504185331 01/19/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

ronic Version v1.1 EPAS ID: PAT4232006

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUGAL MALVIYA	01/12/2017
VIGNESH CHANDRASEKARAN	01/12/2017
ANUPREET K. LAMBA	01/12/2017
AMIT MISHRA	01/12/2017

RECEIVING PARTY DATA

Name:	BANK OF AMERICA CORPORATION
Street Address:	MAIL CODE NC 1-027-20-05
Internal Address:	214 N. TRYON ST.
City:	CHARLOTTE
State/Country:	NORTH CAROLINA
Postal Code:	28255

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15407929

CORRESPONDENCE DATA

Fax Number: (202)824-3001

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.

Phone: (312) 463-5000

Email: bwptopat@bannerwitcoff.com, msigur@bannerwitcoff.com

Correspondent Name: BANNER & WITCOFF, LTD.

Address Line 1: 1100 13TH ST. NW

Address Line 2: STE 1200

Address Line 4: WASHINGTON, D.C. 20005

ATTORNEY DOCKET NUMBER:	007131.01838
NAME OF SUBMITTER:	JEFFREY H. CHANG
SIGNATURE:	/Jeffrey H. Chang/
DATE SIGNED:	01/19/2017

Total Attachments: 8

PATENT REEL: 041013 FRAME: 0308

504185331



COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of invention	Capturing and Extracting Fragmented Data and Data Processing Using Machine Learning
As the below no	amed inventor, I hereby declare that:
This declaration is directed to:	X The attached application, or
	United States application or PCT international application number
The above-iden	tified application was made or authorized to be made by me.
I believe that I a	an the original inventor or an original joint inventor of a claimed invention in the application.
	viedge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or of not more than five (5) years, or both.
	ASSIGNMENT
are blank, the a this assignment	gai Malviya ("Assignor"), a citizen of <u>India</u> (Country), has invented the above invention. If the following lines obove application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of the control of the con
	U.S. Application No. 15/407,929, filed <u>January 17, 2017</u> .
Delaware, and title and interes	IK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, st in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the f America, and in any and all countries foreign thereto:
payment for the said Assignor, be representatived countries in its entitled under lietters Patent (in-parts and exconfidential infrequest the Confidentials or reinterest. I represent thout further nominees, any provisional, div proceedings, si	RE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or e-making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal is, the full and exclusive right, title and interest for the territory of the United States of America and all gen thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign own name and to claim any priority rights for such foreign applications to which such applications are international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuation-tensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, formation, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and remissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and result and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will reconsideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or and all facts known to me regarding said inventions whenever requested, and that I will execute all non-disional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal gn all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its igns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

[Page 1 of 2]

WARNING:

Retitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compilance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

EEGAL NAME OF INVENTOR	-
Inventor: Yugal Malviya Inventor: Yugal Malviya	Date: 12- JAM - 2017

[Page 2 of 2]

COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

Title of invention	Capturing and Extracting Fragmented Data and Data Processing Using Machine Learning
As the below n	gamed investign, Chereby declare that:
This decleration is directed to:	²⁰ X. The attached application, or
	United States application on PCT international application number
The above-ide	nuffed application was made to authorited to be made by me.
(believe that)	am the original inventor or so original joint loventor of a clothed lovention in the application
	swipdge that any with it fairse statement, made in this declaration is punishable under 18 9.5-C, 1901 by fine or of non-more than fine (5) years, or both.
	Assignment

WMRREAU, I, <u>Amit Mishra</u> ("Assignor"), a prize not <u>India</u> (Country), has inverted the above invention. If the following lines acculant, the chove application was filed on even date herewith, otherwise, to nomply with 37 C.S.B. \$8.33 for recorded of this assignment, i, an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date and application number below after they become known and order to filing the recordation.

11.5. Application to 15/407,929 Med January 17, 2017

WHEREAS, BATES OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business of Charlotta, North Carolina, is desirous of acquiring the entire right, tidls and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all Countries foreign thereto:

NOW, THERSTORS, TO WHORE IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby economissized, i said Assigner, by those presents tip sell, assign and transfer unto said Assignee, its sucressors, assigns end legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, finduting the right to early for Letters Fatent in foreign countries in its connitating and to claim any polarity rights for such foreign applications to which such applications are entities under Jatemetica at conventions, presties, or otherwise), in and to taid inventions and to aid applications and Labrara Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, communication in-parts and extensions thereof, and in and to all copyrights, trademarks with their estociated goodwill, trade secrets, confidencial information, and compliations, necessary or usaful to make, use, or self the inventions. Thereby earthcrize and request the Commissioner of Estents, and any official whose duty it is to itsue patents, to issue all Letters Patent on said inventions or resulting Digrafrom to said Assignee, or his successors and assigne, as assignee of the entire right, title and interest. Expresent and warrant that Lineve full right to agree to, execute, and deliver this assignment. Expres that Ewil without further consideration, but or the expense of essignee, communicate to said Assignee, or its successors, assigns, or ncompass, any son all faces known to me regarding said inventions whenever requested, and that I will execute all nonprovisional, divisional, rassue, raexamination, confinuation and confinuation in part applications, testify in any legal processings, sign all fautur papers, make all rightful paths, and generally do everything reasonable for taid Assigned. Its successors, assigns, and nominous, to obtain and enforce proper patent protection for said inventions in all countries.

(Page 1 of 2)

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identify theit. Personal information such as social security numbers, bank account numbers, or credit and numbers (other than a check or credit card authorization form PTO-2038 authorized for payment purposes) credit and numbers tother than a check or credit and authorization form PTO-2038 submitted for payment purposes) is never required by the UEPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redecting such personal information into the documents before submitting them to the USPTO. Petitioners/applicant is advised that the record of a patent application is available to the public after publication of the application furthers a non-publication request in compliance with 37 CFR 1.213(a) is made in the application in squared of a patent. Purcharmore, the record from an absolute or payment and the public of the application is referenced in a published application or application of the application of the application is referenced in a published application or application of the app

an issued patent (see purposes are not ret	37 CPR 1 12). Checks and cremt nated in the application file and t	tere fore are not publicly evaluable.
LEGAL NAME OF INV	ENTOR	
inventor: <u>Amit Mizi</u> li	3.	0886 12 - day - 2057
Constant C	and The State of t	
\$5 - 600 0 T	***************************************	***************************************

(Page 2 of 2)

COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

T	
Title of Invention	Capturing and Extracting Fragmented Data and Data Processing Using Machine Learning
As the below name	ed inventor, I hereby declare that:
This declaration is directed to:	X The attached application, or
	United States application or PCT international application number
The above identific	ed 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 application.
	dge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or of more than five (5) years, or both
	ASSIGNMENT
lines are blank, the recordal of this ass	reet K. Lamba ("Assignor"), a citizen of <u>India</u> (Country), has invented the above invention. If the following a above application was filed on even date herewith, otherwise, to comply with 37 C.F.R. §3.21 for signment, I, an assignor below, hereby authorize the attorneys for Bank of America to insert the filing date imber below after they become known and prior to filing the recordation.
	U.S. Application No. 15/407,929 , filed January 17, 2017

WHEREAS, BANK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Delaware, and having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, title and interest in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the United States of America, and in any and all countries foreign thereto:

NOW, THEREFORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or payment for the making of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I said Assignor, by these presents do sell, assign and transfer unto said Assignee, its successors, assigns and legal representatives, the full and exclusive right, title and interest for the territory of the United States of America and all countries foreign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), in and to said inventions and in and to all applications and Letters Patent granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation in-parts and extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, confidential information, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and request the Commissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said inventions or resulting therefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and interest. I represent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will without further consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or nominees, any and all facts known to me regarding said inventions whenever requested, and that I will execute all nonprovisional, divisional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal proceedings, sign all lawful papers, make all rightful paths, and generally do everything reasonable for said Assignee, its successors, assigns, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.

[Page 1 of 2]

Date: 12 January 2017

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider reducting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

LEGAL NAME OF INVENTOR

Inventor: Anupreet K. Lamba

Signature:

[Page 2 of 2]

COMBINED DECLARATION (37 CFR 1.63) AND ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

l.	PRINCIPLE ESCON ART CALLED LAIN SCIES (ST UN 270)
Title of invention	Capturing and Extracting Fragmented Data and Data Processing Using Machine Learning
As the below	named inventor, I hereby declare that:
This declared to	
	Onited States application or PCT international application number
The above id	profiled againstion was made or europrised to be made by me.
I believe that	i am the congress investors or an original joint inventor of a claimed invention in the application.
	existency that any willful take statement made in this declaration is contribute under 10 U.S.C. 1001 by fine or it of not more than five (5) years, or both.
<u> </u>	A2S/GNMENT
following life for recordals	<u>visional Clandinated and</u> ("Assignor"), a chiteo of <u>India</u> (Country), has invented the above invention. If the is are blank, the above amplication was field on even date terment, otherwise, to comply with \$7.0 KB, \$3.23 of this assignment, I, an assignor below, hereby authorize the attorneys for Bank of America to insert the Using scanon tumpier belogs after they become known and prior to filing the reconsistion.
	U.S. Application No. 15/407,929 Mac January 17, 2017
Delaware, 81 title and loss	MAY DE AMERICA CORPORATION ("Assigner"), a Corporation duly organized under the laws of the little of id naving its offices and place of bosness at Charlotte, North Carolina, is desirous of acquiring the entire right, rest to and to the Aforesed inventions and in and to all applications and Lefters Fident Nortefor granted in the cof America, and in any and all countries foreign thereto:
payment for said Accignor representation countries for scottled said cottled said total devices in parts and cooliderial	pries, TO washed it bear (CascERE), be it known that, for good and valuable consideration, including salary or the making of inventioning, or strictures benefits, the receipt and sufficiency of which is hemby achinovirilized,), by these preservis do self, assign and transfer two said Assignes, is automoral, assigns and logal less, the full and exclusive right, take and invented for the funded Spaces of America and all eight showed, and throughout the world and all eight showed, and throughout the world and all spaces, fundading the right to apply for Lesters Patent in fundaments then and to spirit or Lesters Patent in fundaments then apply to be sufficient on an extramational conventions, treaties, or atthenwise), in and to said inventions and in and to all applications and it greated therefor, and all non-discussionalists, pressures, rescentifications and make a significant and the all applications and it greated therefor, and in and to all engaginglyss, presuments with their acceptance produced, trade secrets, information, and crimipilations, presently or useful to make, use, or set the loweritions. Therefore and commissioner of Patents, and any afficial whose duty it is to issue patents, to issue all Letters Patent on and

securities or requiring the chord to said Assigner, or his successors and assigns, as satigner of the enthr right, fell and interest, i represent and accroms that I have his right in agree to, execute, and deliver this ossignment, i agree than I will settled to the conditionation, but at the expense of Assigner, communicate to said Assigner, or its successors, assigns, or sometimes, any and all facts income to near regarding said inventions whenever requested, and that swill execute all non-provisional, dissigner, research resource, confinantian and conditional part applications, footify in any legal

processings, sign at lewful papers, make all rightful as his, and generally do everything reasonable for used Assignee, its successors, assigne, and commess, to obtain and enforce proper patent protection for said inventions in all countries.

(Page 1 of 2)

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that may contribute to ident credit card numbers (other is never required by the US in documents submitted to	ioned to avoid submitting p dity that. Personal informa than a cheek or credit cand PTC to support a petition of the USPTO, petitioners/ap	tion such as social t authorization form ran application. If th disents should core	in documents filed in a patern applica ecurity numbers, bank account numb PTO-2028 submitted for payment pur his type of presental information is inci- der reducting such personal informati der reducting such personal informati
application is available to fi compliance with 37 CFR 1.2 abandoned application may	se public after authoration of 15(a) is made in the applic class be available to the po R. L. LA). Checks and cradits	of the application (or dien) or issuance of this if the application and authorization fo	sinant is advised that the record of a piece a non-publication request in a patent. Purthermore, the record for it is referenced in a published applications (FO 2008 submitted for paymenting available.
LEGAL NAME OF INVENTOR			
			(2-)40-2017
Inventor Yagogai Chardon		D866	
space Chapt		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
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(Page 2 of 2)			
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PATENT REEL: 041013 FRAME: 0317

RECORDED: 01/19/2017