505413717 04/05/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Tri Ly	08/29/2013
Jie Zhu	08/29/2013
Kulwinder S. Plahey	08/29/2013

RECEIVING PARTY DATA

Name:	FRESENIUS MEDICAL CARE HOLDINGS, INC.
Street Address:	920 WINTER STREET
City:	WALTHAM
State/Country:	MASSACHUSETTS
Postal Code:	02451-1457

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16143000

CORRESPONDENCE DATA

Fax Number: (877)769-7945

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.

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

 Phone:
 617-368-2145

 Email:
 apsi@fr.com

Correspondent Name: ALLISON RAMSEY

Address Line 1: FISH & RICHARDSON P.C.

Address Line 2: P.O.BOX 1022

Address Line 4: MINNEAPOLIS, MINNESOTA 55440-1022

ATTORNEY DOCKET NUMBER:	18196-0180002
NAME OF SUBMITTER:	LAKEISHA BRYANT
SIGNATURE:	/Lakeisha Bryant/
DATE SIGNED:	04/05/2019

Total Attachments: 4

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PATENT REEL: 048804 FRAME: 0928

<u>ASSIGNMENT</u>

For valuable consideration, we, Tri Ly, of 5704 Newfields Lane, Dublin, CA 94568; Jie Zhu, of 4019 Moller Ranch Way, Antioch, CA 94509; and Kulwinder S. Plahey, of 5377 Stonehurst Drive, Martinez, CA 94553; hereby assign to FRESENIUS MEDICAL CARE HOLDINGS, INC., a corporation of New York, having a place of business at 920 Winter St., Waltham, MA 02451-1457, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled DETERMINING A VOLUME OF MEDICAL FLUID PUMPED INTO OR OUT OF A MEDICAL FLUID CASSETTE, filed August 21, 2013, and assigned U.S. Serial Number 13/972,498, this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

Assignment Page 1 of 4

Acknowledgment
State of California
County of Conta Conta
On Ayul 2013 before me, That T. Continue (insert name and title of the officer)
who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.
WITNESS my hand and official seal. TABORA T. CONSTANTENNIA COMM #1948009 Notary Public - California Contra Costa County My Comm. Erpires Aug. 13, 2015 Signature (Seal)

Jie Zhu DATE: 8/29/2013
Acknowledgment
State of California
County of Cortia Costa
On April 29, 2013 before me, Torra Candadamarca (insert name and title of the officer)
personally appeared
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. TABORA T. CONSTANTENNIAL COMM. #1948009
WITNESS my hand and official seal. Notary Public - California Contra Costa County My Comm. Expires Aug. 13, 2015

Kulwinder S. Plahey

Acknowledgment

State of California

County of Cala Cala

On April 202 before me, Tana Cantakenia

(insert name and title of the officer)

personally appeared Kolwinder (insert name and title of the officer)

who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

TABORAT. CONSTANTENNIA

COMM. #1948009

Notary Public California

Contra Costa County

Signature

My Comm. Expres Aug. 13, 2015

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RECORDED: 04/05/2019