# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4523155

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

## **CONVEYING PARTY DATA**

Name	Execution Date
BMC SOFTWARE, INC.	06/11/2015
BLADELOGIC, INC.	06/11/2015

## **RECEIVING PARTY DATA**

Name:	CREDIT SUISSE AG, CAYMAN ISLANDS BRANCH, AS COLLATERAL AGENT
Street Address:	ATTN: ARLENE HILL-FORTE
Internal Address:	7033 LOUIS STEPHENS DRIVE
City:	RALEIGH
State/Country:	NORTH CAROLINA
Postal Code:	27709

### **PROPERTY NUMBERS Total: 55**

Property Type	Number
Application Number:	14512919
Application Number:	14513676
Application Number:	14535030
Application Number:	14563830
Application Number:	14568928
Application Number:	14569958
Application Number:	14579436
Application Number:	14610117
Application Number:	14624129
Application Number:	14635489
Application Number:	14640581
Application Number:	14659002
Application Number:	14659337
Application Number:	14665950
Application Number:	14674742
Application Number:	14674751
Application Number:	13804694
Application Number:	13835739

PATENT

504476453 REEL: 043351 FRAME: 0231

Property Type	Number
Application Number:	13838605
Application Number:	13840053
Application Number:	13842072
Application Number:	13842252
Application Number:	13843648
Application Number:	13850724
Application Number:	13874202
Application Number:	13915233
Application Number:	13929351
Application Number:	13930453
Application Number:	13930466
Application Number:	13931560
Application Number:	14041753
Application Number:	14041973
Application Number:	14044614
Application Number:	14067824
Application Number:	14069819
Application Number:	14143517
Application Number:	14145216
Application Number:	14164524
Application Number:	14185563
Application Number:	14204437
Application Number:	14265923
Application Number:	14285434
Application Number:	14290291
Application Number:	14310539
Application Number:	14319918
Application Number:	14454122
Application Number:	14463236
Application Number:	14466528
Application Number:	14466559
Application Number:	14467743
Application Number:	14467768
Patent Number:	6016501
Patent Number:	6772411
Patent Number:	5887274
Patent Number:	5758357

#### **CORRESPONDENCE DATA**

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using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

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Correspondent Name: BRAKE HUGHES BELLERMANN LLP

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ATTORNEY DOCKET NUMBER:	0081-2015 IP SUPPLEMENT-1
NAME OF SUBMITTER:	JOSEPH F. KEY
SIGNATURE:	/Joseph F. Key, Reg. No. 44827/
DATE SIGNED:	07/27/2017

#### **Total Attachments: 6**

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#### IP SUPPLEMENT

This IP SUPPLEMENT, dated as of June 11, 2015, is delivered pursuant to and supplements (i) the Security Agreement, dated as of September 10, 2013 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the "Security Agreement"), by and among the Grantors named therein and Credit Suisse AG, Cayman Islands Branch, as the Collateral Agent, and (ii) the Patent Security Agreement dated as of September 10, 2013 (the "Agreement") executed by Grantor. Capitalized terms used herein not otherwise defined herein shall have the meanings ascribed thereto in the Agreement.

Grantor grants to the Collateral Agent a security interest in all of Grantor's right, title and interest in and to the Patent Collateral set forth on Schedule A annexed hereto. All such Patent Collateral shall be deemed to be part of the Patent Collateral and shall be hereafter subject to each of the terms and conditions of the Security Agreement and the Agreement.

IN WITNESS WHEREOF, Grantor has caused this IP Supplement to be duly executed and delivered by its duly authorized officer as of the date first set forth above.

BMC SOFTWARE, INC.

Name: Stephen B. Solcher

Title: Senior Vice President & Chief Financial Officer

BLADEŁOGIC, INC.

By:

Name: Stephen B. Solcher

Title: President

BMC \$017WARE & CQUISITION, L.L.C.

By:

Vanie: Stephen B. Solcher

Title: Manager

## SCHEDULE A TO IP SUPPLEMENT

# Additional US Patents Issued:

APPLN#	PATENT #	TITLE	COUNTRY	STATUS	OWNER
09/050,609	6016501	ENTERPRISE DATA MOVEMENT SYSTEM AND METHOD WHICH PERFORMS DATA LOAD AND CHANGED DATA PROPAGATION OPERATIONS	United States of America	Issued	BMC Software, Inc. and Informatica Corporation <sup>1</sup>
12/684,036	8898237	INFORMATION PORTAL BASED ON PARTNER INFORMATION	United States of America	Issued	BMC Software Acquisition, L.L.C
09/728,937	67724[]	SOFTWARE PERFORMANCE AND MANAGEMENT SYSTEM	United States of America		BMC Software, Inc. <sup>2</sup>
08/993,964	5887274	RESTARTABLE FAST DB2 TABLESPACE REORGANIZATION METHOD	United States of America	1	BMC Software, Inc.
08/588,862	5758357	FAST DB2 TABLESPACE REORGANIZATION METHOD THAT IS RESTARTABLE AFTER INTERRUPTION OF THE PROCESS	United States of America	8	BMC Software, Inc.

<sup>&</sup>lt;sup>1</sup> This pledge is limited to the extent of BMC Software, Inc. ownership interest in this Patent Collateral, which is jointly owned with Informatica Corporation.

<sup>&</sup>lt;sup>2</sup> A change to the assignment is in process to update the name of the prior Assignor.

# Additional US Patents Pending:

APPLN# PUB	# TITLE	COUNTRY	STATUS	OWNER
14/512,919	SYSTEM AND METHOD FOR BUILDING BUSINESS SERVICE MODEL	United States of America	Pending	BMC Software, Inc
14/513,676	UTILITY-OPTIMIZED SCHEDULING OF TIME- SENSITIVE TASKS IN A	United States of America	Published	BMC Software, Inc
14/535,030	BI-DIRECTIONAL COMMUNICATION BETWEEN CHANGE MANAGEMENT TOOL	United States of America	Published	BMC Software, Inc
14/563,830	SYSTEMS AND METHODS FOR DISPLAYING AND VIEWING DATA MODELS	United States of America	Pending	BMC Software, Inc
14/568,928	AUTOMATED BLUEPRINT ASSEMBLY FOR ASSEMBLING AN APPLICATION	United States of America	Pending	BMC Software, Inc.
14/568,958	AUTOMATED BLUEPRINT ASSEMBLY FOR ASSEMBLING AN APPLICATION	United States of America	Pending	BMC Software, Inc.
14/579,436	ENFORCING REFERENTIAL INTEGRITY FOR OBJECT DATA DOCUMENTS	United States of America	Pending	BMC Software, Inc.
14/610,117	DYNAMIC VIRTUAL PORT PROVISIONING	United States of America	Pending	BMC Software, Inc.
14/624,129	WINDOW-BASED SCHEDULING USING A KEY-VALUE DATA STORE	United States of America	Pending	BMC Software, Inc.
14/635,489	MULTI-LEVEL KEY MANAGEMENT	United States of America	Pending	BladeLogic, Inc.
14/640,581	MEMORY LEAK DETECTION	United States of America	Pending	BMC Software, Inc.
14/659,002	MECHANISM FOR DEPRECATING OBJECT ORIENTED DATA	United States of America	Pending	BMC Software, Inc.
14/659,337	MAINTAINING VIRTUAL MACHINE TEMPLATES	United States of America	Pending	BMC Software, Inc.
14/665,950	DYNAMIC WORKLOAD CAPPING	United States of America	Pending	BMC Software, Inc.
14/674,742	SMART RECORDER	United States of America	Pending	BMC Software, Inc.
14/674,751	SYSTEMS AND METHODS FOR FORMLESS INFORMATION TECHNOLOGY AND SOCIAL	United States of America	Pending	BMC Software, Inc.

APPLN#	PUB#	TITLE	COUNTRY	STATUS	OWNER
13/359,236		NETWORK BASED APPLICATION MANAGEMENT	United States of America	Pending	BMC Software Acquisition, L.L.C.
13/804,694	20140279992	STORING AND RETRIEVING CONTEXT SENSTIVE DATA IN A MANAGEMENT SYSTEM	United States of America	Published	BMC Software, Inc
13/835,739	20140281891	CONFIGURABLE USER INTERFACE INTERACTIONS USING A STATE MACHINE	United States of America	Published	BMC Software, Inc
13/838,605	20140278818	BUSINESS DEVELOPMENT CONFIGURATION	United States of America	Published	BMC Software, Inc
13/840,053	20140282519	MANAGING A SERVER TEMPLATE	United States of America	Allowed	BMC Software, Inc
13/842,072	20140280130	MULTI-ENTITY NORMALIZATION	United States of America	Published	BMC Software, Inc
13/842,252	20140266818	STORY-MODE USER INTERFACE	United States of America	Published	BMC Software, Inc
13/843.648	20140279977	DATA ACCESS OF SLOWLY CHANGING DIMENSIONS	United States of America	Published	BMC Software, Inc
13/850,724	20140282225	OFF-SCREEN WINDOW CONTROLS	United States of America	Published	BMC Software, Inc.
13/874,202	20140278326	SERVICE PLACEMENT TECHNIQUES FOR A CLOUD DATACENTER	United States of America	Published	BMC Software, Inc.
13/915,233	20140266818	UNICODE CHARACTER CONVERSION	United States of America	Allowed	BMC Software, Inc.
13/929,351	20140278646	WORK ASSIGNMENT QUEUE ELIMINATION	United States of America	Published	BMC Software, Inc.
13/930,453	20140280346	METHOD AND SYSTEM TO RELEASE IMS RESOURCES USED BY IMS BATCH APPLICATION	United States of America	Published	BMC Software, Inc.
13/930,466	20140278600	AUCTION BASED DECENTRALIZED TICKET ALLOTMENT	United States of America	Published	BMC Software, Inc.
13/931,560	2015-0007291	AUTHENTICATION PROXY AGENT	United States of America	Published	BMC Software, Inc.
14/041,753		WORKLOAD MANAGEMENT FOR LICENSE COST OPTIMIZATION	United States of America	Pending	BMC Software, Inc.

APPLN#	PUB#	TITLE	COUNTRY	STATUS	OWNER
14/041,973	20140025647	NORMALIZATION ENGINE TO MANAGE CONFIGURATION MANAGEMENT DATABASE	United States of America	Published	BMC Software, Inc.
14/044,614	20140032768	AUTOMATED CAPACITY PROVISIONING METHOD USING HISTORICAL PERFORMANCE	United States of America	Allowed	BMC Software, Inc.
14/067,824	20140280068	ADAPTIVE LEARNING OF EFFECTIVE TROUBLESHOOTING PATTERNS	United States of America	Published	BMC Software, Inc.
14/069,819		SYSTEMS AND METHODS FOR EFFICIENT DB2 OUTAGE OPERATIONS	United States of America	Pending	BMC Software, Inc.
14/136,879	20140181803	APPLICATION WRAPPING SYSTEM AND METHOD	United States of America	Published	BMC Software Acquisition, L.L.C.
14/143,517		LIFECYCLE REFERENCE PARTITIONING FOR DATABASE OBJECTS	United States of America	Pending	BMC Software, Inc.
14/145,216		SERVER PROVISIONING BASED ON JOB HISTORY ANALYSIS	United States of America	Pending	BMC Software, Inc.
14/164,524	20140143416	GENERIC DISCOVERY FOR COMPUTER NETWORKS	United States of America	Published	BMC Software, Inc.
14/185,563	20140172786	OFFLINE RESTRUCTURING OF DEDB DATABASES	United States of America	Published	BMC Software, Inc.
14/204,437	20140195504	STATISTICAL IDENTIFICATION OF INSTANCES DURING RECONCILIATION PROCESS	United States of America	Published	BMC Software, Inc.
14/244,527	20140366014	SYSTEM AND METHOD FOR AUTOMATED CUSTOMIZATION OF APPLICATIONS	United States of America	Published	BMC Software Acquisition, L.L.C.
14/265,923	20140237560	SECURITY CONTEXT PASSING FOR STATELESS SYSTEM MANAGEMENT	United States of America	Published	BladeLogic, Inc.
14/285,434		SELF-EVOLVING COMPUTING SERVICE TEMPLATE TRANSLATION	United States of America	Pending	BMC Software, Inc.
14/290,291	20140278824	SERVICE CONTEXT	United States of America	Published	BMC Software, Inc.
14/310,539		MONITORING SIGNED RESOURCES TRANSFERRED OVER A NETWORK	United States of America	Pending	BMC Software, Inc.
14/319,918		CAPACITY RISK MANAGEMENT FOR VIRTUAL MACHINES	United States of America	Pending	BMC Software, Inc.
14/454,122	20140358966	METHOD FOR CUSTOMIZING SOFTWARE APPLICATIONS	United States of America	Published	BMC Software, Inc.

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14/463,236		UNOBTRUSIVE COPIES OF ACTIVELY USED COMPRESSED INDICES	United States of America	Published	BMC Software, Inc.
APPLN#	PUB#	TITLE	COUNTRY	STATUS	OWNER
14/466,528	20140365121	USER-CENTRIC ANNOTATED LOCATION AWARE ASSET MAPPING	United States of America	Published	BMC Software, Inc.
14/466,559	20140365489	MANAGEMENT OF ANNOTATED LOCATION AWARE ASSETS	United States of America	Published	BMC Software, Inc.
14/467,743	20140365439	SERVICE DESK DATA TRANSFER INTERFACE	United States of America	Published	BMC Software, Inc.
14/467,768		SERVICE DESK DATA TRANSFER INTERFACE	United States of America	Published	BMC Software, Inc.