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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
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GAURAV VEDA	02/11/2019
KUN-HAN TSAI	02/07/2019
WU-TUNG CHENG	02/07/2019
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SHI-YU HUANG	02/11/2019

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16248866

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ATTORNEY DOCKET NUMBER:	2018P01912US01
NAME OF SUBMITTER:	ANN HICKEY
SIGNATURE:	/ANN HICKEY/
DATE SIGNED:	02/19/2019

PATENT REEL: 048365 FRAME: 0818 505334172

Total Attachments: 7 source=2018P01912US01_SignedAssignment_InvsToMG#page1.tif source=2018P01912US01_SignedAssignment_InvsToMG#page2.tif source=2018P01912US01_SignedAssignment_InvsToMG#page3.tif source=2018P01912US01_SignedAssignment_InvsToMG#page4.tif source=2018P01912US01_SignedAssignment_InvsToMG#page5.tif source=2018P01912US01_SignedAssignment_InvsToMG#page6.tif source=2018P01912US01_SignedAssignment_InvsToMG#page7.tif

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ASSIGNMENT

For good and valuable consideration, I (We),

Yu Huang, residing at 2443 Crestview Drive, West Linn, OR 97068, US, citizen of CN Gaurav Veda, residing at 1673 NE 63rd Avenue, Hillsboro, OR 97124, US, citizen of IN Kun-han Tsai, residing at 12997 Sierra Vista Drive, Lake Oswego, OR 97035, US, citizen of US Wu-Tung Cheng, residing at 19030 SW 35th Place, Lake Oswego, OR 97034, US, citizen of US Mason Chern, residing at No.104-88, Lunziding, Minxiong Township, Chiayi County 621, TW, citizen of TW

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hereafter individually or collectively referred to as "Assignor(s)";

Hereby, (I) acknowledge having previously assigned, sold and transferred to **Mentor Graphics Corporation**, a corporation organized and existing under the laws of the State of OREGON, having its principal place of business at 8005 S.W. Boeckman Rd., Wilsonville, OR, 97070, hereinafter "Assignee", its successors, assigns and legal representatives, or to a predecessor of Assignee, pursuant to (A)(i) the laws of UNITED STATES OF AMERICA or (ii) a Patent & Secrecy Agreement or similar legal document such as, without limitation, an employee agreement executed at the time of entering into the employment of, or executed as a condition of continuing employment with, the Assignee or a predecessor of the Assignee, the entire right, including any and all priority rights, title and interest, in and for the United States and all foreign countries, in and to any and all inventions or improvements which are disclosed in an invention disclosure and/or in the below-identified documents currently filed with this Assignment, already filed or granted for Letters Patent (in which case, any provision of the subject Assignment that is in conflict with or is in addition to any provision in the prior agreement(s) or assignment(s) then this Assignment shall govern, take precedence, and be of legal effect), or

(B)(i) to the extent such laws of UNITED STATES OF AMERICA or such Patent & Secrecy Agreement or similar legal document failed or fails, in whole or part, to have assigned, sold or transferred the entire right (including priority rights), title and interest, in and for the United States and all foreign countries, in and to all inventions or improvements which are disclosed in the below-identified application(s) or pending application(s) or granted Letters Patent, or (ii) if no such agreement(s) exist assigning, selling or transferring any such right (including priority rights), title or interest; then for good and valuable consideration, Assignor(s) now and hereby, effective Nunc Pro Tunc on the filling date of the below identified patent application(s), pending patent application(s) or granted Letter Patent(s), assign, sell and transfer(s) to Assignee, its successors, assigns and legal representatives, the entire right, (including all priority rights), title and interest in and for the United States and all foreign countries, in and to any and all inventions and/or improvements which are disclosed in the following identified; patent application(s), pending patent application(s) or granted Letter Patent(s)

Patent Application Title: Multi-Stage Machine Learning-Based Chain Diagnosis

Filing Date: 17 Jan 2018 Filing Number: 62/618,619

Internal Case Number(s): 2018P01912US

IDNR: 1930 / 21.05.2015

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Patent Application Title: Multi-Stage Machine Learning-Based Chain Diagnosis

Filing Date: 16 Jan 2019 Filing Number: 16/248,866

Internal Case Number(s): 2018P01912US01

and in and to said application(s) or granted patents and all applications claiming priority to said application or granted patent, including, without limitation, and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of the inventions and/or improvements; and in and to all original and reissued patents which have been or shall be filed in the United States and all foreign countries on the inventions and/or improvements;

(II) Agree that said Assignee may apply for and receive Letters Patent for said inventions and/or improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said inventions and/or improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and legal representatives, all facts known to the undersigned relating to said inventions and/or improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said inventions and/or improvements and all applications for patents and all patents on said inventions and/or improvements, in said Assignee, its successors, assigns and legal representatives; and

(III) Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Witness Signature

printed name

Yu Huang

Date

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Docket No.: 2018P01912US01

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Witness Signature

Gaurav Veda

MANISH SHARMA

2/11/2019

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Witness Signature

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Kun-han Tsai

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Date

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Wu-Tung Cheng

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Vin - Trug Lr Witness Signature

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2019/02/13

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Docket No.: 2018P01912US01

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Wei Ohu	Spr Huary
Witness Signature	Shi-Yu (duang
Wei Chu	Feb. 11/2019

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2/14/2019

Legai OK XY 13 Feb 2019

> PATENT REEL: 048365 FRAME: 0826

RECORDED: 02/19/2019