PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

v1.1 EPAS ID: PAT5899441

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YASH PANT DASHPUTRA	01/03/2020
TIRUPATHIRAO MADIYA	01/03/2020
KIRAN KUMAR VEMURI	01/03/2020
YELLAIAH PONNAMENI	01/03/2020

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:	16736955			

CORRESPONDENCE DATA

Fax Number: (312)463-5001

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, ohines@bannerwitcoff.com

Correspondent Name: BANNER & WITCOFF, LTD.

Address Line 1: 71 SOUTH WACKER DRIVE

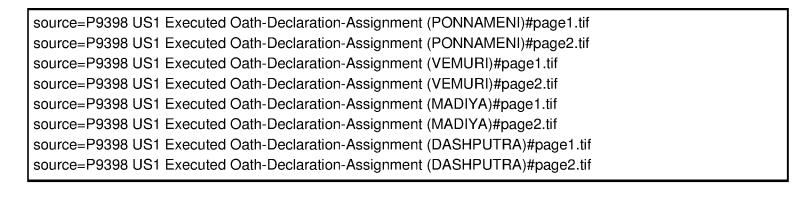
Address Line 2: SUITE 3600

Address Line 4: CHICAGO, ILLINOIS 60606

ATTORNEY DOCKET NUMBER:	007131.02226
NAME OF SUBMITTER:	ASEET PATEL
SIGNATURE:	/ASEET PATEL/
DATE SIGNED:	01/08/2020
	•

Total Attachments: 8

PATENT REEL: 051446 FRAME: 0571



PATENT REEL: 051446 FRAME: 0572

Firm No.: 007131,02226 P9398-US

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

Invention	APAGED MULTI-MODE WHELESS ACCESS PROTOCOL (MANYAP)
As the below nen	ad Inventor, i hansiy deciare that:
This declaration is directed for	X The attached application, or
	United States application or PCT international application number
The above identif	ied application was made or authorized to be made by me.
I believe that I am	the original imantor or an original joint inventor of a claimed invention in the application.
	rige that any willful false statement made in this declaration is purishable under 18 U.S.C. 1901 by fine or not more than five (5) years, or both.
	ASSIGNMENT
State/Province) is date herewith, oil authorize the atto	eleb Pointement ("Assignor"), a chisen of India (Country), residing in 1993 ACT of 1996 India (City, one invented the above application was filed on even terminal to comply with 37 C.F.R. §3.21 for recordal of this assignment, it, an assignor below, hereby meets for Bank of America to insert the filing date and application number below after they become a filing the recordation.
	U.S. Application No. Seed
Delowere, and has title and interest i	OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of Ang its offices and place of business at Charlotte, Morth Carolina, is desirous of acquiring the entire right, a and to the aforesold inventions and in and to all applications and Letters Patent therefor granted in the merica, and in any and all countries foreign thereto:
payment for the name of Assignor, by the property of the countries foreign countries in its owners that grading and contided under into the confidential into confidential into a confiden	TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including selary or seking of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I have presents do sell, assign and francier unto said Assignee, its successors, assigns and legal has full and exclusive right, title and intensit for the territory of the United States of America and all timests, and throughout the world and in space, (including the right to apply for Latters Patent is foreign in same and to claim any priority rights for such foreign applications to which such applications are streamed and to claim any priority rights for such foreign applications and in and to all applications and med therefor, and all non-provisionsis, divisionsis, relisates, reessaminations, continuations sions thereof, and in and to all occyrights, trademarks with their associated goodwill, trade secrets, nation, and complications, necessary or useful to make, use, or sell the inventions. I hereby authorize and fitting therefore to said Assignee, or its successors and assigns, or assignee of the enther right, title and intend warrant that I have full right to agree to execute, and deliver this assignment. I agree that I will insideration, but at the expense of Assignee, communicate to said Assignee, or its successors assigns, or all facts known to me regarding said inventions whenever requested, and that I will execute all mon-

provisional, divisional, reissue, reexamination, continuation and continuation in part applications, testify in any legal proceedings, sign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its successors, essigns, and nominees, to citain and enforce proper patent protection for said inventions in all countries.

(Page 1 of 2)

Firm No.: 007131.02226 P9398-US

WARNING:

Petihloner/applicant is cersioned to avoid submitting personal information in documents filed in a patent application that may contribute to identify theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or cradit card authorization form PTC-2038 submitted for payment purposes) is never required by the USFTO to support a petition or an application. If this type of personal information is included in documents submitted to the USFTO, petitionery/applicants should consider reducting such personal information from the documents before submitting them to the USFTO. Petitioner/applicant is advised that the record of a parent application is available to the public after publication of the application (unless a non-publication request in conclusive with 17 CPR 1.213(a) is made in the application or issuance of a parent. Antherisone, 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 CPR 1.14). Circlis 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						
hive rest: Yellaish Formameni	Detect.	01	03	12020	******	*******
Service 1 P. Yellahah						

[Page 2 of 2]

P9398-US

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	Al-BASED MULTI-MODE WIRELESS ACCESS PROTOCOL (MMWAP)		
As the below	named inventor, I hereby declare that:		
This declaration is directed to:	A THE SUSCINCE EDITIONALISM, OF		
	United States application or PCT international application number		
The above-ide	intified application was made or authorized to be made by me.		
I believe that	am the original inventor or an original joint inventor of a claimed invention in the application.		
	owledge 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 ,		
date herewith authorize the	Kiran Kumar VEMURI ("Assignor"), a citizen of <u>India</u> (Country), residing in		
	U.S. Application No filed		
Delaware, and title and inter	NK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of I having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, est in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the of America, and in any and all countries foreign thereto:		
payment for t said Assignor, representative countries fore countries in it entitled under Letters Patent in-parts and e confidential in request the Co inventions or interest. I rep- without furth- nominees, am- provisional, di proceedings, s	ORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or the 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 es, the full and exclusive right, title and interest for the territory of the United States of America and all ign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign sown 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, continuations, extensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, dormation, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and ammissioner of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said resent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will are consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or y and all facts known to me regarding said inventions whenever requested, and that I will execute all non-visional, reissue, reexamination, continuation and continuation-in-part applications, testify in any legal tign all lawful papers, make all rightful oaths, and generally do everything reasonable for said Assignee, its signs, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.		

[Page 1 of 2]

Firm No.: 007131,02226 P9398-US

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LEGAL NAME OF INVENTOR	•••••	
laventor: <u>Kiran Kumar VEMURI</u>	Date:	01/03/2020
Signature: 1 Y W (Comp.)		

P9398-US

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			AI-BASED MULTI-MODE WIRELESS ACCESS PROTOCOL (MMWAP)
As the below:	namec	inve	ntor, I hereby declare that:
This declaration is directed to:		X	The attached application, or
			United States application or PCY international application number
The above-ide	ntifiec	i app	lication was made or authorized to be made by me.
I believe that	am th	ie ori	ginal inventor or an original joint inventor of a claimed invention in the application.
			it any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or e than five (5) years, or both.
			ASSIGNIMENT
State/Province date herewith authorize the	e) have , other attorn	e inve rwise eys fo	o MADIYA ("Assignor"), a citizen of India (Country), residing in 14 \$35 \$25 \$\frac{1}{2}\$. India (City, inted the above invention. If the following lines are blank, the above application was filed on even to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, hereby or Bank of America to insert the filling date and application number below after they become the recordation.
			U.S. Application Nofiled
Delaware, and title and inter	l havin est in a	g its o	RICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, of the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the and in any and all countries foreign thereto:
payment for ti- said Assignor, representative countries fore countries in it- entitled under Letters Patent in-parts and e confidential in request the Cr inventions or interest. I repr without further nominees, and proceedings, s	he mal by the es, the ign the s own interr grants xtensis dormals resulting resent er consi y and a visions ign all	king c see pr full a creto, name nation stion, stone thous the saidera de saidera the lawfull fact lawfull fact lawfull fact lawfull fact lawfull fact	HOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or of inventions, or employee benefits, the receipt and sufficiency of which is hereby acknowledged, I esents do sell, assign and transfer unto said Assignee, its successors, assigns and legal and exclusive right, title and interest for the territory of the United States of America and all and throughout the world and in space, (including the right to apply for Letters Patent in foreign and to claim any priority rights for such foreign applications to which such applications are nal conventions, treaties, or otherwise), in and to said inventions and in and to all applications and erefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuationsered, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and r of Patents, and any official whose duty it is to issue patents, to issue all Letters Patent on said erefrom to said Assignee, or its successors and assigns, as assignee of the entire right, title and varrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will inton, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or ts known to me regarding said inventions whenever requested, and that I will execute all non-seue, reexamination, continuation and continuation-in-part applications, testify in any legal of papers, make all rightful caths, and generally do everything greasonable for said Assignee, its ominees, to obtain and enforce groper patent protection for said inventions in all countries.

[Page 1 of 2]

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purposes are not retained in the application file and therefore a	
LEGAL NAME OF INVENTOR	
Inventor: Tirupathireo MADIYA	Date:
Signature:	

P9398-US

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	AI-BASED MULTI-MODE WIRELESS ACCESS PROTOCOL (MMWAP)		
As the below	named inventor, I hereby declare that:		
This declaration is directed to:	M the arearms whiteanal to		
	United States application or PCT international application number		
The above-ide	ntified application was made or authorized to be made by me.		
I believe that	am the original inventor or an original joint inventor of a claimed invention in the application.		
	owledge 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		
(City, State/Pr even date her authorize the	Yash Pant DASHPUTRA ("Assignor"), a citizen of <u>India</u> (Country), residing in <u>Figure and a lindia</u> ovince) have invented the above invention. If the following lines are blank, the above application was filed on ewith, otherwise, to comply with 37 C.F.R. §3.21 for recordal of this assignment, I, an assignor below, hereby attorneys for Bank of America to insert the filling date and application number below after they become lor to filling the recordation.		
	U.S. Application No, filed		
Delaware, and title and inter	NK OF AMERICA CORPORATION ("Assignee"), a Corporation duly organized under the laws of the State of I having its offices and place of business at Charlotte, North Carolina, is desirous of acquiring the entire right, est in and to the aforesaid inventions and in and to all applications and Letters Patent therefor granted in the of America, and in any and all countries foreign thereto:		
payment for to said Assignor, representative countries for ecountries in it entitled under Letters Patentin-parts and econfidential in request the Colorentions or interest. I repwithout furth nominees, an provisional, diproceedings,	ORE, TO WHOM IT MAY CONCERN, be it known that, for good and valuable consideration, including salary or he 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 es, the full and exclusive right, title and interest for the territory of the United States of America and all ign thereto, and throughout the world and in space, (including the right to apply for Letters Patent in foreign as 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 a granted therefor, and all non-provisionals, divisionals, reissues, reexaminations, continuations, continuation-vitensions thereof, and in and to all copyrights, trademarks with their associated goodwill, trade secrets, iformation, and compilations, necessary or useful to make, use, or sell the inventions. I hereby authorize and ammissioner 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 resent and warrant that I have full right to agree to, execute, and deliver this assignment. I agree that I will are consideration, but at the expense of Assignee, communicate to said Assignee, or its successors, assigns, or y and all facts known to me regarding said inventions whenever requested, and that I will execute all non-visional, reissue, reexamination, continuation and continuation in part applications, testify in any legal sign all lawful papers, make all rightful daths, and generally do everything reasonable for said Assignee, its signs, and nominees, to obtain and enforce proper patent protection for said inventions in all countries.		

P9398-US

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LEGAL NAME OF INVENTOR	
Inventor: Yash Pant DASHPUTRA	Date: 01 03 2020
Signature:	

[Page 2 of 2]

PATENT REEL: 051446 FRAME: 0580