

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
JOANNA AIZENBERG	11/15/2016
IAN B. BURGESS	04/10/2017
GRANT ENGLAND	01/27/2017
THERESA M. KAY	02/27/2017
ELIJAH SHIRMAN	11/23/2016
NICOLAS VOGEL	01/20/2017
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PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	15757339
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NAME OF SUBMITTER:	KAREN SINCLAIR
SIGNATURE:	/K.S./
DATE SIGNED:	10/07/2019

Total Attachments: 36

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ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we, the undersigned:

**Joanna Aizenberg, Ian B. Burgess, Grant England,
Theresa M. Kay, Calvin Russell, Elijah Shirman and Nicolas Vogel**

(each hereafter "Assignor") hereby assign, sell, and transfer to:

**President and Fellows of Harvard College
17 Quincy Street
Cambridge, MA 02138**

(hereafter "Assignee") its successors and assigns, Assignor's entire right, title, and interest throughout the world in and to any and all inventions for:

MODIFYING OPTICAL PROPERTIES OF THIN-FILMS USING NANOPARTICLES WITH PLASMON RESONANCE

described in **International Application No. PCT/US2016/050378**, filed **September 6, 2016**, and in and to the aforesaid application, in any form or embodiment thereof, and in and to any application on any of the inventions filed in this and any foreign country, based thereon, including the right to file said applications, apply for patent rights, and claim priority under the provisions of any international convention or treaty; also the entire right, title, and interest throughout the world in and to any and all patents or reissues or extensions thereof to be obtained in this or any foreign country upon any of the inventions and any divisional, continuation, or substitute applications which may be filed upon said invention or inventions in this or any foreign country; and the right to sue in its own name and recover damages for past infringement of any United States Letters Patent and foreign patent; and authorize and request the issuing authority to issue any and all patents on said application or applications to said Assignee or its successors and assigns.

For purposes of complying with foreign requirements, the above paragraph is intended to expressly grant all the recited rights and grants in China, Korea, and Japan.

Assignor hereby warrants that he/she has full right to convey his/her entire right, title and interest, both legal and equitable, in and to said inventions, free from all prior assignments, agreements, licenses, mortgages, security interests, or other encumbrances whatsoever; and

Assignor further agrees, without further payment or compensation by said Assignee, or its successors and assigns, to communicate to said Assignee, its representatives or agents, or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings, whenever requested; testify in any interference or other legal proceedings whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said Assignee, its representatives or agents, or its successors or assigns to secure, obtain, and enforce proper patent protection for said invention or inventions in this and any foreign country.

Assignor authorizes Assignee or Assignee's representative to supply and/or to correct any errors in the patent/application information provided above including, but not limited to, said application serial number and filing date, prior to or after recordation.

Assignor appoints Assignee, through its designee, as its attorney-in-fact to execute, in Assignor's name and on Assignor's behalf, any and all documents required to effectuate this Assignment, specifically including, but not limited to, those documents specified above and any necessary corrective assignments.

11/15/2016

Date

Inventor: Joanna Aizenberg

Address:

Citizenship:

Witness:

11/15/2016

Date

Signature

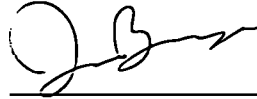
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Address: SEAS-29 Oxford Street

Cambridge, MA 02138

April 10, 2017

Date



Inventor: **Ian B. Burgess**

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Citizenship: Canada

Witness: April 10, 2017

Date



Signature

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Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Grant England**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Theresa M. Kay**

Address:

Citizenship:

Witness:

Date

Signature

Name:

Address:

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Calvin Russell**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Elijah Shirman**

Address:

Citizenship:

Witness:

Date

Signature

Name:

Address:

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Nicolas Vogel**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

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Assignor further agrees, without further payment or compensation by said Assignee, or its successors and assigns, to communicate to said Assignee, its representatives or agents, or its successors and assigns, any facts relating to said invention or inventions including evidence for interference purposes or for other legal proceedings, whenever requested; testify in any interference or other legal proceedings whenever requested; execute and deliver, on request, all lawful papers required to make any of the foregoing provisions effective; and generally do everything possible to aid said Assignee, its representatives or agents, or its successors or assigns to secure, obtain, and enforce proper patent protection for said invention or inventions in this and any foreign country.

Assignor authorizes Assignee or Assignee's representative to supply and/or to correct any errors in the patent/application information provided above including, but not limited to, said application serial number and filing date, prior to or after recordation.

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Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: _____
Joanna Aizenberg

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Ian B. Burgess**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

1/27/2017
Date

Inventor: Grant England
Grant England
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Witness:
1/27/2017
Date

Meredith Duffy
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Inventor: **Theresa M. Kay**

Address:

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Witness:

Date

Signature

Name:

Address:

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Calvin Russell**

Address:

Citizenship:

Witness:

Date

Signature

Name:

Address:

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Elijah Shirman**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Nicolas Vogel**

Address:

Citizenship:

Witness:

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Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Joanna Aizenberg**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Ian B. Burgess**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Date

Inventor: **Grant England**

Address:

Citizenship:

Witness:

Date

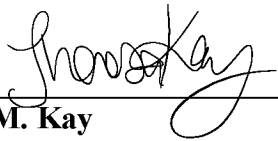
Signature

Name:

Address:

Feb. 27, 2017

Date

Inventor: 

Theresa M. Kay
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Citizenship:

Witness:
Feb. 27, 2017

Date



Signature

Name: Nouman Ahmad

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Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Calvin Russell**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Elijah Shirman**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
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Appln. No.: PCT/US2016/50378

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Inventor: **Nicolas Vogel**

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Citizenship:

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Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: _____
Joanna Aizenberg

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Ian B. Burgess**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

Date

Inventor: **Grant England**

Address:

Citizenship:

Witness:

Date

Signature

Name: _____

Address: _____

Date

Inventor: **Theresa M. Kay**

Address:

Citizenship:

Witness:

Date

Signature

Name:


Address:

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

2/22/2017
Date

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Citizenship: Canadian

Witness:
22 Feb - 2017
Date


Signature

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Nov 23 2016
Date

E. Shirman
Inventor: Elijah Shirman
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Citizenship: Israel

Witness:

11-23-16
Date

Shirman
Signature

Name: Tanya Shirman

Address: 106 Robbins rd.
Arlington MA

Patent Assignment
HU Case No.: HU 5518
Appln. No.: PCT/US2016/50378

2017-01-60
Date

Nicolas Vogel
Inventor: **Nicolas Vogel**
Address: Alfred-Wegener-Str. 1A
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Witness:

2017-01-60
Date

Karina Bley
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