

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4834389

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ABHINAV PATHAK	01/05/2018
CONOR J. O'REILLY	01/05/2018
SHASHI K. DUA	01/08/2018
UDAYKUMAR R. RAVAL	01/05/2018
CHRISTOPHER W. CHANEY	01/05/2018
AMIT K. VYAS	01/05/2018
ALBERT S. LIU	01/05/2018
ROBERTO ALVAREZ	01/05/2018
ROHIT MUNDRA	01/31/2018
VLADISLAV SAHNOVICH	01/05/2018
PATRICK Y. LAW	01/22/2018
PAUL M. THOMPSON	01/02/2018
PAOLO SACCHETTO	02/01/2018
CHAOHAO WANG	02/01/2018
ARTHUR L. SPENCE	01/18/2018
JEAN-PIERRE SIMON GUILLOU	01/18/2018
MOHAMMAD ALI JANGDA	01/18/2018
CHRISTOPHER EDWARD GLAZOWSKI	02/21/2018
YIFAN ZHANG	02/01/2018
PRAJAKTA S. KARANDIKAR	01/19/2018
HAN MING ONG	01/09/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	APPLE INC.
<b>Street Address:</b>	ONE APPLE PARK WAY
<b>City:</b>	CUPERTINO
<b>State/Country:</b>	CALIFORNIA
<b>Postal Code:</b>	95014
<b>PROPERTY NUMBERS Total: 1</b>	

Property Type	Number
Application Number:	15900740

# **CORRESPONDENCE DATA**

**Fax Number:** (925)472-8895

***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:** 925-472-5000

**Email:** sarnold@kilpatricktownsend.com

**Correspondent Name:** SYLVIA ARNOLD

**Address Line 1:** KILPATRICK TOWNSEND & STOCKTON LLP/APPLE

**Address Line 2:** 1100 PEACHTREE STREET, SUITE 2800

**Address Line 4:** ATLANTA, GEORGIA 30309

<b>ATTORNEY DOCKET NUMBER:</b>	090911-P35330US1-1052769
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<b>NAME OF SUBMITTER:</b>	SYLVIA ARNOLD
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<b>SIGNATURE:</b>	/Sylvia E. Arnold/
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<b>DATE SIGNED:</b>	02/21/2018
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# **Total Attachments: 39**

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**ASSIGNMENT**  
(Patent Application)

JOINT

WHEREAS, Abhinav Pathak, Conor J. O'Reilly, Shashi K. Dua, Udaykumar R. Raval, Christopher W. Chaney, Amit K. Vyas, Albert S. Liu, Roberto Alvarez, Rohit Mundra, Vladislav Sahnovich, Patrick Y. Law, Paul M. Thompson, Paolo Sacchetto, Chaohao Wang, Arthur L. Spence, Jean-Pierre Simon Guillou, Mohammad Ali Jangda, Christopher Edward Glazowski, Yifan Zhang, Prajakta S. Karandikar, and Han Ming Ong, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: GRAPHICALLY PROVIDING OLED DISPLAY POWER MODELING  
Filing Date: February 20, 2018  
Application No.: 15/900,740

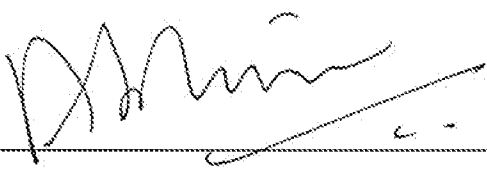
WHEREAS, APPLE INC., a corporation of the state of California, located at 1 Infinite Loop, Cupertino, CA 95014, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignors, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Kilpatrick Townsend & Stockton LLP, Two Embarcadero Center, 19th Floor, San Francisco, CA 94111, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Signature:  Date: 1/5/18

Abhinav Pathak

Signature:  Date: 1/5/18

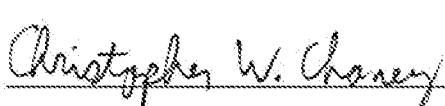
Conor J. O'Reilly

Signature:  Date: 1/8/18

Shashi K. Dua

Signature:  Date: 1-5-18

Udaykumar R. Raval

Signature:  Date: 1/5/2018

Christopher W. Chaney

Signature:  Date: 1/5/2018

Amit K. Vyas

Signature:  Date: 1/5/2018

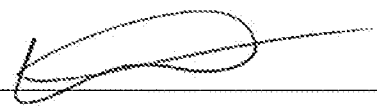
Albert S. Liu

Signature:  Date: 1/5/2018

Roberto Alvarez

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Rohit Mundra

Signature:  Date: 1/5/18

Vladislav Sahnovich

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Patrick Y. Law

Signature:	_____	Date:	_____
	Paul M. Thompson		
Signature:	_____	Date:	_____
	Paolo Sacchetto		
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Signature:	_____	Date:	_____
	Prajakta S. Karandikar		
Signature:	_____	Date:	_____
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Title of Invention: GRAPHICALLY PROVIDING OLED DISPLAY POWER MODELING  
Filing Date: February 20, 2018  
Application No.: 15/900,740

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IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_  
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Signature:	_____	Date:	_____
	Albert S. Liu		
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	Roberto Alvarez		
Signature:	_____	Date:	_____
	Rohit Mundra		
Signature:	_____	Date:	_____
	Vladislav Sahnovich		
Signature:	_____	Date:	_____
	Patrick Y. Law		

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Paul M. Thompson

Signature: Paolo Sacchetto Date: 2/1/18

Paolo Sacchetto

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Chaohao Wang

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Arthur L. Spence

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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Yifan Zhang

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Prajakta S. Karandikar

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Han Ming Ong

**ASSIGNMENT**  
(Patent Application)

JOINT

WHEREAS, Abhinav Pathak, Conor J. O'Reilly, Shashi K. Dua, Udaykumar R. Raval, Christopher W. Chaney, Amit K. Vyas, Albert S. Liu, Roberto Alvarez, Rohit Mundra, Vladislav Sahnovich, Patrick Y. Law, Paul M. Thompson, Paolo Sacchetto, Chaohao Wang, Arthur L. Spence, Jean-Pierre Simon Guillou, Mohammad Ali Jangda, Christopher Edward Glazowski, Yifan Zhang, Prajakta S. Karandikar, and Han Ming Ong, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: GRAPHICALLY PROVIDING OLED DISPLAY POWER MODELING  
Filing Date: February 20, 2018  
Application No.: 15/900,740

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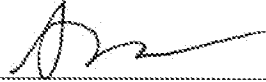
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Jan 18, 2018

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Signature:	<u>Ali J</u>	Date:	<u>Jan 18, 2018</u>
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	Abhinav Pathak		
Signature:	_____	Date:	_____
	Conor J. O'Reilly		
Signature:	_____	Date:	_____
	Shashi K. Dua		
Signature:	_____	Date:	_____
	Udaykumar R. Raval		
Signature:	_____	Date:	_____
	Christopher W. Chaney		
Signature:	_____	Date:	_____
	Amit K. Vyas		
Signature:	_____	Date:	_____
	Albert S. Liu		
Signature:	_____	Date:	_____
	Roberto Alvarez		
Signature:	_____	Date:	_____
	Rohit Mundra		
Signature:	_____	Date:	_____
	Vladislav Sahnovich		
Signature:	_____	Date:	_____
	Patrick Y. Law		

Signature:	_____	Date:	_____
	Paul M. Thompson		
Signature:	_____	Date:	_____
	Paolo Sacchetto		
Signature:	_____	Date:	_____
	Chaohao Wang		
Signature:	_____	Date:	_____
	Arthur L. Spence		
Signature:	_____	Date:	_____
	Jean-Pierre Simon Guillou		
Signature:	_____	Date:	_____
	Mohammad Ali Jangda		
Signature:	_____	Date:	_____
	Christopher Edward Glazowski		
Signature:	_____	Date:	_____
	Yifan Zhang		
Signature:	<u>B Karandikar</u>	Date:	<u>01-19-2018</u>
	Prajakta S. Karandikar		
Signature:	_____	Date:	_____
	Han Ming Ong		

**ASSIGNMENT**  
(Patent Application)

JOINT

WHEREAS, Abhinav Pathak, Conor J. O'Reilly, Shashi K. Dua, Udaykumar R. Raval, Christopher W. Chaney, Amit K. Vyas, Albert S. Liu, Roberto Alvarez, Rohit Mundra, Vladislav Sahnovich, Patrick Y. Law, Paul M. Thompson, Paolo Sacchetto, Chaohao Wang, Arthur L. Spence, Jean-Pierre Simon Guillou, Mohammad Ali Jangda, Christopher Edward Glazowski, Yifan Zhang, Prajakta S. Karandikar, and Han Ming Ong, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: GRAPHICALLY PROVIDING OLED DISPLAY POWER MODELING  
Filing Date: February 20, 2018  
Application No.: 15/900,740

WHEREAS, APPLE INC., a corporation of the state of California, located at 1 Infinite Loop, Cupertino, CA 95014, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignors, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Kilpatrick Townsend & Stockton LLP, Two Embarcadero Center, 19th Floor, San Francisco, CA 94111, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.



Signature:	_____	Date:	_____
	Abhinav Pathak		
Signature:	_____	Date:	_____
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Mohammad Ali Jangda

Signature:

Date:

Christopher Edward Glazowski

Signature:

Date:

Yifan Zhang

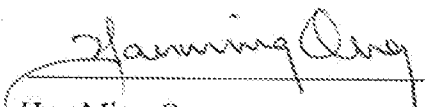
Signature:

Date:

Prajakta S. Karandikar

Signature:

Date:

  
Han Ming Ong

1/9/18