507054347 01/03/2022

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MINGXING TAN	03/09/2021
QUOC V. LE	03/13/2021

RECEIVING PARTY DATA

Name:	GOOGLE LLC
Street Address:	1600 AMPHITHEATRE PARKWAY
City:	MOUNTAIN VIEW
State/Country:	CALIFORNIA
Postal Code:	94043

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	17564860
PCT Number:	US2165448

CORRESPONDENCE DATA

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Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

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DORITY & MANNING, P.A. **Correspondent Name:**

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ATTORNEY DOCKET NUMBER:	GGL-2297/GGL-2297-PCT	
NAME OF SUBMITTER:	JOSEPH J. PROBST	
SIGNATURE:	/Joseph J. Probst/	
DATE SIGNED:	01/03/2022	

Total Attachments: 3

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PATENT REEL: 058527 FRAME: 0406 507054347

ATTORNEY DOCKET NUMBER: GGL-2297-P

CONFIRMATORY ASSIGNMENT OF WORLDWIDE RIGHTS

WHEREAS, we, Mingxing Tan, a citizen of China, residing in Newark, California; and Quoc V. Le, a citizen of Vietnam, residing in Sunnyvale, California, as assignors, have made an invention entitled

"Systems and Methods for Progressive Learning for Machine-Learned Models to Optimize Training Speed"

the "Invention") as described in a patent application (the "Patent Application"), the specification of
rhich:
☐ is attached hereto.
■ was filed on <u>February 4, 2021</u> as U.S. Application Serial No. <u>63/145,830</u> .
□ was filed on as PCT Application Serial No
□ was filed on as

WHEREAS, Google LLC, 1600 Amphitheatre Parkway, Mountain View, California 94043, as assignee, has received and secured or hereby receives and secures the entire right, title and interest in and to the Invention and the Patent Application in all countries throughout the world, in and to any Letters Patent or similar rights for the Invention to be issued upon the Patent Application throughout the world, any application for Letters Patent or similar rights for the Invention claiming priority to the Patent Application in all countries throughout the world, and any Letters Patent or similar rights to be issued claiming priority to the Patent Application in all countries throughout the world;

NOW, THEREFORE, be it known that for good and valuable consideration the receipt of which from assignee is hereby acknowledged, we, as assignors, acknowledge and confirm that we have sold, assigned, transferred, conveyed, and set over, and/or do hereby sell, assign, transfer, convey, and set over unto the assignee, its lawful successors and assigns, our entire right, title, and interest in and to the Invention and the Patent Application now existing and in the future, and all divisions, continuations, continuations-in-part, and national-stage applications thereof, any and all applications claiming priority to the Patent Application, and all Letters Patent or similar rights which may be granted thereon, and all reissues and re-examinations of any of the foregoing, and all rights to claim priority on the basis of any of the foregoing applications, and all applications for Letters Patent or similar rights which may hereafter be filed for the Invention in any country and all Letters Patent or similar rights which may be granted on the Invention in any country, and all extensions, renewals,

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reissues, and re-examinations thereof, any and all causes of action, claims, and demands and other rights for, or arising from, any infringement, breaches, or misappropriation, including past infringements, breaches, and misappropriations of any of the foregoing throughout the world, the right to take actions to assert any and all causes of action related to any of the foregoing throughout the world, including those accrued in assignors' favor for infringement, breach, and misappropriation, and the right to sue and recover and have past, present, and future damages and profits for infringement, breach, and misappropriation, in all countries, territories and possessions throughout the world in accordance with the laws thereof, to the full extent of such rights, and we hereby authorize and request the Commissioner for Patents of the United States and any official of any other country whose duty it is to issue patents on applications as described above, to issue all Letters Patent or similar rights for the Invention or the Patent Application to assignee, its successors and assigns, in accordance with the terms of this Assignment, and we hereby authorize the assignee, its successors and assigns, and the attorney(s) of record in applications as described above to modify this Assignment, subsequent to its execution, to more specifically identify the applications as described above.

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

AND, WE HEREBY further covenant and agree that we will, without further consideration, communicate with assignee, its successors and assigns, any facts known to us respecting the Invention, 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 of the Invention in said assignee, its successors and assigns, execute all divisional, continuation, reissue applications, re-examination applications, and any applications claiming priority to the Patent Application, and make all rightful oaths and generally aid assignee, its successors and assigns, to obtain and enforce proper patent and any other protection for the Invention in the United States and any other country, it being understood that any expense incident to the execution of such papers shall be borne by the assignee, its successors and assigns.

IN WITNESS WHEREOF, the Assignors have executed this document on the date indicated below:

Docusigned by:	3/9/2021
BD28E1BFD582420 Mingxing Tan	Date
Docusigned by:	3/13/2021
7D78D7C07556483 Quoc V. Le	Date

ATTORNEY DOCKET NUMBER: GGL-2297-P