PATENT ASSIGNMENT COVER SHEET

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| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| IULIIA KONSTANTINOVA | 12/13/2018 |
| RALPH DEBUSMANN | 12/13/2018 |
| MICHAIL VASILTSCHENKO | 12/12/2018 |
| ANTON SNITKO | 12/13/2018 |
| GÜNTHER FISCHER | 12/13/2018 |

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: | 16223340 |

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.

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hbodine@sternekessler.com. dofori@sternekessler.com

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| ATTORNEY DOCKET NUMBER: | 1933.5230000 | |
|-------------------------|----------------------------------|--|
| NAME OF SUBMITTER: | TIMOTHY L. TANG, REG. NO. 75,187 | |
| SIGNATURE: | /Timothy L. Tang, Reg.# 75187/ | |
| DATE SIGNED: | 02/11/2019 | |

Total Attachments: 5

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PATENT REEL: 048297 FRAME: 0574

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ASSIGNMENT

For valuable consideration, I, Iuliia Konstantinova,

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:

PRODUCT OPTIMIZATION CRAWLER AND MONITOR

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.

ASSIGNMENT

For valuable consideration, I, Ralph Debusmann,

hereby assign to

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

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Inventor's Signature: Ralph Debusmann 12/13/2018

Ralph Debusmann 12/13/2018

ASSIGNMENT

For valuable consideration, I, Michail Vasiltschenko,

hereby assign to

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

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Inventor's Signature:

Michail Vasiltschenko

12/12/2018

Michail Vasiltschenko

ASSIGNMENT

For valuable consideration, I, Anton Snitko,

hereby assign to

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Inventor's Signature: 12/13/2018

Anton Shitko

ASSIGNMENT

For valuable consideration, I, Gnther Fischer,

hereby assign to

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Inventor's Signature:

RECORDED: 02/11/2019

Gunther Fischer

12/13/2018

PATENT

REEL: 048297 FRAME: 0580