

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4418022

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MARVIN BAUMGART	05/11/2017
VIKTOR POVALYAYEV	05/11/2017
DAVID C. HU	05/15/2017
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:	15594086
CORRESPONDENCE DATA	
Fax Number:	(503)595-5301
<i>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.</i>	
Phone:	503-595-5300
Email:	Ryan.Heck@klarquist.com
Correspondent Name:	RYAN A. HECK, PH.D., C/O KLARQUIST SPARKMAN, LLP
Address Line 1:	121 SW SALMON STREET
Address Line 2:	SUITE 1600
Address Line 4:	PORTLAND, OREGON 97204
ATTORNEY DOCKET NUMBER:	8880-98591-01
NAME OF SUBMITTER:	RYAN A. HECK, PH.D.
SIGNATURE:	/Ryan A. Heck, Reg. No. 51,795/
DATE SIGNED:	05/17/2017
Total Attachments: 3	
source=Assignment#page1.tif	
source=Assignment#page2.tif	
source=Assignment#page3.tif	

ASSIGNMENT

I, Marvin Baumgart ("ASSIGNOR"), have invented subject matter ("INVENTION"), disclosed and/or claimed in the following patent application(s) ("APPLICATIONS"):

U.S. Patent Application entitled POSITIONALLY-ENCODED STRING REPRESENTATIONS, INCLUDING THEIR USE IN MACHINE LEARNING AND IN SECURITY APPLICATIONS, having U.S. Patent Application No. 15/594,086, filed on May 12, 2017;

ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives of Klarquist Sparkman, LLP, 121 S.W. Sabnon Street, Suite 1600, Portland, OR 97204 USA, who are associated with customer number 106592, to insert the application number(s) and filing date(s) above when known;

SAP SE, Dietmar-Hopp-Allee 16, D-69190 Walldorf, Germany, a company organized under the laws of the country of Germany, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and is desirous of acquiring the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns, and transfers to the ASSIGNEE, the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and APPLICATION DERIVATIVES, including foreign priority rights;

ASSIGNOR agrees to sign any documents required for the prosecution of the APPLICATIONS and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for protecting and perfecting title to the APPLICATIONS and APPLICATION DERIVATIVES.

<u>Marvin Baumgart</u>	<u>05/11/2017</u>
Inventor's Signature	Date Signed
Marvin Baumgart	
<u>M. Baumgart</u>	<u>05/11/2017</u>
Witness Signature	Date Signed
<u>JANI K MAYANNAO</u>	
Witness Name (print)	

ASSIGNMENT

I, Viktor Povalyayev ("ASSIGNOR"), have invented subject matter ("INVENTION"), disclosed and/or claimed in the following patent application(s) ("APPLICATIONS"):


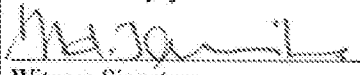
U.S. Patent Application entitled POSITIONALLY-ENCODED STRING REPRESENTATIONS, INCLUDING THEIR USE IN MACHINE LEARNING AND IN SECURITY APPLICATIONS, having U.S. Patent Application No. 15/594,086, filed on May 12, 2017;

ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives of Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, OR 97204 USA, who are associated with customer number 106592, to insert the application number(s) and filing date(s) above when known;

SAP SE, Dietmar-Hopp-Allee 16, D-69190 Walldorf, Germany, a company organized under the laws of the country of Germany, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and is desirous of acquiring the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns, and transfers to the ASSIGNEE, the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and APPLICATION DERIVATIVES, including foreign priority rights;

ASSIGNOR agrees to sign any documents required for the prosecution of the APPLICATIONS and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for protecting and perfecting title to the APPLICATIONS and APPLICATION DERIVATIVES.

	<u>05/11/2017</u>
Inventor's Signature Viktor Povalyayev	Date Signed
	<u>05/11/2017</u>
Witness Signature	Date Signed
<u>JAN NAWANNAD</u>	
Witness Name (print)	

ASSIGNMENT

I, David C. Hu ("ASSIGNOR"), have invented subject matter ("INVENTION"), disclosed and/or claimed in the following patent application(s) ("APPLICATIONS"):


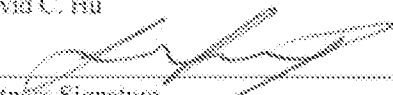
U.S. Patent Application entitled POSITIONALLY-ENCODED STRING REPRESENTATIONS, INCLUDING THEIR USE IN MACHINE LEARNING AND IN SECURITY APPLICATIONS, having U.S. Patent Application No. 15/594,086, filed on May 12, 2017:

ASSIGNOR hereby authorizes and requests ASSIGNEE'S legal representatives of Klarquist Sparkman, LLP, 121 S.W. Salmon Street, Suite 1600, Portland, OR 97204 USA, who are associated with customer number 106592, to insert the application number(s) and filing date(s) above when known;

SAP SE, Dietmar-Hopp-Allee 16, D-69190 Walldorf, Germany, a company organized under the laws of the country of Germany, on behalf of itself and its successors and assigns ("ASSIGNEE"), is entitled to and is desirous of acquiring the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and all other applications and patents derived therefrom, such as continuing applications, in and for the United States, its territories, and all foreign countries ("APPLICATION DERIVATIVES");

For good and valuable consideration, the receipt of which is hereby acknowledged by the ASSIGNOR, the ASSIGNOR hereby sells, assigns, and transfers to the ASSIGNEE, the entire and exclusive rights, title, and interest in the INVENTION, the APPLICATIONS, and APPLICATION DERIVATIVES, including foreign priority rights;

ASSIGNOR agrees to sign any documents required for the prosecution of the APPLICATIONS and APPLICATION DERIVATIVES, for litigation regarding letters patent derived therefrom, and for protecting and perfecting title to the APPLICATIONS and APPLICATION DERIVATIVES.

	<u>5/15/2017</u>
Inventor's Signature David C. Hu	Date Signed
	
Witness Signature	Date Signed
<u>Jackie Wang</u>	<u>5/15/2017</u>
Witness Name (print)	