505807994 12/06/2019

EPAS ID: PAT5854823

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CAITLYN HASTIE	05/09/2014
FRANK KIRCHHOFF	09/13/2012
THORSTEN SIESS	09/13/2012

RECEIVING PARTY DATA

Name:	ABIOMED, INC.	
Street Address:	22 CHERRY HILL DRIVE	
City:	DANVERS	
State/Country:	MASSACHUSETTS	
Postal Code:	01923	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15666689

CORRESPONDENCE DATA

Fax Number: (617)979-9301

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: 6179799300

Email: ginny.blundell@whitecase.com

WHITE & CASE LLP **Correspondent Name:** Address Line 1: 75 STATE STREET

Address Line 4: BOSTON, MASSACHUSETTS 02109

ATTORNEY DOCKET NUMBER:	1846265-0017-031-105
NAME OF SUBMITTER:	GINNY BLUNDELL
SIGNATURE:	/Ginny Blundell/
DATE SIGNED:	12/06/2019

Total Attachments: 4

source=Assignment (parent) 031-105#page1.tif source=Assignment (parent) 031-105#page2.tif source=Assignment (parent) 031-105#page3.tif source=Assignment (parent) 031-105#page4.tif

> **PATENT REEL: 051204 FRAME: 0198** 505807994

ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

ABiomed, Inc. 22 Cherry Hill Drive Danvers, MA 01923

(hereinafter referred to as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions, and all foreign countries in and to this invention relating to

LOADING GUIDE LUMEN

as set forth i	n this United States Patent App	plication
check one	[] executed concurrently	herewith,
	[X] Serial No. 13/552366	Filed 7/18/2012

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention and any other international agreement; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the International Convention or otherwise.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

Page 1 of 4

4816-2877-5440.1

L: 033<u>155_ERA</u>ME: 0116

REEL: 051204 FRAME: 0199

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, and declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of Foley & Lardner LLP the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of Foley & Lardner LLP do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

REEL: 051204 FRAME: 0200

	Executed this 9 day of May , 2014,
	Caitlyn Hastie
	State of Massachusetts) CAIPLYN HASTIE
	County of USA)
	On this 1th day of 2014, before me 31111 5. It (a notary public in an for said county), personally appeared CATLYN HASTE, who proved to me on the basic of satisfactory evidence to be the person whose name is authoritied to the within instrument and acknowledged to me that be/she executed the same in his/her enthorized capacity, and that by his/her signature on the lustrument the person, or the entity upon behalf of which the person acted, executed the instrument.
	WITNESS my stand and pulledul and
	Signapure Grida S Duy
	My Commission Expires: "Notary Public"
	(Seal) Unde S. Day Commonwealth of Messachusetts My Commission Expires on Mench 19, 2015
	Executed this 12 day of Septem 6520 12
	FRANK KIRCHHOFF
	State of
	County of Get many
	On thisday of
	WITNESS my hand and official seel.
	Ngustor
	My Commission Expires.
	(Seal)
4816-287	Page 3 of 4

REEL: 033155 FRAME: 0118 PATENT

Executed this 13 day of Septem	ber, 2012
,	4:
	THORSTEN SIESS
State of)	U
County of <u>Germany</u>)	
On thisday of, 20, vor said county), personally appeared THORSTEN SIESS, who prove a subscribed to the within instrument and acknowledged to me that it ignature on the instrument the person, or the entity upon behalf of w	before me,
WITNESS my hand and official seal.	
ignature	
Ay Commission Expires:	
(Seal)	

Page 4 of 4

4816-2877-5440.1

RECORDED: 06/23/2014 REEL: 033155 FI

RECORDED: 12/06/2019

REEL: 033155 FRAME: 0119 PATENT

REEL: 051204 FRAME: 0202