

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT7960336

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
HUA HAO	03/09/2023
CHEN BI	03/14/2023
TIEYI GUO	03/09/2023
BYUNG CHUN	03/06/2023
WENBIN REN	03/09/2023
HAO FU	03/09/2023
PENGRUI SUN	03/09/2023
RECEIVING PARTY DATA	
Name:	FMR LLC
Street Address:	245 SUMMER STREET
City:	BOSTON
State/Country:	MASSACHUSETTS
Postal Code:	02210
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	18115496
CORRESPONDENCE DATA	
Fax Number:	
<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>	
Email:	docket@c-m.com
Correspondent Name:	CESARI AND MCKENNA, LLP
Address Line 1:	ONE LIBERTY SQUARE
Address Line 2:	SUITE 310
Address Line 4:	BOSTON, MASSACHUSETTS 02109
ATTORNEY DOCKET NUMBER:	256002-0463A
NAME OF SUBMITTER:	PATRICK J. NIEDERMEIER
SIGNATURE:	/Patrick J. Niedermeier #64,946/
DATE SIGNED:	05/18/2023

Total Attachments: 8

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

INVENTOR(S): Hao, et al. CONFIRMATION NO.: 5579
APPLICATION NO.: 18/115,496 FILING DATE: February 28, 2023
TITLE: ENHANCING CHATBOT RECOGNITION OF USER INTENT THROUGH
GRAPH ANALYSIS

DECLARATION PURSUANT TO 37 C.F.R. § 1.63 AND ASSIGNMENT

I. DECLARATION

As the below named inventor, I hereby make the following declarations with respect to the above-identified patent application:

The above-identified application was made or authorized to be made by me;

I believe that I am the original inventor or an original joint inventor of a claimed invention in the above-identified application;

I hereby state that I have reviewed and understand the contents of the above-identified application, including the claims;

I acknowledge the duty to disclose to the United States Patent and Trademark Office all information known by me to be material to patentability as defined in 37 C.F.R. § 1.56, including for continuation-in-part applications, material information known by me which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application; and

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both.

II. ASSIGNMENT

WHEREAS, I, Hua Hao, have invented, solely or jointly, one or more inventions described in the above-identified patent application for letters patent; and

WHEREAS, FMR LLC (hereinafter "ASSIGNEE"), having a usual place of business at 245 Summer Street, Boston, MA 02210, United States of America, desires to acquire an interest therein, in accordance with agreements duly entered into with me.

NOW, THEREFORE, to all whom it may concern be it known that for and in consideration of said agreements and of other good and valuable consideration, the receipt of which is hereby acknowledged, I have sold, assigned and transferred and by these presents do hereby sell, assign and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, my entire right, title and interest in and throughout the United States of America, its territories and all foreign countries, in and to the invention(s) described in said application, together with my entire right, title and interest in and to said application and such letters patent as may issue thereon or claim priority under United States law or international convention, including but not limited to non-provisionals, continuations, divisionals, reissues, reexaminations, extensions, and substitutions of said application or such letters patent, and any right, title and interest I may have in provisional applications to which said application claims priority; said invention(s), applications and letters patent to be held and enjoyed by said ASSIGNEE for its own use and behalf and for its successors, assigns and legal representatives, to the full end of the term for which said letters patent may be granted as fully and entirely as the same would have been held by me had this assignment and sale not been made. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for letters patent, including but not limited to any

cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.

I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such letters patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth below.

Inventor: Hua Hao
Hua Hao

NOTARIZATION

State/Commonwealth of _____)
County of _____) ss

On this ____ day of _____, 2023 before me, the undersigned notary public, personally appeared Hua Hao, proved to me through satisfactory evidence of identification, which was/were _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My Commission Expires: _____

WITNESS

Witness Signature: Hua Hao
Witness Name: Hua Hao
Witness Date: 2023 3 9

had this assignment and sale not been made. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for letters patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.

I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

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III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand-and affixed my seal on the date set forth below.

Inventor: Chen Bi
Chen Bi

NOTARIZATION

State/Commonwealth of _____)
County of _____) ss

On this 14th day of March, 2023 before me, the undersigned notary public, personally appeared Chen Bi, proved to me through satisfactory evidence of identification, which was/were _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My Commission Expires: _____

WITNESS

Zhanghongjin

Witness Signature: _____

Witness Name: Zhanghongjin

Witness Date: _____

had this assignment and sale not been made. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for letters patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.

I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

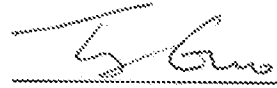
I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such letters patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand-and affixed my seal on the date set forth below.

Inventor:


Teyi Guo

NOTARIZATION

State/Commonwealth of _____)
County of _____) ss

On this ____ day of _____, 2023 before me, the undersigned notary public, personally appeared Teyi Guo, proved to me through satisfactory evidence of identification, which was/were _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

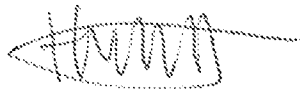
My Commission Expires: _____

WITNESS

Witness Signature:

Witness Name:

Witness Date:



Hua Liang

03/09/2023

had this assignment and sale not been made. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for letters patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.

I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such letters patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have herunto set my hand-and affixed my seal on the date set forth below.

Inventor:


Byung Chun

NOTARIZATION

State/Commonwealth of _____)
County of _____) ss

On this 6 day of March, 2023 before me, the undersigned notary public, personally appeared Byung Chun, proved to me through satisfactory evidence of identification, which was/were _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My Commission Expires: _____

WITNESS

Witness Signature: _____

Witness Name: _____

Witness Date: _____

Byung Chun

Byung Chun

3/6/2023

had this assignment and sale not been made. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for letters patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.

I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such letters patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth below.

Inventor: Wenbin Ren
Wenbin Ren

NOTARIZATION

State/Commonwealth of _____)
County of _____) ss

On this ____ day of _____, 2023 before me, the undersigned notary public, personally appeared Wenbin Ren, proved to me through satisfactory evidence of identification, which was/were _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My Commission Expires: _____

WITNESS

Witness Signature: Hua Hao

Witness Name: Hua Hao

Witness Date: 2023/03/09

had this assignment and sale not been made. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for letters patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.

I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such letters patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth below.

Inventor: Hao Fu
Hao Fu

NOTARIZATION

State/Commonwealth of)
County of) ss

On this ____ day of _____, 2023 before me, the undersigned notary public, personally appeared Hao Fu, proved to me through satisfactory evidence of identification, which was/were _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public
My Commission Expires: _____

WITNESS

Witness Signature: Jayin Yu
Witness Name: Jayin Yu
Witness Date: 2023.3.9

had this assignment and sale not been made. I hereby convey all of my rights arising under or pursuant to any and all United States laws and international agreements, treaties or laws relating to the protection of industrial property by filing any such applications for letters patent, including but not limited to any cause(s) of action and damages accruing prior to this assignment. I hereby acknowledge that this assignment, being of my entire right, title and interest in and to said invention(s), carries with it the right in ASSIGNEE to apply for and obtain from competent authorities in all countries of the world any and all letters patent by attorneys and agents of ASSIGNEE's selection and the right to procure the grant of all letters patent to ASSIGNEE in its own name as assignee of my entire right, title and interest therein.

I hereby further agree for myself and my executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary to secure fully the aforesaid invention(s) to said ASSIGNEE, its successors, assigns, and legal representatives, but at its or their expense and charges, including the execution of non-provisional, substitution, continuation, divisional, reissue, reexamination, or corresponding foreign or international patent applications.

I hereby further agree to provide statements or testimony in any interference or other proceeding in which said invention(s) or any application or patent directed thereto may be involved.

I hereby authorize and request the Director of the United States Patent and Trademark Office to issue such letters patent as shall be granted upon said application, or applications based thereon, to said ASSIGNEE, its successors, assigns, or legal representatives.

III. SIGNATURE BLOCK

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed my seal on the date set forth below.

Inventor:

Pengrui Sun
Pengrui Sun

NOTARIZATION

State/Commonwealth of _____)
County of _____) ss

On this ____ day of _____, 2023 before me, the undersigned notary public, personally appeared Pengrui Sun, proved to me through satisfactory evidence of identification, which was/were _____, to be the person whose name is signed on the preceding or attached document in my presence.

Notary Public

My Commission Expires: _____

WITNESS

Witness Signature: _____

Witness Name: _____

Witness Date: _____

Haitao Zhang

Haitao Zhang

2023/03/09