

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4421103

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JOONGKOO LEE	05/08/2017
JAEHWA KIM	05/10/2017
JOO YEON LEE	05/10/2017
RECEIVING PARTY DATA	
Name:	SAP SE
Street Address:	DIETMAR-HOPP-ALLEE 16
City:	WALLDORF
State/Country:	GERMANY
Postal Code:	D-69190
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15592075
CORRESPONDENCE DATA	
Fax Number:	(503)595-5301
<i>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.</i>	
Phone:	5035955300
Email:	beth.hinnant@klarquist.com
Correspondent Name:	R. ROHATGI, KLARQUIST SPARKMAN, LLP
Address Line 1:	ONE WORLD TRADE CENTER
Address Line 2:	121 SW SALMON ST, SUITE 1600
Address Line 4:	PORTLAND, OREGON 97204
ATTORNEY DOCKET NUMBER:	8880-98662-01
NAME OF SUBMITTER:	RAJEEV ROHATGI
SIGNATURE:	/Rajeev Rohatgi/
DATE SIGNED:	05/18/2017
Total Attachments: 3	
source=98662-01 Assignment#page1.tif	
source=98662-01 Assignment#page2.tif	
source=98662-01 Assignment#page3.tif	

ASSIGNMENT

I, Joongkoo Lee ("ASSIGNOR"), have invented subject matter ("INVENTION"), disclosed and/or claimed in the following patent application(s) ("APPLICATIONS"):

U.S. Patent Application entitled KEY-VALUE STORE FOR LIGHTWEIGHT REPLICATION OF METADATA, having

U.S. Patent Application No. 15/592,075, filed on May 10, 2017;

ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives of Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, OR 97204 USA, who are associated with customer number 106592, to insert the application number(s) and filing date(s) above when known;

SAP SE, Dietmar-Hopp-Allee 16, D-69190 Walldorf, Germany, a company organized under the laws of the country of Germany, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and is desirous of acquiring the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns, and transfers to the ASSIGNEE, the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and APPLICATION DERIVATIVES, including foreign priority rights;

ASSIGNOR agrees to sign any documents required for the prosecution of the APPLICATIONS and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for protecting and perfecting title to the APPLICATIONS and APPLICATION DERIVATIVES.

 Inventor's Signature Joongkoo Lee	<u>May 8, 2017</u> Date Signed
<u>Hyunjun Kim</u> Witness Signature	<u>May 8, 2017</u> Date Signed
<u>Hyunjun Kim</u> Witness Name (print)	

ASSIGNMENT

I, Jaehwa Kim ("ASSIGNOR"), have invented subject matter ("INVENTION"), disclosed and/or claimed in the following patent application(s) ("APPLICATIONS"):

U.S. Patent Application entitled KEY-VALUE STORE FOR LIGHTWEIGHT REPLICATION OF METADATA, having

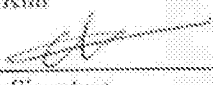
U.S. Patent Application No. 15/592,075, filed on May 10, 2017;

ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives of Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, OR 97204 USA, who are associated with customer number 106392, to insert the application number(s) and filing date(s) above when known;

SAP SE, Dietmar-Hopp-Allee 16, D-69190 Walldorf, Germany, a company organized under the laws of the country of Germany, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and is desirous of acquiring the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns, and transfers to the ASSIGNEE, the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and APPLICATION DERIVATIVES, including foreign priority rights;

ASSIGNOR agrees to sign any documents required for the prosecution of the APPLICATIONS and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for protecting and perfecting title to the APPLICATIONS and APPLICATION DERIVATIVES.

 _____ Inventor's Signature Jaehwa Kim	<u>May 10 2017</u> _____ Date Signed
 _____ Witness Signature Mangjwan Cho _____ Witness Name (print)	<u>May 10 2017</u> _____ Date Signed

ASSIGNMENT

I, Joo Yeon Lee ("ASSIGNOR"), have invented subject matter ("INVENTION"), disclosed and/or claimed in the following patent application(s) ("APPLICATIONS"):

U.S. Patent Application entitled KEY-VALUE STORE FOR LIGHTWEIGHT REPLICATION OF METADATA, having

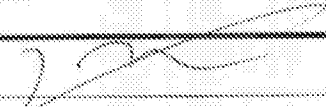
U.S. Patent Application No. 15/592,075, filed on May 10, 2017;

ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives of Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, OR 97204 USA, who are associated with customer number 106592, to insert the application number(s) and filing date(s) above when known;

SAP SE, Dietmar-Hopp-Allee 16, D-69190 Walldorf, Germany, a company organized under the laws of the country of Germany, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and is desirous of acquiring the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns, and transfers to the ASSIGNEE, the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and APPLICATION DERIVATIVES, including foreign priority rights;

ASSIGNOR agrees to sign any documents required for the prosecution of the APPLICATIONS and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for protecting and perfecting title to the APPLICATIONS and APPLICATION DERIVATIVES.

 Inventor's Signature Joo Yeon Lee	<u>10.05.2017</u> Date Signed
 Witness Signature Hanguk Cho	<u>10.05.2017</u> Date Signed
Witness Name (print)	