PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
THOMAS LEGLER	04/03/2018
ANDREAS TONDER	04/02/2018

RECEIVING PARTY DATA

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15945723

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	084874-332F01US
NAME OF SUBMITTER:	PAUL BROCKLAND
SIGNATURE:	/Paul Brockland/
DATE SIGNED:	04/09/2019

Total Attachments: 2

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PATENT 505419327 REEL: 048837 FRAME: 0219

Attorney Dkt. No. 54874-332F01US/ 180132US01

ASSIGNMENT

For valuable consideration, I, Thomas Legler,

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:

VIRTUAL COLUMNSTO EXPOSE ROW SPECIFIC DETAILS FOR QUERY EXECUTION IN COLUMN STORE DATABASES

which is found in the:

USpatent application filed on: April 4, 2018

under Application No. 15/945,723

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:	Thomas Legler	4/3/2018
	Thomas Legier	

- DeauSianed but

PATENT REEL: 048837 FRAME: 0220 Attorney Dkt. No. 54874-332F01US/ 180132US01

ASSIGNMENT

For valuable consideration, I, Andreas Tonder,

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 ASSGNEE) my entire right, title and interest throughout the world in the inventions and improvements in a patent document entitled:

VIRTUAL COLUMNSTO EXPOSE ROW SPECIFIC DETAILS FOR QUERY EXECUTION IN COLUMN STORE DATABASES

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> PATENT REEL: 048837 FRAME: 0221