### 504882628 04/24/2018

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4929369

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
MARTIN HEIDEL	04/03/2018
XIN LIU	04/12/2018
CHRISTOPH ROTERRING	04/05/2018
SHIPING CHEN	04/02/2018
VIVEK KANDIYANALLUR	04/12/2018
STEPHAN KOTTLER	04/02/2018
JOERN SCHMIDT	04/18/2018

### **RECEIVING PARTY DATA**

Name:	SAP SE
Street Address:	DIETMAR-HOPP-ALLEE 16
City:	WALLDORF
State/Country:	GERMANY
Postal Code:	69190

### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	15953856	

### **CORRESPONDENCE DATA**

Fax Number: (202)371-2540

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: 202-371-2600

Email: hruchandani@sternekessler.com, pdomally@sternekessler.com

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. **Correspondent Name:** 

1100 NEW YORK AVENUE, NW Address Line 1: Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	1933.4680000
NAME OF SUBMITTER:	HARISH RUCHANDANI
SIGNATURE:	/Harish Ruchandani, Reg. No. 58,770/
DATE SIGNED:	04/24/2018

**PATENT** REEL: 045620 FRAME: 0567

504882628

# Total Attachments: 7 source=1933.4680000 Executed Assignment#page1.tif source=1933.4680000 Executed Assignment#page2.tif source=1933.4680000 Executed Assignment#page3.tif source=1933.4680000 Executed Assignment#page4.tif source=1933.4680000 Executed Assignment#page5.tif source=1933.4680000 Executed Assignment#page6.tif source=1933.4680000 Executed Assignment#page7.tif

### ASSIGNMENT

For valuable consideration, I, Martin Heidel,

hereby assign to

# SAPSE, a corporation of Europe having a place of business at Dietmar-Hopp-Allee 16, 69190 Walldorf, Germany

and its successors, and assigns (collectively, the ASSIGNE) my entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled:

### DATABASE RECOVERY AND OPTIMIZATION WITH BATCH PROCESSING

which is found in the:

USpatent application filed on:

under Application No.

I 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. This assignment includes the foregoing patent application or patent, as well as continuations and divisionals of said application, all legal equivalents in any country, and all patents issuing from such legal equivalents; all patents, utility models, and design registrations granted by any jurisdiction for any of said inventions and improvements; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements. Thereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment. I hereby state and agree that no assignment, sale, agreement, or encumbrance has been or will be made or entered into that would conflict with this assignment. I further agree for myself and my heirs, legal representatives, and assigns to provide to the Assignee promptly upon its request and at its expense all pertinent facts and documents relating to any of said inventions and improvements or said patents and legal equivalents as may be known and accessible to me and to testify as to the same in any interference, litigation, or proceeding relating thereto; and I agree promptly to perform such lawful acts and to sign such further applications, assignments, statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Inventor's Signature:

Martin Heidel

Martin Heidel

4/3/2018

### ASSIGNMENT

For valuable consideration, I, Xin Liu,

hereby assign to

# SAPSE, a corporation of Europe having a place of business at Dietmar-Hopp-Allee 16, 69190 Walldorf, Germany

and its successors, and assigns (collectively, the ASSIGNEE) my entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled:

### DATABASE RECOVERY AND OPTIMIZATION WITH BATCH PROCESSING

which is found in the:

USpatent application filed on:

under Application No.

I 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. This assignment includes the foregoing patent application or patent, as well as continuations and divisionals of said application, all legal equivalents in any country, and all patents issuing from such legal equivalents; all patents, utility models, and design registrations granted by any jurisdiction for any of said inventions and improvements; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements. Thereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment. I hereby state and agree that no assignment, sale, agreement, or encumbrance has been or will be made or entered into that would conflict with this assignment. I further agree for myself and my heirs, legal representatives, and assigns to provide to the Assignee promptly upon its request and at its expense all pertinent facts and documents relating to any of said inventions and improvements or said patents and legal equivalents as may be known and accessible to me and to testify as to the same in any interference, litigation, or proceeding relating thereto; and I agree promptly to perform such lawful acts and to sign such further applications, assignments, statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

	DocuSigned by:	
Inventor's Sgnature:	Xin Lin	4/12/2018
	Xin Liu 23DD6335B20B46F	

### ASSIGNMENT

For valuable consideration, I, Christoph Roterring,

hereby assign to

SAPSE, a corporation of Europe having a place of business at Dietmar-Hopp-Allee 16, 69190 Walldorf, Germany

and its successors, and assigns (collectively, the ASSIGNE) my entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled:

### DATABASE RECOVERY AND OPTIMIZATION WITH BATCH PROCESSING

which is found in the:

USpatent application filed on:

under Application No.

I 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. This assignment includes the foregoing patent application or patent, as well as continuations and divisionals of said application, all legal equivalents in any country, and all patents issuing from such legal equivalents; all patents, utility models, and design registrations granted by any jurisdiction for any of said inventions and improvements; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements. Thereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment. I hereby state and agree that no assignment, sale, agreement, or encumbrance has been or will be made or entered into that would conflict with this assignment. I further agree for myself and my heirs, legal representatives, and assigns to provide to the Assignee promptly upon its request and at its expense all pertinent facts and documents relating to any of said inventions and improvements or said patents and legal equivalents as may be known and accessible to me and to testify as to the same in any interference, litigation, or proceeding relating thereto; and I agree promptly to perform such lawful acts and to sign such further applications, assignments, statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Inventor's Signature:

Christoph Rotering

4/5/2018

Christoph Rotering

### ASSIGNMENT

For valuable consideration, I, Shiping Chen,

hereby assign to

# SAPSE, a corporation of Europe having a place of business at Dietmar-Hopp-Allee 16, 69190 Walldorf, Germany

and its successors, and assigns (collectively, the ASSIGNEE) my entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled:

### DATABASE RECOVERY AND OPTIMIZATION WITH BATCH PROCESSING

which is found in the:

USpatent application filed on:

under Application No.

I 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. This assignment includes the foregoing patent application or patent, as well as continuations and divisionals of said application, all legal equivalents in any country, and all patents issuing from such legal equivalents; all patents, utility models, and design registrations granted by any jurisdiction for any of said inventions and improvements; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements. Thereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment. I hereby state and agree that no assignment, sale, agreement, or encumbrance has been or will be made or entered into that would conflict with this assignment. I further agree for myself and my heirs, legal representatives, and assigns to provide to the Assignee promptly upon its request and at its expense all pertinent facts and documents relating to any of said inventions and improvements or said patents and legal equivalents as may be known and accessible to me and to testify as to the same in any interference, litigation, or proceeding relating thereto; and I agree promptly to perform such lawful acts and to sign such further applications, assignments, statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Inventor's Signature: 4/2/2018

Shiping Chen

### ASSIGNMENT

For valuable consideration, I, Vivek Kandiyanallur,

hereby assign to

SAPSE, a corporation of Europe having a place of business at Dietmar-Hopp-Allee 16, 69190 Walldorf, Germany

and its successors, and assigns (collectively, the ASSIGNEE) my entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled:

### DATABASE RECOVERY AND OPTIMIZATION WITH BATCH PROCESSING

which is found in the:

USpatent application filed on:

under Application No.

I 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. This assignment includes the foregoing patent application or patent, as well as continuations and divisionals of said application, all legal equivalents in any country, and all patents issuing from such legal equivalents; all patents, utility models, and design registrations granted by any jurisdiction for any of said inventions and improvements; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements. Thereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment. I hereby state and agree that no assignment, sale, agreement, or encumbrance has been or will be made or entered into that would conflict with this assignment. I further agree for myself and my heirs, legal representatives, and assigns to provide to the Assignee promptly upon its request and at its expense all pertinent facts and documents relating to any of said inventions and improvements or said patents and legal equivalents as may be known and accessible to me and to testify as to the same in any interference, litigation, or proceeding relating thereto; and I agree promptly to perform such lawful acts and to sign such further applications, assignments, statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Inventor's Sgnature:

Vivek kandiyanallur

4/12/2018

Vivek Kandiyanallur

### ASSIGNMENT

For valuable consideration, I, Stephan Kottler,

hereby assign to

SAPSE, a corporation of Europe having a place of business at Dietmar-Hopp-Allee 16, 69190 Walldorf, Germany

and its successors, and assigns (collectively, the ASSIGNEE) my entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled:

### DATABASE RECOVERY AND OPTIMIZATION WITH BATCH PROCESSING

which is found in the:

USpatent application filed on:

under Application No.

I 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. This assignment includes the foregoing patent application or patent, as well as continuations and divisionals of said application, all legal equivalents in any country, and all patents issuing from such legal equivalents; all patents, utility models, and design registrations granted by any jurisdiction for any of said inventions and improvements; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements. Thereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment. I hereby state and agree that no assignment, sale, agreement, or encumbrance has been or will be made or entered into that would conflict with this assignment. I further agree for myself and my heirs, legal representatives, and assigns to provide to the Assignee promptly upon its request and at its expense all pertinent facts and documents relating to any of said inventions and improvements or said patents and legal equivalents as may be known and accessible to me and to testify as to the same in any interference, litigation, or proceeding relating thereto; and I agree promptly to perform such lawful acts and to sign such further applications, assignments, statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Inventor's Signature:

Stephan Kottler

4/2/2018

### ASSIGNMENT

For valuable consideration, I, Joern Schmidt,

hereby assign to

SAPSE, a corporation of Europe having a place of business at Dietmar-Hopp-Allee 16, 69190 Walldorf, Germany

and its successors, and assigns (collectively, the ASSIGNE) my entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled:

### DATABASE RECOVERY AND OPTIMIZATION WITH BATCH PROCESSING

which is found in the:

USpatent application filed on: 16 April 2018

under Application No. <u>15/953,856</u>

I 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. This assignment includes the foregoing patent application or patent, as well as continuations and divisionals of said application, all legal equivalents in any country, and all patents issuing from such legal equivalents; all patents, utility models, and design registrations granted by any jurisdiction for any of said inventions and improvements; and the right to claim priority based on the filing date of the foregoing patent application or patent under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes. I authorize the Assignee to apply in all countries in my name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements. Thereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into that would conflict with this assignment. I hereby state and agree that no assignment, sale, agreement, or encumbrance has been or will be made or entered into that would conflict with this assignment. I further agree for myself and my heirs, legal representatives, and assigns to provide to the Assignee promptly upon its request and at its expense all pertinent facts and documents relating to any of said inventions and improvements or said patents and legal equivalents as may be known and accessible to me and to testify as to the same in any interference, litigation, or proceeding relating thereto; and I agree promptly to perform such lawful acts and to sign such further applications, assignments, statements, and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Inventor's Signature:

RECORDED: 04/24/2018

DocuSigned by:

0

4/18/2018

Joern Schmidt