

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	ANSELME KEMGNE TUENO	12/13/2016
	FLORIAN KERSCHBAUM	12/12/2016
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<b>State/Country:</b>	GERMANY	
<b>Postal Code:</b>	D-69190	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	15379034
<b>CORRESPONDENCE DATA</b>		
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<b>ATTORNEY DOCKET NUMBER:</b>	54874-232F01US	
<b>NAME OF SUBMITTER:</b>	LI (LILY) ZHANG	
<b>SIGNATURE:</b>	/li zhang/	
<b>DATE SIGNED:</b>	12/14/2016	
<b>Total Attachments: 3</b>		
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## ASSIGNMENT

We, **ANSELME KEMGNE TUENO** and **FLORIAN KERSCHBAUM**, the undersigned, herein referred to as the ASSIGNOR, for good and valuable consideration, the receipt of which is hereby acknowledged, confirm that we have sold and assigned, and do hereby assign, sell and transfer to **SAP SE**, a European company, with an office at Dietmar-Hopp-Allee 16, Walldorf, Germany, D69190 and to its successors, assigns and legal representatives, collectively hereinafter referred to as the ASSIGNEE: (1) our entire right, title and interest for the United States and in all countries, in and to any and all inventions, discoveries and applications which are disclosed in the application for United States Letters Patent entitled:

### **OBLIVIOUS ORDER-PRESERVING ENCRYPTION**

and electronically filed with the U.S. Patent and Trademark Office on **December 14, 2016**, and assigned Application No. **15/379,034**, including any subsequently filed utility applications, which claim priority to Application No. **15/379,034**, including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof and any substitute applications therefor; (2) the full and complete right to file patent applications in the name of the ASSIGNEE, its designee, or in our names as the ASSIGNEE, or its designee's election, on the aforesaid inventions, discoveries and applications in all countries of the world; (3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any country, and any renewals, revivals, reissues, reexaminations and extensions thereof, and any patents of confirmation, registration and importation of the same; and (4) the entire right, title and interest in all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the above inventions, discoveries and applications.

**We authorize and request the attorneys of record or the attorney filing the application to insert into this assignment the filing date and serial number of the application when known.**

We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

We agree, at any time, upon the request of the ASSIGNEE, to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries, or applications and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.


We further agree at any time to execute and to deliver upon request of the ASSIGNEE such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect the rights of the ASSIGNEE under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

We hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

We hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

We further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

Date: 2016-12-13

  
ANSELME KEMGNE TUONO

Witnessed by:

Signature

Date

Print Name

Witnessed by:

Signature

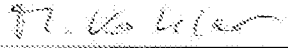
Date

Print Name

Date: 12-12-16

  
FLORIAN KERSCHBAUM

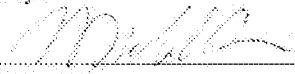
Witnessed by:

  
Signature

12-12-16  
Date

Matthias Kohler  
Print Name

Witnessed by:

  
Signature

12-12-2016  
Date

MICHELE BETTONI  
Print Name