505156978 10/24/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5203745

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

CONVEYING PARTY DATA

| Name | Execution Date |
|---------------------|----------------|
| XIANCHAO LONG | 03/02/2015 |
| JUSTYNA ZANDER | 03/01/2015 |
| DAVID KOH | 02/27/2015 |
| GAUTAM K. VALLABHA | 03/02/2015 |
| PIETER J. MOSTERMAN | 02/27/2015 |

RECEIVING PARTY DATA

| Name: | THE MATHWORKS, INC. | |
|-----------------|-----------------------------|--|
| Street Address: | 3 APPLE HILL DRIVE | |
| City: | NATICK | |
| State/Country: | tate/Country: MASSACHUSETTS | |
| Postal Code: | 01760-2098 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16169177 |

CORRESPONDENCE DATA

Fax Number:

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.

Email: hhodul@harrityllp.com

Correspondent Name: HARRITY & HARRITY LLP

Address Line 1: 11350 RANDOM HILLS ROAD

Address Line 2: SUITE 600

Address Line 4: FAIRFAX, VIRGINIA 22030

| TTORNEY DOCKET NUMBER: 0069-0337C1 | |
|--|---------------|
| NAME OF SUBMITTER: | PAUL M. GURZO |
| IGNATURE: /Paul M. Gurzo, Reg. No. 67,478/ | |
| DATE SIGNED: | 10/24/2018 |

Total Attachments: 7

source=0069-0337C1_Assignment#page1.tif

PATENT REEL: 047296 FRAME: 0253

505156978



PATENT REEL: 047296 FRAME: 0254

ASSIGNMENT (Joint) Worldwide Rights

THIS ASSIGNMENT, by Xianchao LONG, Justyna ZANDER, David KOH, Gautam K. VALLABHA, and Pieter J. MOSTERMAN residing at 3 Homer Street, Apartment 3, Worcester, MA 01602 US; 72 Nicholas Road, Apartment 63, Framingham, MA 01701 US; 9 West Broadway, Unit 401, Boston, MA 02127 US; 226 Maple Street, Framingham, MA 01702 US; and 72 Nicholas Road, Apartment 63, Framingham, MA 01701 US (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in <u>EXCHANGING</u>
<u>INFORMATION AMONG SYSTEM MIDDLEWARE AND MODELS</u> set forth in an application for Letters Patent of the United States,

| (1) | which is a provisional application (a) filed herewith; or (b) bearing Application No, and filed on | ; or |
|-----|---|---------------|
| (2) | which is a non-provisional application (a) bearing Application No. 14/635,719, and filed on Marc. (b) filed herewith; and | h 2, 2015; or |

We hereby authorize Applicants' representative to fill in the preceding information relating to the filing date and/or serial number, as appropriate.

WHEREAS, The MathWorks, Inc., a corporation of the state of <u>Delaware</u>, having its principal place of business at <u>3 Apple Hill Drive</u>, <u>Natick</u>, <u>Massachusetts 01760-2098</u> (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application or from which said application claims priority, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, the Assignor has sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said applications, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, any previously or subsequently filed provisional applications, and in and to any and all applications claiming priority to said applications, including divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignor had this sale and assignment not been made:

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

PATENT REEL: 047296 FRAME: 0255 AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Joint Assignment Attorney's Docket No. 0069-0337

| IN TESTIMONY WHEREOF, I have hereunto set my hand. | | |
|--|--|--|
| IN WITNESS WHEREOF, I hereto set my hand. | | |
| Xianchao LONG 3 Homer Street Apartment 3 Worcester, MA 01602 US | Signature: Xiamchao Long Date: 3/2/2015 | |
| Witness Signature: <u>Leving 1</u> ; Witness Name: <u>Leving 2</u> ; | Date: 3/2/2015 | |
| Witness Signature: Ruixiang Du | Date: 03/02/2015 | |

IN TESTIMONY WHEREOF, I have hereunto set my hand.

IN WITNESS WHEREOF, I hereto set my hand.

Justyna Zamler Signature:

Justyna ZANDER 72 Nicholas Road Apartment 63

Framingham, MA 01701 US

Date: March 1, 2015

Witness Signature:

Date: March 1, 2015

Witness Name: Ewa Zander

to

Witness Signature:

Date: March 1, 2015

Witness Name: Sylwia Fil

IN TESTIMONY WHEREOF, I have hereunto set my hand. IN WITNESS WHEREOF, I hereto set my hand. David KOH Signature: 9 West Broadway Unit 401 Boston, MA 02127 US State of Massachusetts On this 27 day of <u>February</u>, 2015, before me, <u>Nar. Jun E</u>, Notary Public, personally appeared <u>Nav. Jun E</u> personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. MARILYN P. CARRARA Notary Public Massachusetts ommission Expires May 27, 2016 Signature of Notary Public

My Commission Expires:

(Vay 27, 20/6) Signature of Notary Public [Notary's Seal Here]

IN TESTIMONY WHEREOF, I have hereunto set my hand.

IN WITNESS WHEREOF, I hereto set my hand.

Gautam K. VALLABHA 226 Maple Street

Framingham, MA 01702 US

State of Massachusetts

7 Vallabha

, 2015, before me, // / / , P., Notary Public, personally appeared Gautam Kpersonally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

MARILYN P. CARRARA Notary Public Massachusetts ommission Expires May 27, 2016 Notary's Seal Here

WITNESS my hand and official seal.

Signature of Notary Public
My Commission Expires: May 27, 2016

IN TESTIMONY WHEREOF, I have hereunto set my hand.

ommission Expires May 27, 2016

[Notary's Seal Here]

IN WITNESS WHEREOF, I hereto set my hand. Pieter J. MOSTERMAN Signature: < 72 Nicholas Road Apartment 63 Framingham, MA 01701 US State of Massachusetts On this 27 day of February 2015, before me, Mar. In P. Notary Public, personally appeared Pieter J. personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to the within instrument and acknowledged to me that he/ske/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. WITNESS my hand and official seal. MARILYN P. CARRARA Signature of Notary Public
My Commission Expires: Nay 27, 2016 Notary Public Massachusetts