

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT8215687

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
AYUSH TOMAR	10/02/2023
ZENGPAN FAN	10/11/2023
KETKI SAVLE	09/27/2023
FAZLE SHAHNAWAZ MUHIBUL KARIM	09/27/2023
RAMIN ANUSHIRAVANI	09/27/2023
YAZHAO NI	09/27/2023
RECEIVING PARTY DATA	
Name:	OPTUM, INC.
Street Address:	9900 BREN ROAD EAST
City:	MINNETONKA
State/Country:	MINNESOTA
Postal Code:	55343
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	18484943
CORRESPONDENCE DATA	
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<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>	
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Email:	usptomail@alston.com
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Address Line 1:	1120 SOUTH TRYON STREET, SUITE 300
Address Line 4:	CHARLOTTE, NORTH CAROLINA 28203
ATTORNEY DOCKET NUMBER:	054642/598947
NAME OF SUBMITTER:	SYDNEY BITANCOR
SIGNATURE:	/Sydney L. Bitancor/
DATE SIGNED:	10/11/2023
Total Attachments: 8	

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ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor ("Assignor") hereby sells and assigns, unto

Optum, Inc.
9900 Bren Road East
Minnetonka, MN 55343

("Assignee"), and its successors and assigns, Assignor's entire worldwide right, title, and interest in and to all inventions, improvements, and discoveries (collectively, the "Inventions") set forth in the application received concurrently herewith, referred to by the Attorney Docket Number provided herewith, and titled:

"TEXT EMBEDDING-BASED SEARCH TAXONOMY GENERATION AND INTELLIGENT REFINEMENT",

as well as in and to: (a) all improvements and modifications to any of the Inventions, (b) the above-identified patent application(s) (if any) and all other patent applications, patents, utility models, design registrations, other rights of exclusion, and inventors' certificates in every country or region setting forth (i) any or all of the Inventions, or (ii) any improvements or modifications to any or all of the Inventions, including all continuation, divisional, continuation-in-part (to the extent based upon prior Inventions), renewal, substitute, nonprovisional, and Convention applications based in whole or in part upon said Inventions or upon said applications, and any and all Letters Patent and reissues, reexaminations, and extensions of Letters Patent granted for said Inventions or upon said applications (the items referenced in (b) collectively being referred to hereinafter as the "Applications and Granted Rights"), (c) every priority right that is or may be predicated upon or arise from any of the Inventions or the Applications and Granted Rights, and (d) the right to pursue, collect, and retain in Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Inventions, the Applications and Granted Rights, and any other rights assigned by this Assignment;

Assignee being hereby authorized to file patent applications in any or all countries on any or all of the Inventions in the name of Assignor or in the name of Assignee or otherwise as Assignee may deem advisable, under the Paris Convention and/or Patent Cooperation Treaty or otherwise; the Commissioner of Patents of the United States Patent and Trademark Office (and officials of other countries whose duty it is to issue patents) being hereby authorized to issue or transfer all Letters Patent to Assignee in accordance with this Assignment;

this Assignment being under covenant, not only that full power to make the same is held by Assignor, but also that such assigned right is not encumbered by any grant, license, or other right previously given, and that Assignor will do all acts reasonably serving to ensure that the Inventions and the Applications and Granted Rights shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by Assignor if this Assignment had not been made, and particularly to execute and deliver to Assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, declarations, and lawful

affidavits in form and substance which may be requested by Assignee, to furnish Assignee with all facts relating to any of the Inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may embody any of the Inventions, and to testify in any proceedings relating to any of the Inventions or the Applications and Granted Rights.

Assignor hereby grants Assignee, its successors, legal representatives, and assigns the right to insert in this Assignment any further identification (including, but not limited to Attorney Docket Number, and patent application serial number, date, and other information) that may be necessary or desirable for valid recordation of this Assignment.

This Assignment is deemed to be effective at least as early as the earliest filing date listed above and/or associated with any of the Inventions. To the extent that Assignor has previously assigned, to Assignee, any right, title, or interest in the Inventions or the Applications and Granted Rights, this document shall be interpreted as confirming the validity of such prior assignment(s).

Ayush Tomar
/ Ayush Tomar (Oct 2, 2023 08:12 PM) /
Ayush TOMAR

Oct 2, 2023

Date

Assignor hereby grants Assignee, its successors, legal representatives, and assigns the right to insert in this Assignment any further identification (including, but not limited to Attorney Docket Number, and patent application serial number, date, and other information) that may be necessary or desirable for valid recordation of this Assignment.

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Zengpan Fan
Zengpan Fan (Oct 11, 2023 07:29 PDT)

Zengpan FAN

Oct 11, 2023

Date

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Ketki Savle
/ Ketki Savle (Sep 27, 2023 11:37 EDT) /
Ketki SAVLE

Sep 27, 2023
Date

Assignor hereby grants Assignee, its successors, legal representatives, and assigns the right to insert in this Assignment any further identification (including, but not limited to Attorney Docket Number, and patent application serial number, date, and other information) that may be necessary or desirable for valid recordation of this Assignment.

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Fazle Shahnawaz Muhibul Karim
/ Fazle Shahnawaz Muhibul Karim (Sep 27, 2023 10:40 CDT) /
Fazle Shahnawaz Muhibul KARIM

Sep 27, 2023

Date

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Ramin Anushiravani
/ Ramin Anushiravani (Sep 27, 2023 10:17 PM)
Ramin ANUSHIRAVANI

Sep 27, 2023
Date

Assignor hereby grants Assignee, its successors, legal representatives, and assigns the right to insert in this Assignment any further identification (including, but not limited to Attorney Docket Number, and patent application serial number, date, and other information) that may be necessary or desirable for valid recordation of this Assignment.

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/ *Yizhao Ni* /
Yizhao Ni (Sep 27, 2023 09:15 MDT)
Yazhao NI

Sep 27, 2023
Date