PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3655559

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| DANIEL BUCHMANN | 09/23/2015 |

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14864672 |

CORRESPONDENCE DATA

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

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| ATTORNEY DOCKET NUMBER: | 150578US01 |
|-------------------------|--------------------|
| NAME OF SUBMITTER: | ELITSA RANGELOVA |
| SIGNATURE: | /Elitsa Rangelova/ |
| DATE SIGNED: | 12/12/2015 |

Total Attachments: 1

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PATENT REEL: 037278 FRAME: 0918

503608928

Attorney Docket No.: 150578US01

ASSIGNMENT

For valuable consideration, I, <u>Deniel Buchmann</u> hereby assign SAP SE, a European Company, having a place of business at Dietmar-Hopp- Allee 16, D-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 that are the subject of a patent document entitled.

SEARCH-INDEPENDENT RANKING AND ARRANGING DATA

which is found in

| U.S. patent appl | lication filed | on Sept. 2 | 4, 2015 | | |
|-------------------|---------------------|------------|---------|---------------|-------------------|
| [x] under Applica | ation No. <u>14</u> | /864,672 | | and a | |
| with Express | Mail No | | (Appl | ication Numbe | er not yet known) |

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, 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 filling 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.

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 respective 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.

| ventor's Signatu | | Date | |
|------------------|-------------------------|-----------|----|
| int Name | <u> Daniel Buchmann</u> | | |
| inessed by: | <u> </u> | 23.9.2045 | · |
| Si | y)ature (/ | Date | v- |

PATENT REEL: 037278 FRAME: 0919

RECORDED: 12/12/2015