505157113 10/24/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5203880

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JINTAO JIANG	10/16/2018
HASSAN SAWAF	10/16/2018
MUDAR YAGHI	10/16/2018

RECEIVING PARTY DATA

Name:	APPTEK, INC.
Street Address:	6867 ELM STREET
Internal Address:	SUITE 300
City:	MCLEAN
State/Country:	VIRGINIA
Postal Code:	22101

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15672486

CORRESPONDENCE DATA

Fax Number: (202)739-3001

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: 202-739-3000

Email: LYNNORA.BEST@MORGANLEWIS.COM

MORGAN LEWIS & BOCKIUS LLP **Correspondent Name:** Address Line 1: 1111 PENNSYLVANIA AVENUE, NW

Address Line 4: WASHINGTON, D.C. 20004

ATTORNEY DOCKET NUMBER:	107664-5003
NAME OF SUBMITTER:	RACHEL LEA LEVENTHAL
SIGNATURE:	/Rachel Lea Leventhal/
DATE SIGNED:	10/23/2018

Total Attachments: 6

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PATENT REEL: 047296 FRAME: 0929

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COMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION	
Title	HYBRIO PHONEME, DIPHONE, MORPHONE, AND WORD-LEVEL DEEP NEURAL NETWORKS
DECLARATION	
As a below nan	ned inventor, I hereby declare that:
This declaration	n is directed to:
	ne attached application, or
Øu	S. application or PCT international application number 15/672,486 filed on <u>August 9, 2017</u> .
The above-iden	dified application was made or authorized to be made by me.
I believe that I	am the original inventor or an original joint inventor of a claimed invention in the application.
	wiedge that any willful faise statement made in this declaration is punishable under 18 U.S.C. 1001 by nment of not more than five (5) years, or both.
unless that per	or: 37 C.F.R. § 1.63(c) states: A person may not execute an oath or declaration for an application son has reviewed and understands the contents of the application, including the claims, and is styles disclose to the Office all information known to the person to be material to patentobility as 66.
ASSIGNMENT	
WHEREAS, I ha	ve made an invention described and/or daimed in the above-identified application; and
WHEREAS, <u>AppTek, Inc.</u> , a corporation whose post office address is <u>6867 Elm Street</u> , <u>Suite 300</u> , <u>McLean</u> , <u>VA 22101</u> (bereinafter referred to as the "Assignee"), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application of United States Letters Patent on this invention and the Letters Patent to be issued upon this application;	
	RE, be it known that, for good and valuable consideration the receipt of which from the Assignee is dedged, I have sold, assigned, transfer, and set over, and do hereby sell, assign, transfer, and set

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from the Assignee is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, and its lawful successors and assigns, my entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filled for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Director of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent of this invention to the Assignee, and its successors and assigns, in accordance with the terms of this Assignment;

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PATENT REEL: 047296 FRAME: 0930

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COMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will, without further consideration, communicate with the Assignee, and its successors and assigns, any facts known to me respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, and its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid the Assignee, and its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, and its successors and assigns.

IN TESTIMONY WHEREOF, I have hereunto set my hands.	
First (or Sole) Inventor (Swill Legal Name): <u>lintao JIANG</u> Signature:	Date:
Second Inventor (Full Legal Name): <u>Hassan SAWAF</u>	
Signature:	Date:
Third Inventor (Full Legal Name): Mudar YAGHI	
Signature:	Date:

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· ·	OMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION
<u> </u>	SIMBINED DECLARATION & ASSIGNMENT FOR UTIEST ON DESIGN APPRICATION
Title	HYBRID PHONEME, DIPHONE, MORPHONE, AND WORD-LEVEL DEEP NEURAL NETWORKS
DECLARATION	
As a below nar	ned inventor, I hereby declare that:
This declaratio	n is directed to:
	he attached application, or
⊠ ⊍	J.S. application or PCT international application number 15/672,486 filed on August 9, 2017.
The above-ide	ntified application was made or authorized to be made by me.
I believe that I	am the original inventor or an original joint inventor of a claimed invention in the application.
-	wledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by nment of not more than five (5) years, or both.
Note to Inventor: 37 C.F.R. § 1.63(c) states: A person may not execute an oath or declaration for an application unless that person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to the person to be material to patentability as defined in § 1.56.	
ASSIGNMENT	
WHEREAS, I ha	eve made an invention described and/or claimed in the above-identified application; and

WHEREAS, AppTek, Inc., a corporation whose post office address is <u>6867 Elm Street</u>, <u>Suite 300</u>, <u>McLean</u>, <u>VA 22101</u> (hereinafter referred to as the "Assignee"), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application of United States Letters Patent on this invention and the Letters Patent to be issued upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from the Assignee is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, and its lawful successors and assigns, my entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Director of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent of this invention to the Assignee, and its successors and assigns, in accordance with the terms of this Assignment;

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Page 2 of 2

COMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will, without further consideration, communicate with the Assignee, and its successors and assigns, any facts known to me respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, and its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid the Assignee, and its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, and its successors and assigns.

IN TESTIMONY WHEREOF, I have hereunto set my hands.

First (or Sole) Inventor (Full Legal Name): Jintao JIANG

Signature: _______ Date: ______

Second Inventor (Full Legal Name): Hassan SAWAF

Signature: _______ Date: ______

Third Inventor (Full Legal Name): Mudar YAGHI

Signature: _______ Date: ________

Morgan, Lewis & Bockius LLP

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COMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION	
Title	HYBRID PHONEME, DIPHONE, MORPHONE, AND WORD-LEVEL DEEP NEURAL NETWORKS
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This declaration	n is directed to:
	he attached application, or
×	J.S. application or PCT international application number 15/672,486 filed on August 9, 2017.
The above-ide	ntified application was made or authorized to be made by me.
I believe that I	am the original inventor or an original joint inventor of a claimed invention in the application.
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ASSIGNMENT	
WHEREAS, I ha	ave made an invention described and/or claimed in the above-identified application; and
WHEREAS, AppTek, Inc., a corporation whose post office address is 6867 Elm Street, Suite 300, McLean, VA 22101 (hereinafter referred to as the "Assignee"), is desirous of securing the entire right, title, and interest in and to this invention in all countries throughout the world, and in and to the application of United States Letters Patent on this invention and the Letters Patent to be issued upon this application;	

NOW THEREFORE, be it known that, for good and valuable consideration the receipt of which from the Assignee is hereby acknowledged, I have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, and its lawful successors and assigns, my entire right, title, and interest in and to this invention and this application, and all divisions, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and all rights to claim priority on the basis of such applications, and all applications for Letters Patent which may hereafter be filed for this invention in any foreign country and all Letters Patent which may be granted on this invention in any foreign country, and all extensions, renewals, and reissues thereof; and I hereby authorize and request the Director of Patents and Trademarks of the United States and any official of any foreign country whose duty it is to issue patents on applications as described above, to issue all Letters Patent of this invention to the Assignee, and its successors and assigns, in accordance with the terms of this Assignment;

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Page 2 of 2

COMBINED DECLARATION & ASSIGNMENT FOR UTILITY OR DESIGN APPLICATION

AND, I HEREBY covenant that I have the full right to convey the interest assigned by this Assignment, and I have not executed and will not execute any agreement in conflict with this Assignment;

AND, I HEREBY further covenant and agree that I will, without further consideration, communicate with the Assignee, and its successors and assigns, any facts known to me respecting this invention, and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver any and all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, and its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid the Assignee, and its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States and any foreign country, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, and its successors and assigns.

IN TESTIMONY WHEREOF, I have hereunto set my hands.

First (or Sole) Inventor (Full Legal Name): Jintao JIANG

Signature: ______ Date: ______

Second Inventor (Full Legal Name): Hassan SAWAF

Signature: ______ Date: ______ Date: ______

Third Inventor (Full Legal Name): Mudar YAGHI

Signature: ______ Date: _______

Morgan, Lewis & Bockius LLP

RECORDED: 10/24/2018