### 505699464 09/30/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5746274

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
BENJAMIN A. COUSINS	09/23/2019
ESGE ANDERSEN	09/26/2019
MEI ZHANG	09/23/2019
BRIAN R. TWEHUES	09/19/2019
ETHAN L. HUWE	09/23/2019
THANH P. HUA	09/25/2019

### **RECEIVING PARTY DATA**

Name:	APPLE INC.
Street Address:	ONE APPLE PARK WAY
City:	CUPERTINO
State/Country:	CALIFORNIA
Postal Code:	95014

### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	16584920	

### **CORRESPONDENCE DATA**

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**Correspondent Name:** KILPATRICK TOWNSEND & STOCKTON LLP

Address Line 1: 1100 PEACHTREE STREET

Address Line 2: **SUITE 2800** 

Address Line 4: ATLANTA, GEORGIA 30309

ATTORNEY DOCKET NUMBER:	090911-P35640US4-1108747
NAME OF SUBMITTER:	THUY DIEP
SIGNATURE:	/ Thuy Diep /
DATE SIGNED:	09/30/2019

# Total Attachments: 7 source=P35640US4\_Assignment#page1.tif source=P35640US4\_Assignment#page2.tif source=P35640US4\_Assignment#page3.tif source=P35640US4\_Assignment#page4.tif source=P35640US4\_Assignment#page5.tif source=P35640US4\_Assignment#page6.tif source=P35640US4\_Assignment#page6.tif

## ASSIGNMENT

(Patent Application)

JOINT

WHEREAS, Benjamin A. Cousins, Esge Andersen, Mei Zhang, Brian R. Twehues, Ethan L. Huwe, and Thanh P. Hua, 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:

**MULTI-LAYER POROUS SHIELDING** 

Filing Date:

September 26, 2019

Application No.:

16/584,920

WHEREAS, APPLE INC., a corporation of the state of California, located at One Apple Park Way, Cupertino, California 95014, United States of America, 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, 1100 Peachtree Street, Suite 2800, Atlanta, Georgia 30309, to insert herein above the application number and filing date of said application when known.

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

Signature:	Benjamin A. Cousins	Date:	9/23//9
Signature:	Esge Andersen	Date:	
Signature:	Mei Zhang	Date:	9/23/19
Signature:	Brian R. Twehues	Date:	
Signature:	Ethan L. Huwe	Date:	9/23/19
Signature:		Date:	

Thanh P. Hua

indicated.	IN TESTIMONY WHEREOF, Assignors have signed their names on the dates		
Signature:	Benjamin A. Cousins	Date:	
Signature:	Esge Andersen	Date:	9/26-19
Signature:	Mei Zhang	Date:	
Signature:	Brian R. Twehues	Date:	
Signature:	Ethan L. Huwe	Date:	
Signature:	Thanh P. Hua	Date:	

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(Patent Application)

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Title of Invention: MULTI-LAYER POROUS SHIELDING

Filing Date: September 26, 2019

Application No.: 16/584,920

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Signature:	Benjamin A. Cousins	Date:	
Signature:	Esge Andersen	Date:	
Signature:	Mei Zhaug	Date:	
Signature:	Brian R. (Twehues	Date:	9-19-2019
Signature:	Ethan L. Huwe	Date:	
Signature:	Thanh P. Hua	Date:	

Attorney Docket No.: 090911-P35640US4-1108747

# ASSIGNMENT

(Patent Application)

JOINT

WHEREAS, Benjamin A. Cousins, Esge Andersen, Mei Zhang, Brian R. Twehues, Ethan L. Huwe, and Thanh P. Hua, 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:

MULTI-LAYER POROUS SHIELDING

Filing Date:

September 26, 2019

Application No.:

16/584,920

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Assignment Attorney Docket No.: 090911-P35640US4-1108747 Page 2 of 2

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	Benjamin A, Cousins	See
Signature:		Date:
	Esge Andersen (1996) (1	Militari de en engañ parán Karinde gat. Seus a saste del en en fant filosofis inde. Genn Lastinios emple de alan en 2014.
<u>Literatur</u> kip	Mei Zhang	godino Polis Ivo III anis estroporto special ero ngli in o ili engopaja de prinsente adi pedi se shaloka medanino Polis depakterno Polis Inferio e il Sinta ceratiga.
pellik i fasoa Historia Kasalatik	Brian R. Twehues	odi opie iregi a kinaraka on uson "badoje Disonego na unarekesari i kalimo od pelped Poglaria Usom i kopi plikon ekinepolekt Poglaria
		alika) (1911) - <del>Maringa i kalenga da</del> Ikangangantuka, menyenta dan papagasa
Signature:		
	Then T. Hua and Mark I process and select a second	

PATENT REEL: 050569 FRAME: 0467

RECORDED: 09/30/2019