505257017 12/31/2018 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5303789

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |
| | |

CONVEYING PARTY DATA

| Name | Execution Date |
|---|----------------|
| JOHN BRIAN STEWART | 09/20/2018 |
| TIMOTHY ALAN CARNES | 09/21/2018 |
| LAHIRU SANDAKITH PILETHTHUWASAN GALLEGE | 09/18/2018 |
| CHRISTOPHER SEBASTIAN GROER | 09/18/2018 |
| CHENLU LOU | 09/18/2018 |
| DINESH PREMALAL WEERAPURAGE | 09/24/2018 |

RECEIVING PARTY DATA

| Name: | MAPANYTHING, INC. |
|---|-------------------|
| Street Address: 5200 77 CENTER DRIVE, SUITE 400 | |
| City: | CHARLOTTE |
| State/Country: | NORTH CAROLINA |
| Postal Code: | 28217 |

PROPERTY NUMBERS Total: 8

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16236642 |
| Application Number: | 16236643 |
| Application Number: | 16236644 |
| Application Number: | 16236645 |
| Application Number: | 16236650 |
| Application Number: | 16236652 |
| Application Number: | 16236653 |
| Application Number: | 16236654 |

CORRESPONDENCE DATA

| Fax Number: | (877)248-5100 | |
|--|----------------------|--|
| 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: | 8772485100 | |
| Email: | uspto@ti-law.com | |
| Correspondent Name: | TILLMAN WRIGHT, PLLC | |
| Address Line 1: | PO BOX 49309 | |

505257017

PATENT

| Address Line 4: CHARLOTTE, NORTH CAROLINA 28277 | | |
|---|--|--|
| ATTORNEY DOCKET NUMBER: | 1240 CON APPS BATCH THREE | |
| NAME OF SUBMITTER: | CHAD D TILLMAN | |
| SIGNATURE: | /Chad D Tillman/ | |
| DATE SIGNED: | 12/31/2018 | |
| | This document serves as an Oath/Declaration (37 CFR 1.63). | |
| Total Attachments: 30 | | |
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| source=Assignment#page30.tif | | |

ASSIGNMENT OF INVENTION RIGHTS.

WHEREAS,

Timothy Alan Carnes 3033 23rd Ave W Seattle, WA 98199 US

(hereinafter "Assignor") has or may have invented certain new and useful improvements and/or designs (each hereinafter an "Invention" and collectively the "Inventions"), for a full description of which reference is here made to the following patent property:

| Application No.: | 16/053,789 | | |
|-----------------------------|--|--|--|
| Titled: | UTILIZING CONSTRAINTS AND PENALTIES TO FACILITATE DETERMINATION OF PREFERRED SOLUTIONS TO MULTI-OBJECTIVE ROUTING PROBLEMS | | |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Labiru Sandakith Pileththuwasan Gallege, Chenlu Lou | | |
| Filed on: | August 2, 2018 | | |
| Application No.: Titled: | 16/053,790 UTILIZING ESTIMATED TRAVERSAL VALUES TO ACCELERATE THE | | |
| 1 (1104). | DETERMINATION OF HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS | | |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou | | |
| Filed on: | August 2, 2018 | | |
| Application No.: Titled: | 16/053,792 UTILIZING A GEO-LOCATOR SERVICE AND ZONE SERVERS TO REDUCE COMPUTER RESOURCE REQUIREMENTS FOR DETERMINING | | |
| Inventors: | HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou | | |
| Filed on: | August 2, 2018 | | |
| Application No.: Titled: | 16/053,793 UTILIZING DETERMINED OPTIMIZED TIME WINDOWS FOR PRECOMPUTING OPTIMAL PATH MATRICES TO REDUCE COMPUTER RESOURCE USAGE | | |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou | | |
| Filed on: | August 2, 2018 | | |
| | | | |

("Patent Property");

WHEREAS,

MAPANYTHING, INC. 5200 77 Center Drive, Suite 400 Charlotte, NC 28217 US

(hereinafter "Assignee") is desirous of acquiring all rights, title, and interests in, to, and under the Inventions and the Patent Property, and in, to, and under any patent that has been or may be obtained for any of the Inventions, together with all rights corresponding thereto;

NOW, THEREFORE, to all whom it may concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged. Assignor has agreed to irrevocably quitclaim, sell, assign, transfer and convey, and by these presents does hereby irrevocably quitclaim, sell, assign, transfer and convey, unto Assignee, *ab initio* and in perpetuity, all past, present and future right, title, and interest in, to and under:

- The Inventions;
- The right and authorization to file any application for any one or more of the Inventions;
- Any application for patent for any of the Inventions that may be or has been filed in any country, including the Patent Property;
- Any patent that may be or has been obtained for any of the Inventions in any country;
- Any reissue, reexamination, extension, renewal, substitution, conversion, confirmation, division, continuation, nonprovisional, provisional, continuation-in-part and the like of any of the foregoing;
- Any application claiming priority to any of the foregoing;
- Any application from which any of the foregoing claims priority; and
- Any past or present right or cause of action arising with respect to any of the foregoing, including any
 right to sue for patent infringement, and any copyright in any embodiment of an Invention including
 software, and any derivative right thereof,

(hereinafter collectively "Invention Rights").

PATENT REEL: 047995 FRAME: 0223

2 of 5

FURTHERMORE,

Assignor hereby acknowledges that all of the Invention Rights related to any Invention were at least under obligations of assignment to Assignee at least as early as the time of conception of the Invention; that all Invention Rights related to any Invention already may have been assigned to Assignee; and that this "Prefiling Assignment of Invention Rights" (hereinafter "Assignment") is being duly executed for at least the purpose of public recordation with the U.S. Patent & Trademark Office of Assignee's rights, title, and interests in the Invention Rights.

Assignor hereby covenants and agrees, and binds all heirs, administrators, legal representatives, nominees, and assigns, to assist and cooperate with Assignee, at Assignee's expense, in the preparation and prosecution of any application included within the Invention Rights and in the prosecution or defense of any interference, opposition, or other proceeding or trial that may arise in connection with any application or patent included within the Invention Rights and, further, to execute and deliver to Assignee any petition, oath, assignment, or other paper or instrument that may be requested by Assignee in connection herewith, and Assignor hereby appoints the Assignee as its agent and attorney-in-fact to act for and on its behalf in connection with such actions, which appointment is irrevocable and coupled with an interest.

Effective with respect to each Invention at least as early as the time of conception of each such Invention, Assignor hereby authorizes and empowers Assignee to invoke and claim for any application or patent included within the Invention Rights the benefit of any rights to which Assignor might be entitled under international law or under the laws of any particular country, and to invoke and claim such rights without further written or oral authorization from Assignor.

Assignor hereby consents and agrees that a copy of this Assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file, or like document that may be required in any particular country for any purpose and, more particularly, in proof of the right of Assignee to claim the aforesaid benefit of the right of priority and the right to file for patent.

Assignor covenants and agrees that this Assignment and all the terms thereof shall inure to the benefit of the successors, assigns, legal representatives, and nominees of Assignee, without further written or oral authorization from Assignor.

Assignor further hereby represents and warrants: that Assignor has the full power and authority to enter into this Assignment, to assign the Invention Rights, and to fully perform all of obligations of Assignor arising under this Assignment; and that there is no agreement between Assignor and any third party relating to any of the Invention Rights that conflicts with this Assignment.

Without limiting any of the foregoing, Assignor hereby waives any claim that may exist in any jurisdiction to "moral rights" or rights of "droit moral" with respect to any of the Invention Rights and agrees that Assignee shall have the right to make and shall own enhancements to and derivative works of any of the Invention Rights.

This Assignment is governed by and shall be construed in accordance with the laws of the State of North Carolina. To the extent one or more provisions of this Assignment are found invalid or unenforceable with respect to a particular national jurisdiction, the other provisions of this Assignment shall continue to apply in the particular national jurisdiction. Moreover, such finding in the particular national jurisdiction shall not affect the validity or enforceability of any provision of this Agreement in any other national jurisdiction.

[Signature Pages Follow]

3 of 5

ASSIGNOR SIGNATURE PAGE & DECLARATION FOR PATENT PROPERTY

Assignor further declares with respect to each application of the Patent Property both that he or she made such application or authorized such application to be made, and that such individual believes himself or herself to be the original inventor or an original joint inventor of a claimed invention in the application. Assignor hereby acknowledges 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 5 years, or both.

| This the 21st day of September. | 2018 | | |
|---|--|--|--|
| Assignor E | (seal) | | |
| Timothy Alan Carnes Witness #1 Signature Fimberly Leepley Witness #1 Name (print) 4819 99 Ave SW Witness #1 Address Line 1 Staffle, WA 98116 | <u>Miness #2 Signature</u> <u>JESSICA CAMES</u> Witness #2 Name (print) <u>3033 23^{ED} AVE W</u> Witness #2 Address Line 1 SEATTLE, WA 98199 | | |
| Witness #1 Address Line 2 | Witness #2 Address Line 2 | | |
| NOTARY CERTIFICATE FOR ACKNOWLEDGEMENT State of <u>North Caroutus</u>) County of <u>Mecklessesce</u>) United States of America | | | |
| On this $21^{3^{\circ}}$ day of $5ee e e e e e e e e e e e e e e e e e $ | | | |
| Notary Signature: 2:205.42 | | | |
| Printed Name: RECHARD J. HOLMES | | | |
| My Commission Expires: 9/21/2022 | | | |
| (Notary Seal) RICHARD J. HOLMES Notary Public, North Caroline Mecklenburg County My Commission Expires September 21, 2022 | | | |

4 of 5

ACCEPTANCE BY ASSIGNEE

Assignee hereby accepts the assignment of the Invention Rights as set forth above.

| This the 24 TM day of Sectorses | 2018 |
|--|---|
| MAPANYTHING, INC. | |
| By: <u>Richt J. HR</u> | (seal) |
| RECALAGO J. HOLME | S |
| CORPORATE SECRETA | <u>81</u> |
| Withess #1 Signature | <u>A</u> Cauli Witness #2 Signature |
| Michelle Tuckel Witness #1 Name (print) | Amanda Cakilli Witness #2 Name (print) |
| UD1) ROMWORK (and Witness #1 Address Line 1 | 4213 Town Center Rd Witness #2 Address Line 1 |
| Tradian Trail NC 28299' Witness #1 Address Line 2 | Hakkisbukg, NC 28075 Witness #2 Address Line 2 |
| NOTARY CERTIFICATE PO | OR ACKNOWLEDGEMENT |
| State of MONTA |) |
| County of NACCENTY VILLE |) |
| United States of America | |
| On this 244 day of 69410000 I certify that the following person personally appeared bef signed the foregoing document for the purpose stated there | 2010 bre me and acknowledged to me that he or she voluntarily in and in the capacity indicated: |
| Kichard Hohmy | (person appearing before notary) |
| Notary Signature: | |
| Printed Name: //W/20440 JUNG | 444 |
| My Commission Expires: 10125120 | |
| (Notary Seal) | |
| MEAGHAN SHUGHRUE Notary Public, North Carolina Mecklenburg County My Commission Expires October 25, 2020 5 c | əf 5 |

ASSIGNMENT OF INVENTION RIGHTS

WHEREAS,

Lahiru Sandakith Pileththuwasan Gallege 9960 Coral Springs Lane Knoxville, TN 37922 US

(hereinafter "Assignor") has or may have invented certain new and useful improvements and/or designs (each hereinafter an "Invention" and collectively the "Inventions"), for a full description of which reference is here made to the following patent property:

| Application No.: Titled: | 16/053,789 UTILIZING CONSTRAINTS AND PENALTIES TO FACILITATE DETERMINATION OF PREFERRED SOLUTIONS TO MULTI-OBJECTIVE DOUTING PROPILEME | | |
|-----------------------------|--|--|--|
| Inventors: | ROUTING PROBLEMS John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou | | |
| Filed on: | August 2, 2018 | | |
| Application No.: Titled: | 16/053.790 UTILIZING ESTIMATED TRAVERSAL VALUES TO ACCELERATE THE DETERMINATION OF HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS | | |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou | | |
| Filed on: | August 2, 2018 | | |
| Application No.: Titled: | 16/053.792 UTILIZING A GEO-LOCATOR SERVICE AND ZONE SERVERS TO REDUCE COMPUTER RESOURCE REQUIREMENTS FOR DETERMINING HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS | | |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou | | |
| Filed on: | August 2, 2018 | | |
| Application No.: Titled: | 16/053,793 UTILIZING DETERMINED OPTIMIZED TIME WINDOWS FOR PRECOMPUTING OPTIMAL PATH MATRICES TO REDUCE COMPUTER RESOURCE USAGE | | |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou | | |
| Filed on: | August 2, 2018 | | |

("Patent Property"):

WHEREAS,

MAPANYTHING, INC. 5200 77 Center Drive, Suite 400 Charlotte, NC 28217 US

(hereinafter "Assignee") is desirous of acquiring all rights, title, and interests in, to, and under the Inventions and the Patent Property, and in, to, and under any patent that has been or may be obtained for any of the Inventions, together with all rights corresponding thereto;

NOW, THEREFORE, to all whom it may concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged. Assignor has agreed to irrevocably quitclaim, sell, assign, transfer and convey, and by these presents does hereby irrevocably quitclaim, sell, assign, transfer and convey; unto Assignee, *ab initio* and in perpetuity, all past, present and future right, title, and interest in, to and under:

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2 of 5

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[Signature Pages Follow]

ASSIGNOR SIGNATURE PAGE & DECLARATION FOR PATENT PROPERTY

Assignor further declares with respect to each application of the Patent Property both that he or she made such application or authorized such application to be made, and that such individual believes himself or herself to be the original inventor or an original joint inventor of a claimed invention in the application. Assignor hereby acknowledges 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 5 years, or both.

| This the 18th day of <u>September</u> , | 2018 | | |
|---|---|--|--|
| Assignor Sandthe th | (seal) | | |
| Lahiju Sandakith Pileththuwasan Galle | ge | | |
| Witness #1 Signature | Witness #2 Signature | | |
| CHRIS GROEN | Chenly Lon | | |
| Witness #1 Name (print) | Witness #2 Name (print) | | |
| 1811 RAVEN HILL CT. | 12733 Sailpuinte Ln | | |
| Witness #1 Address Line 1 | Witness #2 Address Line 1 | | |
| KNOXVILLE TN 37922 Witness #1 Address Line 2 | KNUXWILE. TN 37922 Witness #2 Address Line 2 | | |
| NOTARY CERTIFICATE FOR | ACKNOWLEDGEMENT | | |
| State of NORTH CAROLENA |) | | |
| County of MECKLENBURG | | | |
| United States of America | | | |
| On this <u>18^{m}</u> day of <u>Seere ASER</u> , <u>2018</u> , I certify that the following person personally appeared before me and acknowledged to me that he or she voluntarily signed the foregoing document for the purpose stated therein and in the capacity indicated: | | | |
| LAMERS SANDAKETH | (person appearing before notary) | | |
| Notary Signature: Diel J. HR | | | |
| Printed Name: RECHARD J. Hours | <u>ES</u> | | |
| My Commission Expires: 9/21/2022 | | | |
| (Notary Scal) RICHARD J. HOLMES Notary Public, North Carolina Mecklenburg County My Commission Expires | | | |
| September 21, 2022 | | | |

4 of 5

ACCEPTANCE BY ASSIGNEE

Assignee hereby accepts the assignment of the Invention Rights as set forth above.

| | This the 24" day of Scorensee. | 2018 |
|---|--|---|
| | MAPANYTHING, INC. | |
| | By: <u>RiveJAR</u> signature | (seal) |
| | RECHARD J. Hour | AES |
| ŝ | CORPORATE SECRET | <u>.</u> |
| | Michell Jules Witness #1 Signature | U GOULU Witness #2 Signature |
| | Michela Tu dress Witness #1 Name (print) | Amanda Cakilli Witness #2 Name (print) |
| | VOB Rosewater Cane Witness #1 Address Line I | 4213 Town Center Rd Witness #2 Address Line 1 |
| | Tradah Trad NC 28079 Witness #1 Address Line 2 | Harris burg, NC 28075 Witness #2 Address Line 2 |
| | NOTARY CERTIFICATE P | OR ACKNOWLEDGEMENT |
| | State of NOVA CAVOLINA |) |
| | County of MELLINDIANA |) |
| | United States of America | |
| | signed the foregoing document for the purpose stated then | fore me and acknowledged to me that he or she voluntarily ein and in the capacity indicated: |
| | eimard Hohmel | (person appearing before notary) |
| | Notary Signature: | |
| | Printed Name: //////////////////////////////////// | <u>MM</u> |
| | My Commission Expires: 10122 12.02.0 | |
| | (Notary Seal) | |
| | MEAGHAN SHUGHRUE Notary Public, North Carolina Mecklenburg County My Commission Expires October 25, 2020 5 | of 5 |

ASSIGNMENT OF INVENTION RIGHTS

WHEREAS,

Christopher Sebastian Groer 1811 Raven Hill Court Knoxville, TN 37922 US

(hereinafter "Assignor") has or may have invented certain new and useful improvements and/or designs (each hereinafter an "Invention" and collectively the "Inventions"), for a full description of which reference is here made to the following patent property:

| 16/053,789 |
|---|
| UTILIZING CONSTRAINTS AND PENALTIES TO FACILITATE DETERMINATION OF PREFERRED SOLUTIONS TO MULTI-OBJECTIVE ROUTING PROBLEMS |
| John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| August 2, 2018 |
| 16/053,790 |
| UTILIZING ESTIMATED TRAVERSAL VALUES TO ACCELERATE THE DETERMINATION OF HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS |
| John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| August 2, 2018 |
| 16/053,792 |
| UTILIZING A GEO-LOCATOR SERVICE AND ZONE SERVERS TO REDUCE COMPUTER RESOURCE REQUIREMENTS FOR DETERMINING HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS |
| John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| August 2, 2018 |
| 16/053,793 UTILIZING DETERMINED OPTIMIZED TIME WINDOWS FOR PRECOMPUTING OPTIMAL PATH MATRICES TO REDUCE COMPUTER |
| RESOURCE USAGE John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu |
| Lou August 2, 2018 |
| |

("Patent Property");

1 of 5

. .

WHEREAS,

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(hereinafter "Assignee") is desirous of acquiring all rights, title, and interests in, to, and under the Inventions and the Patent Property, and in, to, and under any patent that has been or may be obtained for any of the Inventions, together with all rights corresponding thereto;

NOW, THEREFORE, to all whom it may concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor has agreed to irrevocably quitclaim, sell, assign, transfer and convey, and by these presents does hereby irrevocably quitclaim, sell, assign, transfer and convey, unto Assignee, *ab initio* and in perpetuity, all past, present and future right, title, and interest in, to and under:

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- Any application claiming priority to any of the foregoing;
- Any application from which any of the foregoing claims priority; and
- Any past or present right or cause of action arising with respect to any of the foregoing, including any
 right to sue for patent infringement, and any copyright in any embodiment of an Invention including
 software, and any derivative right thereof,

(hereinafter collectively "Invention Rights").

PATENT REEL: 047995 FRAME: 0233

2 of 5

FURTHERMORE,

Assignor hereby acknowledges that all of the Invention Rights related to any Invention were at least under obligations of assignment to Assignee at least as early as the time of conception of the Invention; that all Invention Rights related to any Invention already may have been assigned to Assignee; and that this "Prefiling Assignment of Invention Rights" (hereinafter "Assignment") is being duly executed for at least the purpose of public recordation with the U.S. Patent & Trademark Office of Assignee's rights, title, and interests in the Invention Rights.

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Effective with respect to each Invention at least as early as the time of conception of each such Invention, Assignor hereby authorizes and empowers Assignee to invoke and claim for any application or patent included within the Invention Rights the benefit of any rights to which Assignor might be entitled under international law or under the laws of any particular country, and to invoke and claim such rights without further written or oral authorization from Assignor.

Assignor hereby consents and agrees that a copy of this Assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file, or like document that may be required in any particular country for any purpose and, more particularly, in proof of the right of Assignee to claim the aforesaid benefit of the right of priority and the right to file for patent.

Assignor covenants and agrees that this Assignment and all the terms thereof shall inure to the benefit of the successors, assigns, legal representatives, and nominees of Assignee, without further written or oral authorization from Assignor.

Assignor further hereby represents and warrants: that Assignor has the full power and authority to enter into this Assignment, to assign the Invention Rights, and to fully perform all of obligations of Assignor arising under this Assignment; and that there is no agreement between Assignor and any third party relating to any of the Invention Rights that conflicts with this Assignment.

Without limiting any of the foregoing, Assignor hereby waives any claim that may exist in any jurisdiction to "moral rights" or rights of "droit moral" with respect to any of the Invention Rights and agrees that Assignee shall have the right to make and shall own enhancements to and derivative works of any of the Invention Rights.

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[Signature Pages Follow]

3 of 5

ASSIGNOR SIGNATURE PAGE & DECLARATION FOR PATENT PROPERTY

Assignor further declares with respect to each application of the Patent Property both that he or she made such application or authorized such application to be made, and that such individual believes himself or herself to be the original inventor or an original joint inventor of a claimed invention in the application. Assignor hereby acknowledges 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 5 years, or both.

| This the 18th day of SERVEMISE | K 2018 |
|---|--|
| Assignor signature | (seal) |
| Christopher Sebastian Groer | |
| Witness #1 Signature | |
| | Witness #2 Signature |
| Lahiru S. Pilethunasan Gallege, Witness #1 Name (print) | <u>Chenlu Lou</u> Witness #2 Name (print) |
| 9960 Coval Springe Ln Witness #1 Address Line 1 | 12733 Sailpuinte Ln Witness #2 Address Line 1 |
| Knoxville TN 37922 | KNOXWILE. TN 37922 |
| Witness #1 Address Line 2 | Witness #2 Address Line 2 |
| NOTARY CERTIFICATE FOI | |
| County of MECKLENBURG |) |
| United States of America | |
| On this day of SEPTEMBER I certify that the following person personally appeared befor signed the foregoing document for the purpose stated therein | e me and acknowledged to me that he or she voluntarily |
| CHRESTOPHER SERASTEAM GROER | (person appearing before notary) |
| Notary Signature: Rich J. HAR | |
| Printed Name: RECHARO J. How | £.S |
| My Commission Expires: <u>9/21/2022</u> | |
| (Notary Seal) (Notary Seal) Notary Public, North Carolina Mecklenburg County My Commission Expires Seatember 21, 2022 | |
| 0 "MONAGEMENT" 1 CONTROLOGICI (CONTROLOGICI | |

4 of 5

ACCEPTANCE BY ASSIGNEE

Assignee hereby accepts the assignment of the Invention Rights as set forth above.

| | 2018 |
|--|--|
| MAPANYTHING, INC. | |
| By: Rignature | (seal) |
| RECARDO J. HOLMES | |
| CORPORATE SECRETA | <u>ar</u> |
| Mulule Jucks | A Cauto Witness #2 Signature |
| Michelle Tuckey Witness #1 Name (print) | Amanda Cakilli Witness #2 Name (print) |
| Witness #1 Address Line 1 | 4213 Town Center Rd Witness #2 Address Line 1 |
| <u>Undran Trail</u> NU 28079. Witness #1 Address Line 2 | Harkisburg, NC 28075 Witness #2 Address Line 2 |
| NOTARY CERTIFICATE FO | R ACKNOWLEDGEMENT |
| State of <u>NOVAN COVONA</u> |) |
| and the first of the second | |
| County of <u>IVALUEVIANA</u> |) |
| County of <u>MULUNNUL</u> United States of America |) |
| · · · · · · · · · · · · · · · · · · · | re me and acknowledged to me that he or she voluntarily |
| United States of America On this 244 , day of 64444 | re me and acknowledged to me that he or she voluntarily |
| United States of America On this 244 day of 24244201 I certify that the following person personally appeared before signed the foregoing document for the purpose stated thereit | re me and acknowledged to me that he or she voluntarily n and in the capacity indicated: |
| United States of America On this <u>2446</u> day of <u>041010</u> I certify that the following person personally appeared befo signed the foregoing document for the purpose stated therei <u>2100070</u> HOWY | re me and acknowledged to me that he or she voluntarily n and in the capacity indicated: |
| United States of America On this <u>2446</u> day of <u>04200000000000000000000000000000000000</u> | re me and acknowledged to me that he or she voluntarily n and in the capacity indicated: |
| United States of America On this <u>244</u> , day of <u>041/401/</u> I certify that the following person personally appeared before signed the foregoing document for the purpose stated therei <u>KUMA/A</u> <u>HOMA/</u> Notary Signature: <u><u>MOMA/A</u> <u>MAA/A</u> Printed Name: <u>MOMA/A</u> <u>MAA/A</u></u> | re me and acknowledged to me that he or she voluntarily n and in the capacity indicated: |

ASSIGNMENT OF INVENTION RIGHTS

WHEREAS,

Chenlu Lou 12733 Sailpointe Lane Knoxville, TN 37922 US

(hereinafter "<u>Assignor</u>") has or may have invented certain new and useful improvements and/or designs (each hereinafter an "<u>Invention</u>" and collectively the "<u>Inventions</u>"), for a full description of which reference is here made to the following patent property:

| 16/053,789 |
|--|
| UTILIZING CONSTRAINTS AND PENALTIES TO FACILITATE DETERMINATION OF PREFERRED SOLUTIONS TO MULTI-OBJECTIVE ROUTING PROBLEMS |
| John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| August 2, 2018 |
| 16/053,790 |
| UTILIZING ESTIMATED TRAVERSAL VALUES TO ACCELERATE THE DETERMINATION OF HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS |
| John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| August 2, 2018 |
| 16/053,792 |
| UTILIZING A GEO-LOCATOR SERVICE AND ZONE SERVERS TO REDUCE COMPUTER RESOURCE REQUIREMENTS FOR DETERMINING HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS |
| John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu |
| Lou August 2, 2018 |
| 16/053,793 UTILIZING DETERMINED OPTIMIZED TIME WINDOWS FOR PRECOMPUTING OPTIMAL PATH MATRICES TO REDUCE COMPUTER |
| RESOURCE USAGE John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| August 2, 2018 |
| |

("Patent Property");

WHEREAS,

MAPANYTHING, INC. 5200 77 Center Drive, Suite 400 Charlotte, NC 28217 US

(hereinafter "Assignee") is desirous of acquiring all rights, title, and interests in, to, and under the Inventions and the Patent Property, and in, to, and under any patent that has been or may be obtained for any of the Inventions, together with all rights corresponding thereto;

NOW, THEREFORE, to all whom it may concern, be it known that, for and in consideration of the sum of One Dollar (\$1,00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor has agreed to irrevocably quitclaim, sell, assign, transfer and convey, and by these presents does hereby irrevocably quitclaim, sell, assign, transfer and convey, unto Assignee, *ab initio* and in perpetuity, all past, present and future right, title, and interest in, to and under:

- The Inventions;
- The right and authorization to file any application for any one or more of the Inventions;
- Any application for patent for any of the Inventions that may be or has been filed in any country, including the Patent Property;
- Any patent that may be or has been obtained for any of the Inventions in any country;
- Any reissue, reexamination, extension, renewal, substitution, conversion, confirmation, division, continuation, nonprovisional, provisional, continuation-in-part and the like of any of the foregoing;
- Any application claiming priority to any of the foregoing;
- Any application from which any of the foregoing claims priority; and
- Any past or present right or cause of action arising with respect to any of the foregoing, including any
 right to sue for patent infringement, and any copyright in any embodiment of an Invention including
 software, and any derivative right thereof.

(hereinafter collectively "Invention Rights").

PATENT REEL: 047995 FRAME: 0238

2 of 5

FURTHERMORE,

Assignor hereby acknowledges that all of the Invention Rights related to any Invention were at least under obligations of assignment to Assignee at least as early as the time of conception of the Invention; that all Invention Rights related to any Invention already may have been assigned to Assignee; and that this "Prefiling Assignment of Invention Rights" (hereinafter "Assignment") is being duly executed for at least the purpose of public recordation with the U.S. Patent & Trademark Office of Assignee's rights, title, and interests in the Invention Rights.

Assignor hereby covenants and agrees, and binds all heirs, administrators, legal representatives, nominees, and assigns, to assist and cooperate with Assignee, at Assignee's expense, in the preparation and prosecution of any application included within the Invention Rights and in the prosecution or defense of any interference, opposition, or other proceeding or trial that may arise in connection with any application or patent included within the Invention Rights and, further, to execute and deliver to Assignee any petition, oath, assignment, or other paper or instrument that may be requested by Assignee in connection herewith, and Assignor hereby appoints the Assignee as its agent and attorney-in-fact to act for and on its behalf in connection with such actions, which appointment is irrevocable and coupled with an interest.

Effective with respect to each Invention at least as early as the time of conception of each such Invention, Assignor hereby authorizes and empowers Assignee to invoke and claim for any application or patent included within the Invention Rights the benefit of any rights to which Assignor might be entitled under international law or under the laws of any particular country, and to invoke and claim such rights without further written or oral authorization from Assignor.

Assignor hereby consents and agrees that a copy of this Assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file, or like document that may be required in any particular country for any purpose and, more particularly, in proof of the right of Assignee to claim the aforesaid benefit of the right of priority and the right to file for patent.

Assignor covenants and agrees that this Assignment and all the terms thereof shall inure to the benefit of the successors, assigns, legal representatives, and nominees of Assignce, without further written or oral authorization from Assignor.

Assignor further hereby represents and warrants: that Assignor has the full power and authority to enter into this Assignment, to assign the Invention Rights, and to fully perform all of obligations of Assignor arising under this Assignment; and that there is no agreement between Assignor and any third party relating to any of the Invention Rights that conflicts with this Assignment.

Without limiting any of the foregoing. Assignor hereby waives any claim that may exist in any jurisdiction to "moral rights" or rights of "droit moral" with respect to any of the Invention Rights and agrees that Assignee shall have the right to make and shall own enhancements to and derivative works of any of the Invention Rights.

This Assignment is governed by and shall be construed in accordance with the laws of the State of North Carolina. To the extent one or more provisions of this Assignment are found invalid or unenforceable with respect to a particular national jurisdiction, the other provisions of this Assignment shall continue to apply in the particular national jurisdiction. Moreover, such finding in the particular national jurisdiction shall not affect the validity or enforceability of any provision of this Agreement in any other national jurisdiction.

[Signature Pages Follow]

3 of 5

ASSIGNOR SIGNATURE PAGE & DECLARATION FOR PATENT PROPERTY

Assignor further declares with respect to each application of the Patent Property both that he or she made such application or authorized such application to be made, and that such individual believes himself or herself to be the original inventor or an original joint inventor of a claimed invention in the application. Assignor hereby acknowledges 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 5 years, or both.

| This the 18th day of September. | 2018 |
|---|--|
| Assignor signature | (seal) |
| Chenlu Lou | 1 N |
| Sanderbully | 4.1/2 |
| Witness #1 Signature | Witness #2 Signature |
| Labirn S. PileththurasanGallege. Witness #1 Name (print) | CHAIS 67000 Witness #2 Name (print) |
| <u>9960 loval Springs Ln</u> Witness #1 Address Line 1 | 1811 KAVEN HILL CT. Witness #2 Address Line 1 |
| Knoxville TN 37922. Witness #1 Address Line 2 | KNOXVILLE, TN 37922 Witness #2 Address Line 2 |
| NOTARY CERTIFICATE FO | R ACKNOWLEDGEMENT |
| State of Noarn CAROLEMA | |
| County of MECKLENGURG |) |
| United States of America | |
| On this <u>18</u> day of <u>Sectem 666</u> I certify that the following person personally appeared before signed the foregoing document for the purpose stated therei | re me and acknowledged to me that he or she volumarily |
| CHENLU LOU | (person appearing before notary) |
| Notary Signature: Dil J. H.S. | |
| Printed Name: RECHARD J. Hour | <u>ES</u> |
| My Commission Expires: 9/21/2022 | |
| (Notary Scal) RICHARD J. HOLMES Notary Public, North Carolina Meckienburg County My Commission Expires September 21, 2022 | |
| Debrauma: Debrauma: c.1. com | |

4 of 5

ACCEPTANCE BY ASSIGNEE

Assignee hereby accepts the assignment of the Invention Rights as set forth above.

| This the 24th day of Sectoresee | 2018 |
|---|--|
| MAPANYTHING, INC. | |
| By: <u>RiebJAR</u> | (seal) |
| RECHARD J. HOLME | <u>s</u> |
| CORPORATE SECRETA | 2~ |
| Witness #1 Signature | <u>a</u> Cauiui Witness #2 Signature |
| Mithelle Tiele | Amancia Careilli Witness #2 Name (print) |
| 4013 Rosswert (and Witness #1 Address Line 1 | 4213 Town Centek Rd Witness #2 Address Line 1 |
| <u>Induan Trail</u> NC 28079 Witness #LAddress Line 2 | Hakkisbukg, NC 28075 Witness #2 Address Line 2 |
| NOTARY CERTIFICATE FO | R ACKNOWLEDGEMENT |
| State of MANA MANA | |
| County of ALLEN VILL |) |
| United States of America | |
| On this <u>2441</u> day of <u>142000000000000000000000000000000000000</u> | re me and acknowledged to me that he or she voluntarily n and in the capacity indicated: |
| Kinard using | (person appearing before notary) |
| Notary Signature: | |
| Printed Name: MLAGNAM INUGNAU | |
| My Commission Expires: 10 25 2520 | |
| (Notary Scal) MEAGHAN SHUGHRUE Notary Public, North Carolina | |
| Mecklenburg County My Commission Expires October 25, 2820 | |

5 of 5

ASSIGNMENT OF INVENTION RIGHTS

WHEREAS,

John Brian Stewart 4709 Noras Path Road Charlotte, NC 28226 US

(hereinafter "Assignor") has or may have invented certain new and useful improvements and/or designs (each hereinafter an "Invention" and collectively the "Inventions"), for a full description of which reference is here made to the following patent property:

| Application No.: | 16/053.789 |
|-----------------------------|--|
| Titled: | UTILIZING CONSTRAINTS AND PENALTIES TO FACILITATE DETERMINATION OF PREFERRED SOLUTIONS TO MULTI-OBJECTIVE ROUTING PROBLEMS |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| Filed on: | August 2, 2018 |
| Application No.: | 16/053,790 |
| Titled: | UTILIZING ESTIMATED TRAVERSAL VALUES TO ACCELERATE THE DETERMINATION OF HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Labiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| Filed on: | August 2, 2018 |
| Application No.: Titled: | 16/053,792 UTILIZING A GEO-LOCATOR SERVICE AND ZONE SERVERS TO REDUCE COMPUTER RESOURCE REQUIREMENTS FOR DETERMINING HIGH QUALITY SOLUTIONS TO ROUTING PROBLEMS |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
| Filed on: | August 2, 2018 |
| Application No.: Titled: | 16/053,793 UTILIZING DETERMINED OPTIMIZED TIME WINDOWS FOR PRECOMPUTING OPTIMAL PATH MATRICES TO REDUCE COMPUTER RESOURCE USAGE |
| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu |
| | Lou |

("Patent Property");

WHEREAS,

MAPANYTHING, INC. 5200 77 Center Drive, Suite 400 Charlotte, NC 28217 US

(hereinafter "Assignee") is desirous of acquiring all rights, title, and interests in, to, and under the Inventions and the Patent Property, and in, to, and under any patent that has been or may be obtained for any of the Inventions, together with all rights corresponding thereto;

NOW, THEREFORE, to all whom it may concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor has agreed to irrevocably quitclaim, sell, assign, transfer and convey, and by these presents does hereby irrevocably quitclaim, sell, assign, transfer and convey, unto Assignee, *ab initio* and in perpetuity, all past, present and future right, title, and interest in, to and under:

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- Any application claiming priority to any of the foregoing;
- Any application from which any of the foregoing claims priority; and
- Any past or present right or cause of action arising with respect to any of the foregoing, including any
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(hereinafter collectively "Invention Rights").

PATENT REEL: 047995 FRAME: 0243

2 of 5.

FURTHERMORE,

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[Signature Pages Follow]

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| This the 20th / day of Seender bec | 208 |
|---|--|
| Assignor Assignature | (seal) |
| John Brian Stewart | |
| Mahu Jun Witness #1 Signature | Q QUUUI Witness #2 Signature |
| Michelle Tucked Witness #1 Name (print) | Amanda Cakilli Witness #2 Name (print) |
| 4018 Roleworky Land Witness #1 Address Line 1 | 4213 Town Center Rd Witness #2 Address Line 1 |
| John Trad NC 22079 Witness #1 Address Line 2 | Harrisburg, NC 28075 Witness #2 Address Line 2 |
| NOTARY CERTIFICATE FO |)R ACKNOWI EDGEMENT |
| State of Norry ChaoLTN | |
| County of MECKLENBURG | |
| United States of America | |
| | ~ ~ |
| On this 20^{-1} day of $5ee = 1$ eertify that the following person personally appeared bef signed the foregoing document for the purpose stated there | ore me and acknowledged to me that he or she voluntarily |
| JOHN BREAN STEWART | (person appearing before notary) |
| Notary Signature: 12:12.49 | |
| Printed Name: RECHARD J. HOLD | LES |
| My Commission Expires: 9/21/2022 | |
| (Notary Seal) (Notary Seal) (Notary Public, North Carolina Mackienburg County My Commission Expires | |
| September 21, 2022 | |

4 of 5

ACCEPTANCE BY ASSIGNEE

Assignee hereby accepts the assignment of the Invention Rights as set forth above.

| This the 26 day of Secre asce | 2018 |
|--|---|
| MAPANYTHING, INC. | |
| By: River S. HAR | (seal) |
| RECHARD J. HOLDE | Š |
| Coacocare Secretary title Multu Jun O Witness #1 Signature | A Cauic Witness #2 Signature |
| Michaelle Tures Witness #1 Name (print) | Amanda Careilli Witness #2 Name (print) |
| 1018 Rosewate Lani Witness #1 Address Line 1 | 4213 Town Center Rd Witness #2 Address Line 1 |
| Indian Trail NC 28074 Witness #1 Address Line 2 | Harksburg, NC 28075 Witness #2 Address Line 2 |
| NOTARY CERTIFICATE FOR | ACKNOWLEDGEMENT |
| State of MONTA CANDINA |) |
| County of WAREX LEW WAR |) |
| United States of America | |
| On this 2440 day of <u>MANNU</u> I certify that the following person personally appeared before signed the foregoing document for the pyrpose stated therein | me and acknowledged to me that he or she voluntarily and in the capacity indicated: |
| Kinard Hoffyrds// | (person appearing before notary) |
| Notary Signature: | · |
| Printed Name: MARAYMA MUANNU | |
| My Commission Expires: 10 25 2120 | |
| (Notary Seal) MEAGHAN SHUGHRUE Notary Public, North Caroline | |
| Mecklanburg County My Commission Expires October 25, 2020 | |

5 of 5

ASSIGNMENT OF INVENTION RIGHTS

WHEREAS,

Dinesh Premalal Weerapurage 13806 W Layton Cir Morrison, CO 80465 US

(hereinafter "<u>Assignor</u>") has or may have invented certain new and useful improvements and/or designs (each hereinafter an "<u>Invention</u>" and collectively the "<u>Inventions</u>"), for a full description of which reference is here made to the following patent property:

| Application No.: | 16/053,789 |
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| Inventors: | John Brian Stewart, Dinesh Premalal Weerapurage, Timothy Alan Carnes, Christopher Sebastian Groer, Lahiru Sandakith Pileththuwasan Gallege, Chenlu Lou |
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| Application No.: | 16/053,790 |
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| Filed on: | August 2, 2018 |

("Patent Property");

WHEREAS,

MAPANYTHING, INC. 5200 77 Center Drive, Suite 400 Charlotte, NC 28217 US

(hereinafter "<u>Assignee</u>") is desirous of acquiring all rights, title, and interests in, to, and under the Inventions and the Patent Property, and in, to, and under any patent that has been or may be obtained for any of the Inventions, together with all rights corresponding thereto;

NOW, THEREFORE, to all whom it may concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignor has agreed to irrevocably quitclaim, sell, assign, transfer and convey, and by these presents does hereby irrevocably quitclaim, sell, assign, transfer and convey, unto Assignee, *ab initio* and in perpetuity, all past, present and future right, title, and interest in, to and under:

- The Inventions;
- The right and authorization to file any application for any one or more of the Inventions;
- Any application for patent for any of the Inventions that may be or has been filed in any country, including the Patent Property;
- Any patent that may be or has been obtained for any of the Inventions in any country;
- Any reissue, reexamination, extension, renewal, substitution, conversion, confirmation, division, continuation, nonprovisional, provisional, continuation-in-part and the like of any of the foregoing;
- Any application claiming priority to any of the foregoing;
- · Any application from which any of the foregoing claims priority; and
- Any past or present right or cause of action arising with respect to any of the foregoing, including any
 right to sue for patent infringement, and any copyright in any embodiment of an Invention including
 software, and any derivative right thereof.

(hereinafter collectively "Invention Rights").

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FURTHERMORE,

Assignor hereby acknowledges that all of the Invention Rights related to any Invention were at least under obligations of assignment to Assignee at least as early as the time of conception of the Invention; that all Invention Rights related to any Invention already may have been assigned to Assignee; and that this "Prefiling Assignment of Invention Rights" (hereinafter "Assignment") is being duly executed for at least the purpose of public recordation with the U.S. Patent & Trademark Office of Assignee's rights, title, and interests in the Invention Rights.

Assignor hereby covenants and agrees, and binds all heirs, administrators, legal representatives, nominees, and assigns, to assist and cooperate with Assignee, at Assignee's expense, in the preparation and prosecution of any application included within the Invention Rights and in the prosecution or defense of any interference, opposition, or other proceeding or trial that may arise in connection with any application or patent included within the Invention Rights and, further, to execute and deliver to Assignee any petition, oath, assignment, or other paper or instrument that may be requested by Assignee in connection herewith, and Assignor hereby appoints the Assignee as its agent and altorney-in-fact to act for and on its behalf in connection with such actions, which appointment is irrevocable and coupled with an interest.

Effective with respect to each Invention at least as early as the time of conception of each such Invention, Assignor hereby authorizes and empowers Assignee to invoke and claim for any application or patent included within the Invention Rights the benefit of any rights to which Assignor might be entitled under international law or under the laws of any particular country, and to invoke and claim such rights without further written or oral authorization from Assignor.

Assignor hereby consents and agrees that a copy of this Assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file, or like document that may be required in any particular country for any purpose and, more particularly, in proof of the right of Assignee to claim the aforesaid benefit of the right of priority and the right to file for patent.

Assignor covenants and agrees that this Assignment and all the terms thereof shall inure to the benefit of the successors, assigns, legal representatives, and nominees of Assignee, without further written or oral authorization from Assignor.

Assignor further hereby represents and warrants: that Assignor has the full power and authority to enter into this Assignment, to assign the Invention Rights, and to fully perform all of obligations of Assignor arising under this Assignment; and that there is no agreement between Assignor and any third party relating to any of the Invention Rights that conflicts with this Assignment.

Without limiting any of the foregoing, Assignor hereby waives any claim that may exist in any jurisdiction to "moral rights" or rights of "droit moral" with respect to any of the Invention Rights and agrees that Assignee shall have the right to make and shall own enhancements to and derivative works of any of the Invention Rights.

This Assignment is governed by and shall be construed in accordance with the laws of the State of North Carolina. To the extent one or more provisions of this Assignment are found invalid or unenforceable with respect to a particular national jurisdiction, the other provisions of this Assignment shall continue to apply in the particular national jurisdiction. Moreover, such finding in the particular national jurisdiction shall not affect the validity or enforceability of any provision of this Agreement in any other national jurisdiction.

[Signature Pages Follow]

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ASSIGNOR SIGNATURE PAGE & DÉCLARATION FOR PATENT PROPERTY

Assignor further declares with respect to each application of the Patent Property both that he or she made such application or authorized such application to be made, and that such individual believes himself or herself to be the original inventor or an original joint inventor of a claimed invention in the application. Assignor hereby acknowledges 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 5 years, or both.

| This the 24th day of September | . 2018 |
|---|---|
| Assignar Am Aby m. | (seat) |
| Dinesh Premalal Weerapurage NHHMA Witness #1 Signature | Wigness of Signature |
| NETHIKA SURANEERA Winness #1 Name (print) 12806 12 Layton C.Y Winness #1 Address Line 1 | Medghan Magnal Witness #2 Name (print) 1420 Abbey P1, 313 Witness #2 Address Line 1 |
| Morrison (0.80965 Wilness #1 Address Line 2 | CWAVIOHINC 29207 Witness #2 Address Line 2 |
| NOTARY CERTIFICATE F | OR ACKNOWLEDGEMENT |
| State of NORTH CAROLER | • 🛧 |
| County of Mecklesburg | } |
| United States of America | |
| A loss of the foreasian document for the parroyse stated they | fore me and acknowledged to me that he or she voluntarily who and in the canacity indicated: |
| DINESH PREMALAL | (person appearing before notary) |
| Notary Signature: River J. H.S. | |
| Printed Name: QECHARD J. How | |
| My Commission Expires: 9/21/2022 | |
| (Notary Scal) RICHARD J. HOLME Notary Public, North Caro Mecklenburg County My Commission Expir September 21, 2023 | lina Ba |

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ACCEPTANCE BY ASSIGNEE

Assignee hereby accepts the assignment of the Invention Rights as set forth above.

| This the 25 th day of Secrember. | 2018 |
|--|--|
| MAPANYTHING, INC. | |
| By: Rignature | (seal) |
| RECHARD J. HOLMES | |
| CORPORATE SECRETAD | 2 |
| And A COMMI Witness #1 Signature | Witness #2 Signature |
| Alvanda Cakilli Witness #1 Name (print) | <u>Chanki Duncan</u> Witness #2 Name (print) |
| 4213 Town Center Rd Witness #1 Address Line 1 | 1009 Bailes Ridge Ave Witness #2 Address Line 1 |
| HORREDUKG, NC 28075 Witness #1 Address Line 2 | <u>Fort Mill, 56, 29707</u> Witness #2 Address Line 2 |
| | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ |
| NOTARY CERTIFICATE FOR | ACKNOWLEDGEMENT |
| NOTARY CERTIFICATE FOR State of <u>NUMA</u> | |
| |) |
| State of <u>MUXA (AVUIWA</u> |) |
| State of <u>NUXXA</u> <u>AVDIWA</u> County of <u>NUXXVVA</u> |)) me and acknowledged to me that he or she voluntarily |
| State of Implify Implify County of Implify Implify United States of America Implify Implify On this 7514 day of Implify I certify that the following person personally appeared before signed the foregoing document for the purpose stated therein Implify |)) me and acknowledged to me that he or she voluntarily |
| State of MMM $MVNM$ County of $MVNM$ $MVNM$ United States of America MNM $MVNM$ On this $7 \leq W$ $MVNM$ I certify that the following person personally appeared before signed the foregoing document for the purpose stated therein |)) me and acknowledged to me that he or she voluntarily and in the capacity indicated: |
| State of Implify Implify Implify County of Implify Implify Implify United States of America Implify Implify Implify On this 7 Implify Implify Implify I certify that the following person personally appeared before signed the foregoing document for the purpose stated therein Implify Implify I implify Implify Implify Implify Implify Implify I implify Implif |) |
| State of Image: Average of Aver |) |
| State of NOVA County of NOUVA United States of America On this ZSW day of JeffeldWolle I certify that the following person personally appeared before signed the foregoing document for the purpose stated therein MUCAAVA HOWM Notary Signature: MUCAAVA MUCAAVA MUCAAVA |) |

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RECORDED: 12/31/2018