### 505334195 02/19/2019

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
JEFFREY M. KARP	12/14/2015
YUHAN LEE	12/14/2015

#### **RECEIVING PARTY DATA**

Name:	THE BRIGHAM AND WOMEN'S HOSPITAL, INC.
Street Address:	75 FRANCIS STREET
City:	BOSTON
State/Country:	MASSACHUSETTS
Postal Code:	02115

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

Property Type	Number
Application Number:	15310877

#### **CORRESPONDENCE DATA**

**Fax Number:** (617)495-9568

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:** (617) 495-3067

**Email:** siobhan murphy@harvard.edu

Correspondent Name: KAREN SINCLAIR

Address Line 1: 1350 MASSACHUSETTS AVE

Address Line 2: HARVARD UNIVERSITY, OFFICE OF TECH. DEV.

Address Line 4: CAMBRIDGE, MASSACHUSETTS 02138

ATTORNEY DOCKET NUMBER:	5052
NAME OF SUBMITTER:	KAREN SINCLAIR
SIGNATURE:	/K.S./
DATE SIGNED:	02/19/2019

## **Total Attachments: 4**

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PATENT REEL: 048365 FRAME: 0961 Patent Assignment HU Case 5052 Appl. No(s): PCT/US15/30567

## ASSIGNMENT

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

## Jeffrey M. Karp and Yuhan Lee

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

## The Brigham and Women's Hospital, Inc. 75 Francis Street, Boston, Massachusetts 02115

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

#### Catheter for Transmitting and Reflecting Light

described in International Patent Application No. PCT/US15/30567, filed May 13, 2015; and in and to the aforesaid application(s), 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

Assigner 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,

Patent Assignment HU Case 5052 Appl. No(s): PCT/US15/30567

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 or omissions in the patent/application information provided above including but not limited to said application serial number(s) and filing date(s), 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.

12 14 15	-000M
Date	/// Jeffrey M. Karp
12/14/15	
Date	Lawitness Badia
	Witness's Printed Name
Date	Yuhan Lee
Date	Witness
	Witness's Printed Name

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#### **Catheter for Transmitting and Reflecting Light**

described in International Patent Application No. PCT/US15/30567, filed May 13, 2015; and in and to the aforesaid application(s), 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

Assigner 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.

PATENT REEL: 048365 FRAME: 0964 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 or omissions in the patent/application information provided above including but not limited to said application serial number(s) and filing date(s), 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.

Date	Jeffrey M. Karp
Date	Witness
	Witness's Printed Name
D 44 0045	44/120
Dec. 14, 2015	Yuhan Lee
Date	Y unan Lee
Dec. 14, 2015	ر ڪيم
Date	Witness
	Monisha Sebastin
	Witness's Printed Name