505682794 09/20/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5729602

UBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT		
CONVEYING PARTY DA	ТА			
Name				Execution Date
NAN JIANG				09/02/2019
MINGYU GUO				09/02/2019
RECEIVING PARTY DAT	A			
Name:	ALIBABA GROUP HOLDING LIMITED			
Street Address:	FOURTH FLOOR, ONE CAPITAL PLACE, P.O. BOX 847,			
City:	GEORGE TOWN, GRAND CAYMAN,			
	CAYMAN ISLANDS			
State/Country:	CAYMA	N ISLANDS		
		N ISLANDS		
State/Country: PROPERTY NUMBERS		N ISLANDS		
PROPERTY NUMBERS	Total: 1			
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PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE DA Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name:	Total: 1	Number 6577191 202)408-4400 the e-mail address first; if that if that is unsuccessful, it will 02-408-4000 egional-desk@finnegan.com INNEGAN, HENDERSON, FA	l l be sent via U RABOW, GARI	'S Mail.
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ATTORNEY DOCKET NUMBER:	15009.0029-00000				
NAME OF SUBMITTER:	DEBORAH A. EDDINS				
SIGNATURE:	/Deborah A. Eddins/				
DATE SIGNED:	09/20/2019				
Total Attachments: 2					
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SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 15009.0029-00000 Applicant Reference No. PCT12191US

ASSIGNMENT

WHEREAS I/We are the below-named inventor(s) (hereinafter referred to as Assignor(s)) of an invention entitled:

IMAGE PROCESSING METHODS AND DEVICES

as disclosed and claimed in the applications identified below this paragraph:

Application Number	Country of Filing	Filing Date
PCT/CN2018/096278	PCT	July 19, 2018
201710594226.2	CN	July 20, 2017

WHEREAS, <u>Alibaba Group Holding Limited</u>, a corporation of <u>Cayman Islands</u>, whose post office address is <u>Fourth</u> <u>Floor, One Capital Place, P.O. Box 847, George Town, Grand Cayman, Cayman Islands</u> (hereinafter referred to as 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 all applications for patents on this invention in all countries throughout the world, including any PCT International Application and all national stage applications based thereon that may be filed, and all patents issued upon such applications 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, I/We, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, my/our entire right, title, and interest in and to this invention, the above-referenced applications that disclose and claim this invention, any PCT International Application and all national stage applications based thereon that may be filed, any other applications for patents filed anywhere in the world that claim this invention, and all divisions, and continuations of any such application, and all patents which may be granted thereon, and all reissues thereof, and all rights to claim priority in any country on the basis of any such applications, and reissues thereof; and I/We hereby authorize and request any official of any country whose duty it is to issue patents on applications as described above, to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

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

AND, I/WE further covenant and agree that I/We will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to me/us 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, its successors or assigns, execute all divisional, continuation, and reissue applications, make all rightful oaths and generally do everything possible to aid Assignee, 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, its successors and assigns.

AND, I/WE authorize and request a patent practitioner of record in this application, to insert the filing date, country of filing, and application number of the above-referenced application(s) when known.

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PATENT REEL: 050443 FRAME: 0424

SOLE/JOINT INVENTION (Worldwide Rights) Attorney Docket No. 15009.0029-00000 Applicant Reference No. PCT12191US

IN TESTIMONY WHEREOF, I/We have hereunto set our hands.

ASSIGNOR (Inventor) 1

Signature

Nan JIANG

Prigt Name

Sep . 2 77

Execution Date

ASSIGNOR (Inventor) 2 Signature Mingyu GUO

Print Name

Sep.2 2019

Execution Date

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