PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| Chang Yuan | 03/07/2013 |
| Geoffrey Scott Heller | 03/07/2013 |

RECEIVING PARTY DATA

| Name: | Amazon Technologies, Inc. |
|-----------------|---------------------------|
| Street Address: | PO Box 8102 |
| City: | Reno |
| State/Country: | NEVADA |
| Postal Code: | 89507 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13789508 |

CORRESPONDENCE DATA

Fax Number: 4158146165

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (415) 814-6161

Email: julie.raynova@novakdruce.com

Correspondent Name: Novak Druce + Quigg LLP

Address Line 1: 555 Mission Street

Address Line 2: 34th Floor

Address Line 4: San Francisco, CALIFORNIA 94105

| ATTORNEY DOCKET NUMBER: | 20346.0435.NPUS00 | |
|-------------------------|--|--|
| NAME OF SUBMITTER: | Julie Raynova | |
| | This document serves as an Oath/Declaration (37 CFR 1.63). | |

Total Attachments: 5

PATENT REEL: 029947 FRAME: 0125 OF \$40.00 13/89

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PATENT REEL: 029947 FRAME: 0126

| U.S. Patent Appln. No Filing Date | Attorney Docket No. 20346.0435.NPUS00 Client Docket No. P7231-US |
|---|---|
| PARTIES TO THE ASSIGNMENT | . |
| Assignor(s): CHANG YUAN 410 Terry Avenue North Seattle, WA 98109-5210 | |
| GEOFFREY SCOTT HELLER 410 Terry Avenue North Seattle, WA 98109-5210 | |
| Assignee: Amazon Technologies, Inc. PO Box 8102 Reno, NV 89507 | |
| AGREEMENT | |
| WHEREAS, ASSIGNOR(S) (listed above) are inventor(s) | of an invention entitled |
| "IMAGE PREPROCESSING FOR CHARACTER RECOGNIT | ION" (Invention) for which a non- |
| provisional application for United States Letters Patent | |
| was filed on and accorded U.S. applica | ation no; or |
| will be filed concurrently with the submission of this recordation. | executed PATENT ASSIGNMENT for |
| ASSIGNOR(S) hereby authorizes and requests ASSIGN | JEE'S legal representatives, of Novak |
| Druce Connolly Bove + Quigg LLP, associated with Customer N | |
| · | • |
| and here in parentheses (U.S. application no | , filed) this |
| application's U.S. application number and filing date, when known | 1. |

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Filing Date _____

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WHEREAS, ASSIGNEE, a corporation of the State of Nevada, is desirous of acquiring the entire

right, title and interest in and to the Invention and in and to any letters patent that may be granted therefor

in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is

hereby acknowledged, ASSIGNOR(S) hereby sell, assign and transfer unto ASSIGNEE its successors

and assigns, the entire right, title and interest in and to said Invention and any improvements thereto, said

Application and any and all letters patent which may be granted for said Invention in the United States of

America and its territorial possessions and in any and all foreign countries, and in any and all provisional,

divisions, reissues, re-examinations and continuations thereof, including the right to file foreign

applications directly in the name of ASSIGNEE and to claim priority rights deriving from said application

to which said foreign applications are entitled by virtue of international convention, treaty or otherwise,

said Invention, application and all letters patent on said Invention to be held and enjoyed by ASSIGNEE

and its successors and assigns for their use and benefit and of their successors and assigns as fully and

entirely as the same would have been held and enjoyed by ASSIGNOR(S) had this assignment, transfer

and sale not been made. ASSIGNOR(S) hereby authorize and request the Commissioner of Patents and

Trademarks to issue all letters patent on said Invention to ASSIGNEE. ASSIGNOR(S) agree to execute

all instruments and documents required for the making and prosecution of applications for United States

and foreign letters patent on said Invention, for litigation regarding said letters patent, or for the purpose

of protecting title to said Invention or letters patent therefor.

AND ASSIGNOR(S) DOES HEREBY sell, assign, transfer, and convey to ASSIGNEE, its

successors, legal representatives, and assigns all claims for damages and all remedies arising out of any

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Filing Date _

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violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain

damages for past infringements of said letters patent before or after issuance.

AND ASSIGNOR(S) DOES HEREBY covenant and agree that ASSIGNOR(S) will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to ASSIGNOR respecting the Invention or said application, and testify in any legal proceeding, assist in the preparation of any other patent property relating to the application and the Invention or any improvements made thereto, sign/execute all lawful papers, provide all requested documents, execute and make all rightful oaths and/or declarations in connection with the application and the Invention including any improvements made thereto, any patent applications filed therefrom, and any continuing application filed from any of the aforementioned applications, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for the Invention in all countries. These provisions are binding upon our heirs, legal representatives,

CORRESPONDENCE ADDRESS

administrators, and assigns.

I hereby direct all correspondence and telephone calls in connection with this application be addressed to the number associated with the customer number listed below, which is:

Customer No.

65761

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PATENT REEL: 029947 FRAME: 0129

| U.S. Patent Appln. No Filing Date | Attorney Docket No. <u>2034</u> Client Docke | 6.0435.NPUS00 t No. <u>P7231-US</u> |
|--|---|--|
| DECLARATION As a below named inventor, I hereby declare that: | | |
| This declaration is directed to: | | |
| the attached application; or | | |
| United States application number | filed on | ; or |
| PCT international application number | filed on | · |
| The above-identified application was made or authorized | orized to be made by me. | |
| I believe that I am the original inventor or an origin application. | al joint inventor of a claimed Invention | in the |
| I have reviewed and understand the contents of the duty to disclose to the US Patent & Trademark Offi patentability as defined in 37 CFR 1.56. | * - | |
| I hereby acknowledge that any willful false statemed USC 1001 by fine or imprisonment of not more that | · - | under 18 |
| Legal name of inventor: CHANG YUAN | | |
| 3/7/2013 Date | Inventor Signature | · · · · · · · · · · · · · · · · · · · |
| WITNESSED BY: 3/7/13 Date | Witness (Signature) LISA D(12NC) | |
| | Witness (Printed Name) | |

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| U.S. Patent Appln. No Filing Date | Attorney Docket No. <u>203</u> Client Dock | Attorney Docket No. <u>20346.0435.NPUS00</u> Client Docket No. <u>P7231-US</u> | |
|--|---|---|--|
| DECLARATION | | | |
| As a below named inventor, I hereby declare that: | | | |
| This declaration is directed to: | | | |
| the attached application; or | | | |
| United States application number | filed on | ; or | |
| PCT international application number | filed on | | |
| The above-identified application was made or authorize | zed to be made by me. | | |
| I believe that I am the original inventor or an original application. | joint inventor of a claimed Invention | in the | |
| I have reviewed and understand the contents of the abduty to disclose to the US Patent & Trademark Office patentability as defined in 37 CFR 1.56. | • • | • | |
| I hereby acknowledge that any willful false statement USC 1001 by fine or imprisonment of not more than f | • | le under 18 | |
| Legal name of inventor: GEOFFREY SCOTT HELI J / 1 / 3 Date | Inventor Signature | | |
| WITNESSED BY: 3/7//3 Date | Witness (Signature) LISA DYEZNE | | |
| | Witness (Printed Name) | | |

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RECORDED: 03/07/2013