agreement, dated as of October 2, 2018 in favor of the Agent (together with all amendments, restatements, supplements and modifications, if any, from time to time thereafter made thereto, the "Security Agreement");

WHEREAS, pursuant to the Security Agreement, each Grantor has granted to the Agent, for the benefit of the Secured Parties, a lien on and security interest in, all of its right, title and interest in, to and under certain Intellectual Property, including the Patents, that is not Excluded Property; and

NOW THEREFORE, in consideration of the premises and to induce the Administrative Agent, the Collateral Agent, the Lenders to enter into the Credit Agreement, to induce the Lenders to make their respective extensions of credit under the Credit Agreement, the Grantors hereby agree with the Collateral Agent, for the benefit of the Secured Parties, as follows:

1.   Definitions. Unless otherwise defined herein or the context otherwise requires, terms used in this Agreement, including its preamble and recitals, have the meanings provided or provided by reference in the Credit Agreement and the Security Agreement.

2.   Grant of Security Interest. Each Grantor hereby grants a lien on and security interest in all of such Grantor's right, title and interest in, to and under the Patents that are not Excluded Property (including, without limitation, those items listed on Schedule A hereto), including the right to receive all Proceeds therefrom (collectively, the "Collateral"), to the Agent for the benefit of the Secured Parties as

collateral security for the prompt and complete payment and performance when due (whether at the stated maturity, by acceleration or otherwise), in full of the Obligations.

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 security interest granted hereby has been granted to the Secured Parties in connection with the Security Agreement and is expressly subject to the terms and conditions thereof. The Security Agreement (and all rights and remedies of the Secured Parties thereunder) shall remain in full force and effect in accordance with its terms.

4.   Acknowledgment. Each Grantor does hereby further acknowledge and affirm that the rights and remedies of the Secured Parties with respect to the security interest in the Collateral granted hereby are more fully set forth in the Credit Agreement and the Security Agreement, the terms and provisions of which (including the remedies provided for therein) are incorporated by reference herein as if fully set forth herein. In the event of any conflict between the terms of this Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern. In the event of any conflict between the terms of this Agreement and the terms of the Credit Agreement, the terms of the Credit Agreement shall govern.

5.   Counterparts. This Agreement may be executed in one or more counterparts (including by facsimile or other electronic transmission), each of which will be deemed an original, but all of which together constitute one and the same original. The words "execution", "execute", "signed", "signature", and words of like import in or related to any document to be signed in connection with this Agreement and the transactions contemplated hereby shall be deemed to include electronic signatures, the electronic matching of assignment terms and contract formations on electronic platforms approved by the Administrative Agent, or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act (E-Sign Act) of 2000, the New York State Electronic Signatures and Records Act as updated in 2021, or any other similar state laws based on the Uniform Electronic Transactions Act of 1999.

6.   Governing Law: THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the day and year first above written.

BMC SOFTWARE, INC.,
as a Grantor

By: Marc Rothman
Name: Marc E. Rothman
Title: Senior Vice President, Chief Financial Officer

BLADELOGIC, INC.,
as a Grantor

By: Marc Rothman
Name: Marc E. Rothman
Title: Chief Financial Officer

[Signature Page to Grant of Security Interest in Patent Rights]

**PATENT
REEL: 069352 FRAME: 0643**

GOLDMAN SACHS BANK USA, as the
Collateral Agent

By:_____
Authorized Signatory

SCHEDULE A

UNITED STATES ISSUED PATENTS AND PATENT APPLICATIONS

Compuware Patents

Title	Application No.	Patent No.	Owner
Resolution of computer operations problems using fault trend analysis.	12690004	7934126 Valid till: 06-05-2027	BMC Software, Inc.
Resolution of computer operations problems using fault trend analysis.	13048763	8151141 Valid till: 06-05-2027	BMC Software, Inc.
System and method of fault detection in a Unix environment.	10364728	7114104 Valid till: 10-27-2024	BMC Software, Inc.
Cross-platform single sign-on data sharing.	10817275	7509672 Valid till: 03-25-2026	BMC Software, Inc.
Method and system for processing COBOL language record description entries that specify data items that include a varying length characteristic and computer readable storage medium for storing instructions for performing the method.	11180160	7730471 Valid till: 06-05-2028	BMC Software, Inc.
Resolution of computer operations problems using fault trend analysis.	11758641	7676695 Valid till: 06-12-2028	BMC Software, Inc.
Execution pathway for interfacing with legacy programs in a mainframe environment.	13300026	8782638 Valid till: 04-03-2032	BMC Software, Inc.
Techniques for constructing minimum supersets of test data from relational databases.	13603758	9002902 Valid till: 11-07-2033	BMC Software, Inc.
Visual data definition for identifying data items in loosely-structured data.	13910468	9489451 Valid till: 10-06-2034	BMC Software, Inc.
Automated Unit Testing In A Mainframe Environment	15913159	10528457 Valid till: 04-25-2038	BMC Software, Inc.

Title	Application No.	Patent No.	Owner
Automated Unit Testing in A Mainframe Environment.	16700261	10990515 Valid till: 03-06-2038	BMC Software, Inc.

Other Patents

Title	Patent No.	Issue Date	Owner
System and method of enterprise systems and business impact management	7774458	Aug 10, 2010	BMC Software, Inc.
Database management system and method which monitors activity levels and determines appropriate schedule times	9037536	May 19, 2015	BMC Software, Inc.
System and method for secure communications with a remote software program	7877783	Jan 25, 2011	BMC Software, Inc.
System and method for packaging updates	7194728	Mar 20, 2007	BMC Software, Inc.
System and method for packaging updates	8151261	Apr 3, 2012	BMC Software, Inc.
System and method for database structure comparison	7680833	Mar 16, 2010	BMC Software, Inc.
System and method for updating devices that execute an operating system or application program directly from nonvolatile storage	7287068	Oct 23, 2007	BMC Software, Inc.
System and method for updating devices that execute an operating system application program directly from nonvolatile storage	7996501	Aug 9, 2011	BMC Software, Inc.
System and method for assessing and indicating the health of components	7617073	Nov 10, 2009	BMC Software, Inc.
Two-phase root cause analysis	7062683	Jun 13, 2006	BMC Software, Inc.
Network management system to monitor managed elements	7882213	Feb 1, 2011	BMC Software, Inc.
Reorganizing database objects using variable length keys	7496572	Feb 24, 2009	BMC Software, Inc.
Outage-less database change operation	7809762	Oct 5, 2010	BMC Software, Inc.
System and method for statistical performance monitoring	8000932	Aug 16, 2011	BMC Software, Inc.
Unobtrusive point-in-time consistent copies	7133884	Nov 7, 2006	BMC Software, Inc.

Title	Patent No.	Issue Date	Owner
Unobtrusive point-in-time consistent copies	7769718	Aug 3, 2010	BMC Software, Inc.
Removing overflow rows in a relational database	7555491	Jun 30, 2009	BMC Software, Inc.
Method of heuristic determination of network interface transmission mode and apparatus implementing such method	7742423	Jun 22, 2010	BMC Software, Inc.
Cascade delete processing	7664790	Feb 16, 2010	BMC Software, Inc.
Cascade delete processing	8645331	Feb 4, 2014	BMC Software, Inc.
Constraint processing	7930291	Apr 19, 2011	BMC Software, Inc.
Constraint processing	9449067	Sep 20, 2016	BMC Software, Inc.
System and method for collecting statistics related to software usage	7925635	Apr 12, 2011	BMC Software, Inc.
Monitoring several distributed resource elements as a resource pool	7689628	Mar 30, 2010	BMC Software, Inc.
Abnormality indicator of a desired group of resource elements	7502844	Mar 10, 2009	BMC Software, Inc.
Web services availability cache	7716353	May 11, 2010	BMC Software, Inc.
Configuration management database reference instance	7685167	Mar 23, 2010	BMC Software, Inc.
Log data store and assembler for large objects in database system	7730044	Jun 1, 2010	BMC Software, Inc.
Log data store and assembler for large objects in database system	8121992	Feb 21, 2012	BMC Software, Inc.
Dynamic compression of systems management data	7765346	Jul 27, 2010	BMC Software, Inc.
Dynamic compression of systems management data	8117361	Feb 14, 2012	BMC Software, Inc.
System and method for providing access to a database during a recovery process	7801865	Sep 21, 2010	BMC Software, Inc.
Database reorganization technique	8239343	Aug 7, 2012	BMC Software, Inc.
Network transaction discovery	7996515	Aug 9, 2011	BMC Software, Inc.
Network transaction discovery	8560684	Oct 15, 2013	BMC Software, Inc.
Method and apparatus for loading data into multi-table tablespace	8818953	Aug 26, 2014	BMC Software, Inc.
Method and apparatus for building index of source data	7933927	Apr 26, 2011	BMC Software, Inc.
System and method for resource reconciliation in an enterprise management system	9137115	Sep 15, 2015	BMC Software, Inc.
Resource reconciliation	10534577	Jan 14, 2020	BMC Software, Inc.
Resource reconciliation	10795643	Oct 6, 2020	BMC Software, Inc.

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Generic discovery for computer networks	8683032	Mar 25, 2014	BMC Software, Inc.
Generic discovery for computer networks	9967162	May 8, 2018	BMC Software, Inc.
Generic discovery for computer networks	10523543	Dec 31, 2019	BMC Software, Inc.
User interface for network discovery operations	7941506	May 10, 2011	BMC Software, Inc.
System and method for business service management	8612408	Dec 17, 2013	BMC Software, Inc.
System and method for building business service model	8862631	Oct 14, 2014	BMC Software, Inc.
System and method for building business service model	9239857	Jan 19, 2016	BMC Software, Inc.
Method and system for deployment of agents	8443438	May 14, 2013	BMC Software, Inc.
Overlay dataset	9792348	Oct 17, 2017	BMC Software, Inc.
Overlay dataset	10585918	Mar 10, 2020	BMC Software, Inc.
Overlay dataset	10339159	Jul 2, 2019	BMC Software, Inc.
Bi-directional communication between change management tool and implementation tools	8887133	Nov 11, 2014	BMC Software, Inc.
Bi-directional communication between change management tool and implementation tools	9152413	Oct 6, 2015	BMC Software, Inc.
Bi-directional communication between change management tool and implementation tools	11132192	Sep 28, 2021	BMC Software, Inc.
Database application federation	9122719	Sep 1, 2015	BMC Software, Inc.
Database application federation	10235435	Mar 19, 2019	BMC Software, Inc.
Automated capacity provisioning method using historical performance data	8555287	Oct 8, 2013	BMC Software, Inc.
Automated capacity provisioning method using historical performance data	9065783	Jun 23, 2015	BMC Software, Inc.
Automated capacity provisioning method using historical performance data	9405587	Aug 2, 2016	BMC Software, Inc.
Automated capacity provisioning method using historical performance data	10169095	Jan 1, 2019	BMC Software, Inc.

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Automated capacity provisioning method using historical performance data	10942781	Mar 9, 2021	BMC Software, Inc.
Database recovery using logs applied to consistent copies	8671076	Mar 11, 2014	BMC Software, Inc.
Associating database log records into logical groups	8306945	Nov 6, 2012	BMC Software, Inc.
Dynamic folding of listed items for display	9779181	Oct 3, 2017	BMC Software, Inc.
Impact propagation in a directed acyclic graph	8301755	Oct 30, 2012	BMC Software, Inc.
Impact propagation in a directed acyclic graph having restricted views	8051164	Nov 1, 2011	BMC Software, Inc.
Service model flight recorder	8082275	Dec 20, 2011	BMC Software, Inc.
System, method and computer program product for optimized root cause analysis	8463899	Jun 11, 2013	BMC Software, Inc.
IMS change mapper	8190579	May 29, 2012	BMC Software, Inc.
Method and system for configuration management database software license compliance	8646093	Feb 4, 2014	BMC Software, Inc.
System and method for scheduled and collaborative distribution of software and data to many thousands of clients over a network using dynamic virtual proxies	8775456	Jul 8, 2014	BMC Software, Inc.
Method of reconciling resources in the metadata hierarchy	10831724	Nov 10, 2020	BMC Software, Inc.
Automation of mainframe software deployment	8464246	Jun 11, 2013	BMC Software, Inc.
Method to make SMP/E based products self describing	8584117	Nov 12, 2013	BMC Software, Inc.
Data set size tracking and management	9251149	Feb 2, 2016	BMC Software, Inc.
Unobtrusive copies of actively used compressed indices	8843449	Sep 23, 2014	BMC Software, Inc.
Unobtrusive copies of actively used compressed indices	9753811	Sep 5, 2017	BMC Software, Inc.
Unobtrusive copies of actively used compressed indices	10642696	May 5, 2020	BMC Software, Inc.
Software title discovery	8346752	Jan 1, 2013	BMC Software, Inc.
Unified service model for business service management	10867259	Dec 15, 2020	BMC Software, Inc.
Balancing data across partitions of a table space during load processing	9177004	Nov 3, 2015	BMC Software, Inc.

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Normalization engine to manage configuration management database integrity	8554750	Oct 8, 2013	BMC Software, Inc.
Normalization engine to manage configuration management database integrity	10671593	Jun 2, 2020	BMC Software, Inc.
CMDB federation method and management system	8082222	Dec 20, 2011	BMC Software, Inc.
MDR federation facility for CMDBF	8380749	Feb 19, 2013	BMC Software, Inc.
Method and system to automatically adapt web services from one protocol/idiom to another protocol/idiom	8473595	Jun 25, 2013	BMC Software, Inc.
Relational database page-level schema transformations	8161001	Apr 17, 2012	BMC Software, Inc.
Asynchronous collection and correlation of trace and communications event data	9037555	May 19, 2015	BMC Software, Inc.
Authorized application services via an xml message protocol	8353013	Jan 8, 2013	BMC Software, Inc.
Database quiesce operations	8171005	May 1, 2012	BMC Software, Inc.
Automated computer systems event processing	8601489	Dec 3, 2013	BMC Software, Inc.
Method to automatically redirect SRB routines to a ZIIP eligible enclave	8352947	Jan 8, 2013	BMC Software, Inc.
Method to automatically redirect SRB routines to a ZIIP eligible enclave	8352948	Jan 8, 2013	BMC Software, Inc.
A method to automatically redirect SRB routines to a ZIIP eligible enclave	9477518	Oct 25, 2016	BMC Software, Inc.
Method to automatically redirect SRB routines to a ZIIP eligible enclave	9158572	Oct 13, 2015	BMC Software, Inc.
Index page split avoidance with mass insert processing	8682872	Mar 25, 2014	BMC Software, Inc.
Offline restructuring of DEDB databases	8700566	Apr 15, 2014	BMC Software, Inc.
Offline restructuring of DEDB databases	9128976	Sep 8, 2015	BMC Software, Inc.
Area-specific reload of database	8180728	May 15, 2012	BMC Software, Inc.
Method and system for traversing in reverse chronological order along a critical path of a plurality of jobs, and reducing time gaps between jobs until an estimated end time of the last job is less than or equal to a target end time	8473951	Jun 25, 2013	BMC Software, Inc.

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Method of collecting and correlating locking data to determine ultimate holders in real time	8407531	Mar 26, 2013	BMC Software, Inc.
Automating application provisioning for heterogeneous datacenter environments	9122536	Sep 1, 2015	BMC Software, Inc.
Automating application provisioning for heterogeneous datacenter environments	9766935	Sep 19, 2017	BMC Software, Inc.
Intelligent and elastic resource pools for heterogeneous datacenter environments	8589554	Nov 19, 2013	BMC Software, Inc.
Extending a Database Recovery Point At A Disaster Recovery Site	9767181	Sep 19, 2017	BMC Software, Inc.
Method and system to enable inferencing for natural language queries of configuration management databases	8380645	Feb 19, 2013	BMC Software, Inc.
Extending a database recovery point at a disaster recovery site	8954563	Feb 10, 2015	BMC Software, Inc.
Utility-optimized scheduling of time-sensitive tasks in a resource-constrained environment	8875143	Oct 28, 2014	BMC Software, Inc.
Utility-optimized scheduling of time-sensitive tasks in a resource-constrained environment	9875135	Jan 23, 2018	BMC Software, Inc.
Mechanism for deprecating object oriented data	8983982	Mar 17, 2015	BMC Software, Inc.
Mechanism for deprecating object oriented data	9760589	Sep 12, 2017	BMC Software, Inc.
Mechanism for deprecating object oriented data	10558642	Feb 11, 2020	BMC Software, Inc.
Smart impact views	8743121	Jun 3, 2014	BMC Software, Inc.
Automatic determination of dynamic threshold for accurate detection of abnormalities	8457928	Jun 4, 2013	BMC Software, Inc.
Auto adjustment of baseline on configuration change	8478569	Jul 2, 2013	BMC Software, Inc.
Graph expansion mini-view	9710938	Jul 18, 2017	BMC Software, Inc.
Graph expansion mini-view	10475218	Nov 12, 2019	BMC Software, Inc.
Graph expansion mini-view	11132820	Sep 28, 2021	BMC Software, Inc.
Method for customizing software applications	8832652	Sep 9, 2014	BMC Software, Inc.

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Method for customizing software applications	9363252	Jun 7, 2016	BMC Software, Inc.
Mechanism to display graphical it infrastructure using configurable smart navigation	9467344	Oct 11, 2016	BMC Software, Inc.
Statistical identification of instances during reconciliation process	8712979	Apr 29, 2014	BMC Software, Inc.
Statistical identification of instances during reconciliation process	9323801	Apr 26, 2016	BMC Software, Inc.
Statistical identification of instances during reconciliation process	10198476	Feb 5, 2019	BMC Software, Inc.
Statistical identification of instances during reconciliation process	10877974	Dec 29, 2020	BMC Software, Inc.
Application blueprint and deployment model for dynamic business service management (BSM)	9805322	Oct 31, 2017	BMC Software, Inc.
Centrally managed impersonation	8677446	Mar 18, 2014	BMC Software, Inc.
Spotlight graphs	8674992	Mar 18, 2014	BMC Software, Inc.
System and method for offering virtual private clouds within a public cloud environment	8402127	Mar 19, 2013	BMC Software, Inc.
Client-side application script error processing	9003378	Apr 7, 2015	BMC Software, Inc.
Full-function to high availability large database conversion	8321480	Nov 27, 2012	BMC Software, Inc.
Log-based DDL generation	8924398	Dec 30, 2014	BMC Software, Inc.
Detection of customizations of application elements	8539598	Sep 17, 2013	BMC Software, Inc.
System and method for stateless, fault tolerance and load balanced data collection using overlay namespaces	8478888	Jul 2, 2013	BMC Software, Inc.
System and method for stateless, fault tolerance and load balanced data collection using overlay namespaces	8645555	Feb 4, 2014	BMC Software, Inc.
System and method for stateless, fault tolerance and load balanced data collection using overlay namespaces	8671194	Mar 11, 2014	BMC Software, Inc.
Dynamic dispatch for distributed object-oriented software systems	8589471	Nov 19, 2013	BMC Software, Inc.
Integrating action requests from a plurality of spoke systems at a hub system	10592829	Mar 17, 2020	BMC Software, Inc.
Focus-driven user interface	10268730	Apr 23, 2019	BMC Software, Inc.
Directed graph transitive closure	8667027	Mar 4, 2014	BMC Software, Inc.

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Cooperative naming for configuration items in a distributed configuration management database environment	10127296	Nov 13, 2018	BMC Software, Inc.
Cooperative naming for configuration items in a distributed configuration management database environment	10740352	Aug 11, 2020	BMC Software, Inc.
Pre-bursting to external clouds	8606924	Dec 10, 2013	BMC Software, Inc.
Use of metrics selected based on lag correlation to provide leading indicators of service performance degradation	9195563	Nov 24, 2015	BMC Software, Inc.
Cloud-based resource identification and allocation	8843633	Sep 23, 2014	BMC Software, Inc.
Server management with dynamic construction of pre-boot images	9250918	Feb 2, 2016	BMC Software, Inc.
Methods and apparatus related to graph transformation and synchronization	9116968	Aug 25, 2015	BMC Software, Inc.
Methods and apparatus related to graph transformation and synchronization	10733055	Aug 4, 2020	BMC Software, Inc.
Methods and apparatus related to completion of large objects within a db2 database environment	8595190	Nov 26, 2013	BMC Software, Inc.
Event processing based on meta-relationship definition	8595264	Nov 26, 2013	BMC Software, Inc.
Systems and methods for displaying, viewing and navigating three dimensional representations	8610743	Dec 17, 2013	BMC Software, Inc.
Service context	8745040	Jun 3, 2014	BMC Software, Inc.
Mobile service context	8818994	Aug 26, 2014	BMC Software, Inc.
Service context	9412084	Aug 9, 2016	BMC Software, Inc.
Systems and methods for displaying and viewing data models	8907988	Dec 9, 2014	BMC Software, Inc.
Systems and methods for displaying and viewing data models	10297052	May 21, 2019	BMC Software, Inc.
Monitoring based on client perspective	8688982	Apr 1, 2014	BMC Software, Inc.
Monitoring based on client perspective	8694779	Apr 8, 2014	BMC Software, Inc.
Determination of quality of a consumer's experience of streaming media	8706895	Apr 22, 2014	BMC Software, Inc.
Automated upgrading method for capacity of it system resources	9356846	May 31, 2016	BMC Software, Inc.

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Automated service time estimation method for it system resources	9350627	May 24, 2016	BMC Software, Inc.
Methods and apparatus for monitoring execution of a database query program	9015188	Apr 21, 2015	BMC Software, Inc.
Methods and apparatus for monitoring execution of a database query program	9652503	May 16, 2017	BMC Software, Inc.
Provision of index recommendations for database access	9773032	Sep 26, 2017	BMC Software, Inc.
Dynamic evocations for computer event management	8689241	Apr 1, 2014	BMC Software, Inc.
Systems and methods for applying dynamic relational typing to a strongly-typed object-oriented API	8782601	Jul 15, 2014	BMC Software, Inc.
Methods and apparatus for performing database management utility processes	9104429	Aug 11, 2015	BMC Software, Inc.
Database recovery progress report	8880479	Nov 4, 2014	BMC Software, Inc.
Systems and methods related to a temporal log structure database	8478771	Jul 2, 2013	BMC Software, Inc.
Display window with multi-layer, parallel tab display	9189134	Nov 17, 2015	BMC Software, Inc.
Monitoring network performance remotely	9100320	Aug 4, 2015	BMC Software, Inc.
Facilitating suspension of batch application program access to shared IMS resources	7685122	Mar 23, 2010	BMC Software, Inc.
Registry synchronizer and integrity monitor	9300624	Mar 29, 2016	BMC Software, Inc.
Registry synchronizer and integrity monitor	9516109	Dec 6, 2016	BMC Software, Inc.
Systems and methods for migrating database data	8818949	Aug 26, 2014	BMC Software, Inc.
Systems and methods for migrating database data	9152659	Oct 6, 2015	BMC Software, Inc.
Systems and methods for migrating database data	10366074	Jul 30, 2019	BMC Software, Inc.
Dynamic service resource control	9223623	Dec 29, 2015	BMC Software, Inc.
Window-based scheduling using a key-value data store	8959518	Feb 17, 2015	BMC Software, Inc.
Automated blueprint assembly for assembling an application	8914768	Dec 16, 2014	BMC Software, Inc.
Automated blueprint assembly for assembling an application	9557969	Jan 31, 2017	BMC Software, Inc.
Automated blueprint assembly for assembling an application	9727315	Aug 8, 2017	BMC Software, Inc.

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Systems and methods for altering limit key values	8447791	May 21, 2013	BMC Software, Inc.
Unique attribute constraints for versioned database objects	8812539	Aug 19, 2014	BMC Software, Inc.
Optimization of path selection for transfers of files	10367878	Jul 30, 2019	BMC Software, Inc.
Application instrumentation code extension	9251026	Feb 2, 2016	BMC Software, Inc.
Application instrumentation code extension	10372586	Aug 6, 2019	BMC Software, Inc.
Application instrumentation code extension	10896117	Jan 19, 2021	BMC Software, Inc.
Semi-automatic discovery and generation of useful service blueprints	8874704	Oct 28, 2014	BMC Software, Inc.
Zero-outage database reorganization	9547672	Jan 17, 2017	BMC Software, Inc.
Zero-outage database reorganization	10289705	May 14, 2019	BMC Software, Inc.
Automated capacity aware provisioning	9135076	Sep 15, 2015	BMC Software, Inc.
Elastic packaging of application configuration	11132238	Sep 28, 2021	BMC Software, Inc.
Application of business process management standards for dynamic information technology management	9805319	Oct 31, 2017	BMC Software, Inc.
Application of business process management standards for dynamic information technology management	10540617	Jan 21, 2020	BMC Software, Inc.
Progressive analysis for big data	9734237	Aug 15, 2017	BMC Software, Inc.
Progressive analysis for big data	10706088	Jul 7, 2020	BMC Software, Inc.
User-centric annotated location aware asset mapping	9261372	Feb 16, 2016	BMC Software, Inc.
Management of annotated location aware assets	9631934	Apr 25, 2017	BMC Software, Inc.
Management of annotated location aware assets	9534903	Jan 3, 2017	BMC Software, Inc.
Management of annotated location aware assets	10788326	Sep 29, 2020	BMC Software, Inc.
Relative addressing usage for CPU performance	9122495	Sep 1, 2015	BMC Software, Inc.
Additive independent object modification	9645833	May 9, 2017	BMC Software, Inc.
System and methods for remote access to IMS databases	9218226	Dec 22, 2015	BMC Software, Inc.
System and methods for remote access to IMS databases	9674293	Jun 6, 2017	BMC Software, Inc.

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Automatic creation of graph time layer of model of computer network objects and relationships	9208051	Dec 8, 2015	BMC Software, Inc.
Automatic creation of graph time layer of model of computer network objects and relationships	10229243	Mar 12, 2019	BMC Software, Inc.
Managing a server template	9098322	Aug 4, 2015	BMC Software, Inc.
Managing a server template	9519504	Dec 13, 2016	BMC Software, Inc.
Managing a server template	9760396	Sep 12, 2017	BMC Software, Inc.
Memory leak detection	9003233	Apr 7, 2015	BMC Software, Inc.
Memory leak detection	11048616	Jun 29, 2021	BMC Software, Inc.
Computing infrastructure planning	9317327	Apr 19, 2016	BMC Software, Inc.
Off-screen window controls	9213555	Dec 15, 2015	BMC Software, Inc.
Systems and methods for remote access to Db2 databases	9218401	Dec 22, 2015	BMC Software, Inc.
Systems and methods for remote access to Db2 databases	9679059	Jun 13, 2017	BMC Software, Inc.
Systems and methods for remote access to Db2 databases	10572553	Feb 25, 2020	BMC Software, Inc.
Exception based quality assessment	9052980	Jun 9, 2015	BMC Software, Inc.
Service placement techniques for a cloud datacenter	9946527	Apr 17, 2018	BMC Software, Inc.
Service placement techniques for a cloud datacenter	11048490	Jun 29, 2021	BMC Software, Inc.
Storing and retrieving context sensitive data in a management system	9158799	Oct 13, 2015	BMC Software, Inc.
Storing and retrieving context sensitive data in a management system	9852165	Dec 26, 2017	BMC Software, Inc.
Method and system to release IMS resources used by IMS batch application programs	9336067	May 10, 2016	BMC Software, Inc.
Multi-entity normalization	9613070	Apr 4, 2017	BMC Software, Inc.
Multi-entity normalization	10324912	Jun 18, 2019	BMC Software, Inc.
Multi-entity normalization	11010359	May 18, 2021	BMC Software, Inc.
Application accelerator	9098557	Aug 4, 2015	BMC Software, Inc.
Business development configuration	9508051	Nov 29, 2016	BMC Software, Inc.
Story-mode user interface	10824993	Nov 3, 2020	BMC Software, Inc.
Unicode character conversion using one of two conversion services	9048854	Jun 2, 2015	BMC Software, Inc.
Adaptive learning of effective troubleshooting patterns	9710525	Jul 18, 2017	BMC Software, Inc.
Auction based decentralized ticket allotment	10796361	Oct 6, 2020	BMC Software, Inc.
Authentication proxy agent	9654473	May 16, 2017	BMC Software, Inc.

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Authentication proxy agent	10104079	Oct 16, 2018	BMC Software, Inc.
Workload management for license cost optimization	10936976	Mar 2, 2021	BMC Software, Inc.
System and method for automated customization of applications	9946528	Apr 17, 2018	BMC Software, Inc.
Application wrapping system and method	9535674	Jan 3, 2017	BMC Software, Inc.
Application wrapping system and method	10133564	Nov 20, 2018	BMC Software, Inc.
System and method for extending the functionality of an application	10831460	Nov 10, 2020	BMC Software, Inc.
Information portal based on partner information	8898237	Nov 25, 2014	BMC Software, Inc.
Network based application management	9396499	Jul 19, 2016	BMC Software, Inc.
Network based application management	10110665	Oct 23, 2018	BMC Software, Inc.
Network based application management	10826974	Nov 3, 2020	BMC Software, Inc.
Systems and methods for efficient db2 outage operations	9342351	May 17, 2016	BMC Software, Inc.
Server provisioning based on job history analysis	9819547	Nov 14, 2017	BMC Software, Inc.
Lifecycle reference partitioning for database objects	9311381	Apr 12, 2016	BMC Software, Inc.
Reference partitioning for database objects	10061831	Aug 28, 2018	BMC Software, Inc.
Capacity risk management for virtual machines	9483299	Nov 1, 2016	BMC Software, Inc.
Capacity risk management for virtual machines	10296364	May 21, 2019	BMC Software, Inc.
Capacity risk management for virtual machines	9983900	May 29, 2018	BMC Software, Inc.
Capacity risk management for virtual machines	10289440	May 14, 2019	BMC Software, Inc.
Capacity risk management for virtual machines	10896055	Jan 19, 2021	BMC Software, Inc.
Monitoring signed resources transferred over a network	9712516	Jul 18, 2017	BMC Software, Inc.
Generation of support data records using natural language processing	9864798	Jan 9, 2018	BMC Software, Inc.
Generation of support data records using natural language processing	11010413	May 18, 2021	BMC Software, Inc.
Maintaining virtual machine templates	11061705	Jul 13, 2021	BMC Software, Inc.

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Dynamic workload capping	9342372	May 17, 2016	BMC Software, Inc.
Dynamic workload capping	10643193	May 5, 2020	BMC Software, Inc.
Determining statuses of computer modules	10079713	Sep 18, 2018	BMC Software, Inc.
Determining statuses of computer modules	10257022	Apr 9, 2019	BMC Software, Inc.
Using multi-factor context for resolving customer service issues	10810600	Oct 20, 2020	BMC Software, Inc.
Extensibility of business logic shared across a business process orchestration engine, a rule engine, and a user interface	10504064	Dec 10, 2019	BMC Software, Inc.
Cost optimization in dynamic workload capping	9680657	Jun 13, 2017	BMC Software, Inc.
Dynamic workload capping	10812278	Oct 20, 2020	BMC Software, Inc.
Application monitoring for cloud-based architectures	9819729	Nov 14, 2017	BMC Software, Inc.
Application monitoring for cloud-based architectures	10171565	Jan 1, 2019	BMC Software, Inc.
Application monitoring for cloud-based architectures	10749939	Aug 18, 2020	BMC Software, Inc.
Reorganization of partition by growth space with lob columns	10521454	Dec 31, 2019	BMC Software, Inc.
System and method to dynamically allocate varying processing capacity entitlements based on workload importance	10108459	Oct 23, 2018	BMC Software, Inc.
System and method to dynamically allocate varying processing capacity entitlements based on workload importance	9846600	Dec 19, 2017	BMC Software, Inc.
Creating models based on performance metrics of a computing workloads running in a plurality of data centers to distribute computing workloads	10346204	Jul 9, 2019	BMC Software, Inc.
Automatic server cluster discovery	10171596	Jan 1, 2019	BMC Software, Inc.
Automatic server cluster discovery	10715608	Jul 14, 2020	BMC Software, Inc.
Automated scoring of unstructured events in information technology environments	10419268	Sep 17, 2019	BMC Software, Inc.
Asset floor map	10798538	Oct 6, 2020	BMC Software, Inc.
Phased start and stop of resources in a mainframe environment	10802878	Oct 13, 2020	BMC Software, Inc.

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Systems and methods for intercepting access to messaging systems	10523603	Dec 31, 2019	BMC Software, Inc.
Cloud service interdependency relationship detection	10931532	Feb 23, 2021	BMC Software, Inc.
Automatic server classification in cloud environments	10686682	Jun 16, 2020	BMC Software, Inc.
Systems and methods for recovery of consistent database indexes	10565070	Feb 18, 2020	BMC Software, Inc.
Synthetic objects in service models	11102072	Aug 24, 2021	BMC Software, Inc.
Power saving through automated power scheduling of virtual machines	10817046	Oct 27, 2020	BMC Software, Inc.
Identifying change windows for performing maintenance on a service	10972353	Apr 6, 2021	BMC Software, Inc.
Method and system for executing and undoing distributed server change operations	7249174	Jul 24, 2007	BladeLogic Inc.
Method and system for executing and undoing distributed server change operations	8296755	Oct 23, 2012	BladeLogic Inc.
Method and system for simplifying distributed server management	8447963	May 21, 2013	BladeLogic Inc.
Method and system for model-based heterogeneous server configuration management	8549114	Oct 1, 2013	BladeLogic Inc.
Information technology enterprise manager and product portfolio manager application module	8549036	Oct 1, 2013	BladeLogic Inc.
Secure credential store	8510810	Aug 13, 2013	BladeLogic Inc.
Secure credential store	9094217	Jul 28, 2015	BladeLogic Inc.
Systems and methods to support information technology business decisions	8335692	Dec 18, 2012	BladeLogic Inc.
Vendor portfolio management in support of vendor relationship management analysis, planning and evaluation	8266096	Sep 11, 2012	BladeLogic Inc.
Systems and methods for digital file change monitoring	8589343	Nov 19, 2013	BladeLogic Inc.
Systems and methods for extensible distributed resource configuration management	7996500	Aug 9, 2011	BladeLogic Inc.
Security context passing for stateless system management	8752137	Jun 10, 2014	BladeLogic Inc.

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Security context passing for stateless system management	9489499	Nov 8, 2016	BladeLogic Inc.
Multi-level key management	8971535	Mar 3, 2015	BladeLogic Inc.
Multi-level key management	9866375	Jan 9, 2018	BladeLogic Inc.
System and method for cloud provisioning and application deployment	9274811	Mar 1, 2016	BladeLogic Inc.
System and method for cloud provisioning and application deployment	10430204	Oct 1, 2019	BladeLogic Inc.
Topology aware smart merge	9491052	Nov 8, 2016	BladeLogic Inc.
Auto-suggesting it asset groups using clustering techniques	10824986	Nov 3, 2020	BladeLogic Inc.
Continuous content sharing through intelligent resolution of federated hierarcidcal graphs	8533197	Sep 10, 2013	BladeLogic Inc.
Monitoring network performance of encrypted communications	9197606	Nov 24, 2015	BladeLogic Inc.
Monitoring network performance of encrypted communications	10142215	Nov 27, 2018	BladeLogic Inc.
Monitoring network performance of encrypted communications	10735297	Aug 4, 2020	BladeLogic Inc.
System and method for installing, updating and uninstalling applications	9442708	Sep 13, 2016	BladeLogic Inc.
System and method for installing, updating and uninstalling applications	10592222	Mar 17, 2020	BladeLogic Inc.
System and method for installing, updating and uninstalling applications	10922067	Feb 16, 2021	BladeLogic Inc.
Self-evolving computing service template translation	8789022	Jul 22, 2014	BladeLogic Inc.
Self-evolving computing service template translation	9286189	Mar 15, 2016	BladeLogic Inc.
Hybrid-cloud infrastructures	9122552	Sep 1, 2015	BladeLogic Inc.
Hybrid-cloud infrastructures	9841962	Dec 12, 2017	BladeLogic Inc.
Computer-readable medium, apparatus, and methods of automatic capability installation	9207928	Dec 8, 2015	BladeLogic Inc.
Data access of slowly changing dimensions	9208183	Dec 8, 2015	BladeLogic Inc.
Behavioral rules discovery for intelligent computing environment administration	9195943	Nov 24, 2015	BladeLogic Inc.

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Behavioral rules discovery for intelligent computing environment administration	9563849	Feb 7, 2017	BladeLogic Inc.
Behavioral rules discovery for intelligent computing environment administration	10692007	Jun 23, 2020	BladeLogic Inc.
Enforcing referential integrity for object data documents	9659051	May 23, 2017	BladeLogic Inc.
Enforcing referential integrity for object data documents	10528548	Jan 7, 2020	BladeLogic Inc.
Dynamic virtual port provisioning	9535737	Jan 3, 2017	BladeLogic Inc.
Provisioning of containers for virtualized applications	10693948	Jun 23, 2020	BladeLogic Inc.
System and method for building business service model	11386077	Jul 12, 2022	BMC Software, Inc.
Extending a database recovery point at a disaster recovery site	11263238	Mar 1, 2022	BMC Software, Inc.
Cooperative naming for configuration items in a distributed configuration management database environment	11514076	Nov 29, 2022	BMC Software, Inc.
Zero-outage database reorganization	11379437	Jul 5, 2022	BMC Software, Inc.
Additive independent object modification	11474830	Oct 18, 2022	BMC Software, Inc.
Automatic creation of graph time layer of model of computer network objects and relationships	11227079	Jan 18, 2022	BMC Software, Inc.
Configurable user interface interactions using a state machine combined with event orchestration	11237705	Feb 1, 2022	BMC Software, Inc.
Work assignment queue elimination	11514379	Nov 29, 2022	BMC Software, Inc.
Maintaining virtual machine templates	11392404	Jul 19, 2022	BMC Software, Inc.
Extensibility of business logic shared across a business process orchestration engine, a rule engine, and a user interface	11321668	May 3, 2022	BMC Software, Inc.
Reorganization of partition by growth space with lob columns	11327999	May 10, 2022	BMC Software, Inc.
Behavioral analytics in information technology infrastructure incident management systems	11657063	May 23, 2023	BMC Software, Inc.

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Systems and methods for intercepting access to messaging systems	11323397	May 3, 2022	BMC Software, Inc.
Cloud service interdependency relationship detection	11233702	Jan 25, 2022	BMC Software, Inc.
Prioritized remediation of information security vulnerabilities based on service model aware multi-dimensional security risk scoring	11677773	Jun 13, 2023	BMC Software, Inc.
Rapid content deployment on a publication platform	11170117	Nov 9, 2021	BMC Software, Inc.
Synthetic objects in service models	11736352	Aug 22, 2023	BMC Software, Inc.
Creative and additive reconciliation of data records	11561766	Jan 24, 2023	BMC Software, Inc.
Reachability graph-based safe remediations for security of on-premise and cloud computing environments	11637861	Apr 25, 2023	BMC Software, Inc.
System and method for troubleshooting abnormal behavior of an application	11526422	Dec 13, 2022	BMC Software, Inc.
Search data curation and enrichment for deployed technology	11386170	Jul 12, 2022	BMC Software, Inc.
A cloud-native proxy gateway to cloud resources	11625280	Apr 11, 2023	BMC Software, Inc.
Application state prediction using component state	11675687	Jun 13, 2023	BMC Software, Inc.
Systems and methods for efficient transfer of log data	11734012	Aug 22, 2023	BMC Software, Inc.
Restart tolerance in system monitoring	11526400	Dec 13, 2022	BMC Software, Inc.
Automated unit testing in a mainframe CICS environment	11449412	Sep 20, 2022	BMC Software, Inc.
Root cause identification and event classification in system monitoring	11640329	May 2, 2023	BMC Software, Inc.
Inter-environment communication with environment isolation	11537411	Dec 27, 2022	BMC Software, Inc.
Technique for reporting nested linking among applications in mainframe computing environment	11714662	Aug 1, 2023	BMC Software, Inc.
Iterative performance analysis with interval expansion	11630818	Apr 18, 2023	BMC Software, Inc.
Index generation and use with indeterminate ingestion patterns	11947490	Apr 2, 2024	BMC Software, Inc.
RESTART TOLERANCE IN SYSTEM MONITORING	11886297	Jan 30, 2024	BMC Software, Inc.

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AUTOMATED UNIT TESTING IN A MAINFRAME CICS ENVIRONMENT	11954014	Apr 9, 2024	BMC Software, Inc.
APPLICATION DEVELOPMENT PLATFORM	11947938	Apr 2, 2024	BMC Software, Inc.
FAST DATABASE LOADING WITH TIME-STAMPED RECORDS	11537599	Dec 27, 2022	BMC Software, Inc.
INTEGRITY VIOLATION DETECTION FOR SYSTEM SERVICES	11971979	Apr 30, 2024	BMC Software, Inc.
DIRECTED INCREMENTAL CLUSTERING OF CAUSALLY RELATED EVENTS USING MULTI-LAYERED SMALL WORLD NETWORKS	11892904	Feb 6, 2024	BMC Software, Inc.
DIRECTED INCREMENTAL CLUSTERING OF CAUSALLY RELATED EVENTS	11734101	Aug 22, 2023	BMC Software, Inc.
RECOMMENDATIONS FOR REMEDIAL ACTIONS	11874732	Jan 16, 2024	BMC Software, Inc.
USE OF GRAPH DATABASES FOR REPLICATING TOPOLOGY AND ENRICHING MONITORING DATA STREAMS IN COMPLEX INFORMATION TECHNOLOGY SYSTEMS	11960457	Apr 16, 2024	BMC Software, Inc.
OPTIMIZING THE NUMBER OF IMS DEPENDENT REGIONS	12026178	Jul 2, 2024	BMC Software, Inc.
POSITIONAL TEXT CONTROL FOR TEXT ENTRY AND INTERPRETATION	11972199	Apr 30, 2024	BMC Software, Inc.
LOG RECOVERY FOR INTER-TABLESPACE TABLE MIGRATION	12013766	Jun 18, 2024	BMC Software, Inc.
DOMAIN-SPECIFIC GENERATIVE MACHINE LEARNING MODELS	11855860	Dec 26, 2023	BMC Software, Inc.
SYSTEM AND METHOD FOR IMPORTING AND EXPORTING DATA BETWEEN TAPES TO CLOUD STORAGE	11481129	Oct 25, 2022	BMC Software, Inc.
SYSTEM AND METHOD FOR IMPORTING AND EXPORTING DATA BETWEEN TAPES TO CLOUD STORAGE	11972129	Apr 30, 2024	BMC Software, Inc.
SYSTEM AND METHOD FOR BACKUP AND RESTORE OF	10228879	Mar 12, 2019	BMC Software, Inc.

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OFFLINE DISKS IN MAINFRAME COMPUTERS			
SYSTEM AND METHOD FOR MAINFRAME COMPUTERS BACKUP AND RESTORE ON OBJECT STORAGE SYSTEMS	10216580	Feb 26, 2019	BMC Software, Inc.
SYSTEM AND METHOD FOR EXECUTING USER CHANNEL PROGRAMS ON MAINFRAME COMPUTERS	9740461	Aug 22, 2017	BMC Software, Inc.
SYSTEM AND METHOD FOR MAINFRAME COMPUTERS BACKUP AND RESTORE	10754733	Aug 25, 2020	BMC Software, Inc.

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Optimization of path selection for transfers of files	16434937	Jun 7, 2019	BMC Software, Inc.
Real-time intelligent filtering and extraction of mainframe log data	16352161	Mar 13, 2019	BMC Software, Inc.
Performance prediction using dynamic model correlation	16949477	Oct 30, 2020	BMC Software, Inc.
Short-term model calibration in system monitoring	17301143	Mar 26, 2021	BMC Software, Inc.
APPLICATION STATE PREDICTION USING COMPONENT STATE	18332336	Jun 9, 2023	BMC Software, Inc.
USING AN EVENT GRAPH SCHEMA FOR ROOT CAUSE IDENTIFICATION AND EVENT CLASSIFICATION IN SYSTEM MONITORING	18310288	May 1, 2023	BMC Software, Inc.
SELF-OPTIMIZING CONTEXT-AWARE PROBLEM IDENTIFICATION FROM INFORMATION TECHNOLOGY INCIDENT REPORTS	17449538	Sep 30, 2021	BMC Software, Inc.
SEQUENCE PREDICTION EXPLANATION USING CAUSAL CHAIN EXTRACTION BASED ON NEURAL NETWORK ATTRIBUTIONS	17646706	Dec 31, 2021	BMC Software, Inc.

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SYSTEMS AND METHODS FOR INFORMATION MANAGEMENT SYSTEM TRANSACTION SCHEDULING AS WAIT-FOR-INPUT OR PSEUDO-WAIT-FOR-INPUT	17452398	Oct 26, 2021	BMC Software, Inc.
INTER-ENVIRONMENT USE OF JAVA VIRTUAL MACHINES FOR MULTIPLE ADDRESS MODES	17649489	Jan 31, 2022	BMC Software, Inc.
DATABASE ARCHIVING AND ACCESS ACROSS UPDATES TO DATABASE METADATA	17450686	Oct 12, 2021	BMC Software, Inc.
CAUSAL EVENT PREDICTION FOR EVENTS	17657625	Mar 31, 2022	BMC Software, Inc.
RECOMMENDATIONS FOR REMEDIAL ACTIONS	18519822	Nov 27, 2023	BMC Software, Inc.
PROBABILISTIC ROOT CAUSE ANALYSIS	17657628	Mar 31, 2022	BMC Software, Inc.
MULTI-PATH APPLICATION OUTPUT	17657617	Mar 31, 2022	BMC Software, Inc.
AUTOMATIC BUFFER POOL PAGE FIX PRIORITIZATION FOR DATABASE TUNING	17657347	Mar 30, 2022	BMC Software, Inc.
AUTOMATED SKILL DISCOVERY, SKILL LEVEL COMPUTATION, AND INTELLIGENT MATCHING USING GENERATED HIERARCHICAL SKILL PATHS	17452998	Oct 31, 2021	BMC Software, Inc.
RUNTIME PREDICTION FOR JOB MANAGEMENT	17809486	Jun 28, 2022	BMC Software, Inc.
RESOURCE TUNING WITH USAGE FORECASTING	17649543	Jan 31, 2022	BMC Software, Inc.
AUTOMATION OF WEB APPLICATION SECURITY	17810215	Jun 30, 2022	BMC Software, Inc.
LOG RECOVERY FOR INTER-TABLESPACE TABLE MIGRATION	18743641	Jun 14, 2024	BMC Software, Inc.

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SYSTEMS AND METHODS FOR ISOLATING TRANSACTIONS TO A PSEUDO-WAIT-FOR-INPUT REGION	17656557	Mar 25, 2022	BMC Software, Inc.
STORING AND ACCESSING OVERLAPPING INTERNET PROTOCOL (IP) ADDRESS RANGES	18148166	Dec 29, 2022	BMC Software, Inc.
CONTINUOUS KNOWLEDGE GRAPH GENERATION USING CAUSAL EVENT GRAPH FEEDBACK	17934992	Sep 23, 2022	BMC Software, Inc.
BATCH WORKLOAD CONTROL BASED ON CAPACITY CONSUMPTION	17810264	Jun 30, 2022	BMC Software, Inc.
ANOMALY DETECTION USING HASH SIGNATURE GENERATION FOR MODEL-BASED SCORING	17937254	Sep 30, 2022	BMC Software, Inc.
SEMANTIC CLASSIFICATION FOR DATA MANAGEMENT	17937261	Sep 30, 2022	BMC Software, Inc.
SMART PATCH RISK PREDICTION AND VALIDATION FOR LARGE SCALE DISTRIBUTED INFRASTRUCTURE	18194612	Mar 31, 2023	BMC Software, Inc.
DYNAMIC PAGE FIX OPTIMIZATION FOR DATABASE OBJECTS	18171104	Feb 17, 2023	BMC Software, Inc.
OPTIMAL REORGANIZATION OF A DATABASE	18147937	Dec 29, 2022	BMC Software, Inc.
EFFICIENT TRAINING OF MACHINE LEARNING MODELS FOR LOG RECORD ANALYSIS	18194190	Mar 31, 2023	BMC Software, Inc.
DOMAIN-SPECIFIC HALLUCINATION DETECTION AND CORRECTION FOR MACHINE LEARNING MODELS	18194547	Mar 31, 2023	BMC Software, Inc.
LOG RECORD ANALYSIS USING SIMILARITY DISTRIBUTIONS OF CONTEXTUAL LOG RECORD SERIES	18241095	Aug 31, 2023	BMC Software, Inc.
OPTIMIZATION OF ATTRIBUTE ACCESS IN PROGRAMMING FUNCTIONS	18345878	Jun 30, 2023	BMC Software, Inc.
ADAPTIVE SCENARIOS GENERATION FROM SITUATIONS	18511530	Nov 16, 2023	BMC Software, Inc.

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PREDICTING PRIORITY OF SITUATIONS	18511543	Nov 16, 2023	BMC Software, Inc.
PREDICTING CAUSAL IMPACT FROM SCENARIOS	18511550	Nov 16, 2023	BMC Software, Inc.
REMEDIATION GENERATION FOR SITUATION EVENT GRAPHS	18478930	Sep 29, 2023	BMC Software, Inc.
NARRATIVE GENERATION FOR SITUATION EVENT GRAPHS	18478933	Sep 29, 2023	BMC Software, Inc.
ACTIONABLE INSIGHT GENERATION FOR INCIDENTS GENERATED FROM EVENTS	18523804	Nov 29, 2023	BMC Software, Inc.
WRITING AND READING DATA SETS TO AND FROM CLOUD STORAGE FOR LEGACY MAINFRAME APPLICATIONS	17832328	Jun 3, 2022	BMC Software, Inc.
SYSTEM AND METHOD FOR IMPORTING AND EXPORTING DATA BETWEEN TAPES TO CLOUD STORAGE	18649521	Apr 29, 2024	BMC Software, Inc.
MEMORY-EFFICIENT LARGE LANGUAGE MODEL	18622568	Mar 29, 2024	BMC Software, Inc.
DYNAMIC DISTRIBUTED DATA ACCESS CONTROL	18588845	Feb 27, 2024	BMC Software, Inc.
OPTIMIZATION OF LOG RECORD APPLICATION DURING DATABASE RECOVERY	18401293	Dec 29, 2023	BMC Software, Inc.
LOW OVERHEAD PROCESSOR SWITCHING	18592367	Feb 29, 2024	BMC Software, Inc.
ENHANCEMENT EVENT DETERMINATION AND USE IN SYSTEM MONITORING	18622305	Mar 29, 2024	BMC Software, Inc.
AUTHORIZATION-BASED DATA COLLECTION FOR MONITORED SERVICE INFRASTRUCTURE	18634853	Apr 12, 2024	BMC Software, Inc.
PROMPT ORCHESTRATION FOR VIRTUAL AGENTS WITH DIGRESSION CAPABILITIES	18622841	Mar 29, 2024	BMC Software, Inc.