

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT7152153

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the THE COMMA AFTER THE PERIOD IN "INC." IN THE ASSIGNEE'S NAME. THE ASSIGNEE'S NAME SHOULD APPEAR: FACEBOOK, INC. previously recorded on Reel 050321 Frame 0027. Assignor(s) hereby confirms the ASSIGNMENT.
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SACHIN KADLOOR	05/24/2017
LAKSHMI GANESH	05/25/2017
JIACHENG FENG	05/25/2017
SAJAL JAIN	05/25/2017
QIANG WU	09/09/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	FACEBOOK, INC.
<b>Street Address:</b>	1601 WILLOW ROAD
<b>City:</b>	MENLO PARK
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94025
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15482415
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	8019803399
<b>Email:</b>	FBparalegal@maxval.com
<b>Correspondent Name:</b>	FISHERBROYLES, LLP - FACEBOOK, INC.
<b>Address Line 1:</b>	222 SOUTH MAIN STREET, 5TH FLOOR
<b>Address Line 4:</b>	SALT LAKE CITY, UTAH 84101
<b>ATTORNEY DOCKET NUMBER:</b>	007726.0484U1
<b>NAME OF SUBMITTER:</b>	JONATHAN LEE
<b>SIGNATURE:</b>	/Jonathan Lee/
<b>DATE SIGNED:</b>	02/01/2022

**Total Attachments: 6**

source=US15482415#page1.tif

source=US15482415#page2.tif

source=US15482415#page3.tif

source=US15482415#page4.tif

source=US15482415#page5.tif

source=US15482415#page6.tif

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5709259

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SACHIN KADLOOR	05/24/2017
LAKSHMI GANESH	05/25/2017
JIACHENG FENG	05/25/2017
SAJAL JAIN	05/25/2017
QIANG WU	09/09/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	FACEBOOK, INC., <u>FACEBOOK, INC.</u>
<b>Street Address:</b>	1601 WILLOW ROAD
<b>City:</b>	MENLO PARK
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	94025
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15482415
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(866)259-6138
<i>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.</i>	
<b>Phone:</b>	8018673327
<b>Email:</b>	fb-docketing@FisherBroyles.com
<b>Correspondent Name:</b>	FISHERBROYLES, LLP - FACEBOOK, INC.
<b>Address Line 1:</b>	222 SOUTH MAIN STREET, 5TH FLOOR
<b>Address Line 4:</b>	SALT LAKE CITY, UTAH 84101
<b>ATTORNEY DOCKET NUMBER:</b>	007726.0484U1
<b>NAME OF SUBMITTER:</b>	BRYAN HANKS
<b>SIGNATURE:</b>	/Bryan Hanks/
<b>DATE SIGNED:</b>	09/09/2019
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 5</b>	

**COMBINED ASSIGNMENT/DECLARATION (37 CFR 1.63)**

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to Facebook, Inc., a Delaware corporation, having a place of business at 1601 Willow Road, Menlo Park, California 94025 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional application filed under 35 U.S.C. § 111(b), non-provisional application filed under 35 U.S.C. § 111(a), international application filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase application filed under 35 U.S.C. § 371 ("APPLICATION").

Application No. 15/482,415 entitled "AUTOMATIC LOAD BALANCING FOR RESOURCE ALLOCATIONS" filed on April 7, 2017.

2. The entire worldwide right, title, and interest in and to:  
(a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Title: AUTOMATIC LOAD BALANCING FOR RESOURCE ALLOCATIONS  
Date Filed: April 7, 2017  
Application No.: 15/482,415

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
USING AN APPLICATION DATA SHEET (37 CFR 1.76)

By signing below, INVENTOR further attests to the following:

- The APPLICATION was made or authorized to be made by INVENTOR.
- INVENTOR believes that INVENTOR is the original inventor or an original joint inventor of a claimed invention in the APPLICATION.
- INVENTOR acknowledges the duty to disclose to the United States Patent and Trademark Office all information known to INVENTOR to be material to patentability as defined in 37 CFR § 1.56, which for a continuation-in-part includes information known to INVENTOR to be material to patentability as defined in 37 CFR § 1.56 that became available between the filing date of the prior patent application and the National or PCT filing date of the continuation-in-part application.

INVENTOR hereby acknowledges that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

Name and Signature	Date of Signature
<u>Sachin Kadloor</u>	<u>May 24, 2017</u>
Sachin Kadloor	
Name and Signature	Date of Signature
<u>Lakshmi Ganesh</u>	<u>May 25, 2017</u>
Lakshmi Ganesh	
Name and Signature	Date of Signature
<u>Jiacheng Feng</u>	<u>May 25, 2017</u>
Jiacheng Feng	
Name and Signature	Date of Signature
<u>Sajal Jain</u>	<u>May 25, 2017</u>
Sajal Jain	

Title: AUTOMATIC LOAD BALANCING FOR RESOURCE ALLOCATIONS  
Date Filed: April 7, 2017  
Application No.: 15/481,415

---

Name and Signature

---

Date of Signature

---

Qiang Wu

Attorney Docket No.: 060406.2471.US01  
60406-2471.US01/131142056.1

3

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY  
OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)**

<b>Title of Invention</b>	AUTOMATIC LOAD BALANCING FOR RESOURCE ALLOCATIONS		
This statement is directed to:			
<input type="checkbox"/> The attached application,			
OR			
<input checked="" type="checkbox"/> United States application or PCT international application number <u>15482415</u> filed on <u>7 April 2017</u> .			
<b>LEGAL NAME of inventor to whom this substitute statement applies:</b>			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Qiang Wu			
Residence (except for a deceased or legally incapacitated inventor):			
City	State	Country	
Houston	TX	US	
Mailing Address (except for a deceased or legally incapacitated inventor):			
1321 UPLAND DR STE 3514			
City	State	Zip	Country
Houston	TX	77043-4718	US
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.			
The above-identified application was made or authorized to be made by me.			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
Relationship to the inventor to whom this substitute statement applies:			
<input type="checkbox"/> Legal Representative (for deceased or legally incapacitated inventor only),			
<input checked="" type="checkbox"/> Assignee,			
<input type="checkbox"/> Person to whom the inventor is under an obligation to assign,			
<input type="checkbox"/> Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or			
<input type="checkbox"/> Joint Inventor.			

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9198.

**PATENT**  
**REEL: 058920 FRAME: 0830**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**SUBSTITUTE STATEMENT**

Circumstances permitting execution of this substitute statement:

- ☐ Inventor is deceased,
- ☐ Inventor is under legal incapacity,
- ☒ Inventor cannot be found or reached after diligent effort, or
- ☐ Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- ☒ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- ☐ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**PERSON EXECUTING THIS SUBSTITUTE STATEMENT:**Name: **Jonathan Lee**

Date (Optional): 6 September 2019

Signature: **/Jonathan Lee/****APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:**

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Facebook, Inc.

Applicant Name:

Title of Person Executing  
This Substitute Statement: **Attorney For Applicant**

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

**Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):**

City <b>Menlo Park</b>	State <b>CA</b>	Country <b>US</b>
------------------------	-----------------	-------------------

**Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)**

1601 Willow Road

City <b>Menlo Park</b>	State <b>CA</b>	Zip <b>94025</b>	Country <b>US</b>
------------------------	-----------------	------------------	-------------------

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.