505122823 10/02/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
VENGATESWARAN CHANDRASEKARAN	09/27/2018
SANDEEP CHAKRAVARTY	09/26/2018

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16144829

CORRESPONDENCE DATA

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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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Correspondent Name: MINTZ LEVIN SAN DIEGO / LILY ZHANG

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Address Line 2: SUITE 300

Address Line 4: SAN DIEGO, CALIFORNIA 92130

ATTORNEY DOCKET NUMBER:	054874-354F01US
NAME OF SUBMITTER:	LI (LILY) ZHANG
SIGNATURE:	/li zhang/
DATE SIGNED:	10/02/2018

Total Attachments: 2

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PATENT 505122823 REEL: 047039 FRAME: 0905

Attorney Dkt. No. 054874-354F01US / 180536US01

ASSIGNMENT

For valuable consideration, I, Vengateswaran Chandrasekaran,

hereby assign to

SAP SE, 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:

LEARNING MODEL BASED SEARCH ENGINE

which is found in the:

US patent application filed on: September 27, 2018

under Application No. 16/144,829

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. I hereby covenant that no assignment, sale, agreement or encum brance 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:

Vengateswaran Chandrasekaran 27/2018

Vengateswaran Chandrasekaran

PATENT REEL: 047039 FRAME: 0906 Attorney Dkt. No. 054874-354F01US / 180536US01

<u>ASSIGNMENT</u>

For valuable consideration, I, Sandeep Chakravarty,

hereby assign to

SAP SE, 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:

LEARNING MODEL BASED SEARCH ENGINE

which is found in the:

RECORDED: 10/02/2018

US patent application filed on: September 27, 2018

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Inventor's Signature:

Sandup Chakravarty

9/26/2018

Sandeep Chakravarty

Sandeep Chakravarty

PATENT REEL: 047039 FRAME: 0907