PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4872667

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
GARY A. FREEMAN	12/07/2017
ZIAD F. ELGHAZZAWI	12/12/2017
JING PAN	08/29/2012

RECEIVING PARTY DATA

Name:	ZOLL MEDICAL CORPORATION	
Street Address:	269 MILL ROAD	
City:	CHELMSFORD	
State/Country:	MASSACHUSETTS	
Postal Code:	01824-4105	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15833288

CORRESPONDENCE DATA

Fax Number: (412)471-4094

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: 4124718815

Email: assignments@webblaw.com

THE WEBB LAW FIRM **Correspondent Name:**

Address Line 1: ONE GATEWAY CNTR 420 FT DUQUESNE BLVD

Address Line 2: **SUITE 1200**

Address Line 4: PITTSBURGH, PENNSYLVANIA 15222

ATTORNEY DOCKET NUMBER:	7460-1708303	
NAME OF SUBMITTER:	RYAN J. MILLER	
SIGNATURE:	/Ryan J. Miller/	
DATE SIGNED:	03/19/2018	

Total Attachments: 14

source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif

> **PATENT** REEL: 045275 FRAME: 0771 504825931

purce=Assignment#page4.tif
purce=Assignment#page5.tif
ource=Assignment#page6.tif
purce=Assignment#page7.tif
ource=Assignment#page8.tif
ource=Assignment#page9.tif
purce=Assignment#page10.tif
purce=Assignment#page11.tif
purce=Assignment#page12.tif
purce=Assignment#page13.tif
purce=Assignment#page14.tif

PATENT REEL: 045275 FRAME: 0772

ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, Gary A. Freeman of Waltham, MA, Jing Pan of Newton, MA, and Ziad F. Elghazzawi of Newton, MA, each individually assign to ZOLL MEDICAL CORPORATION, a corporation formed under the laws of Massachusetts and having a principal place of business at 269 Mill Road, Chelmsford, MA 01824, and its successors, transferees, and assigns (collectively the "Assignee"), all of our individual and joint right, title, and interest throughout the world in the patent application titled "System for Assisting Rescuers in Performing Cardio-Pulmonary Resuscitation (CPR) on a Patient," filed in the United States Patent and Trademark Office on December 6, 2017, as Application No. 15/833,288 (the "Application"), including without limitation: (a) the subject matter of the Application (the "Subject Matter"); (b) the Application and all other applications that may be made for, and all patents, utility models, design registrations, creative works, and other rights of exclusion and inventors' certificates for any of the Subject Matter, and all applications claiming the benefit of or priority to the Application (including without limitation divisionals, continuations, continuations-in-part, reexaminations, reissues, supplemental examinations, continued prosecution applications, post-grant reviews, inter partes reviews, renewals, and extensions), and all applications to which the Application claims priority or of which the Application claims the benefit (including without limitation provisional applications), in every country or region (collectively the "Applications and Granted Rights"); (c) the right to claim priority based on and the benefit of the filing date of any of the Applications and Granted Rights under the Paris Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other applicable treaties or conventions, and (d) the right to pursue, collect, and retain in the Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment.

We authorize the Assignee to apply for and pursue protection for any or all of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment in all countries, regions, and territories of the world, in our names or in the Assignee's name.

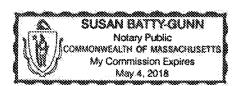
We represent and warrant that we have the right and power to make this Assignment and that we have not made and will not make any other assignment that conflicts with this

1

Assignment. We authorize the Assignee, its successors and assigns, and its representatives, to insert in or on this Assignment the filing date and application number of the Application or of any Applications and Granted Rights, including any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office or foreign equivalent thereof for recordation of this Assignment.

We will communicate to the Assignee (or at the request of the Assignee to other parties) all known facts in any form relating to the Subject Matter, will execute and provide all oaths and declarations, statements, testimony, assignments, powers of attorney, applications, and documents, and will perform all other lawful acts necessary or desirable to secure fully to the Assignee the rights, titles, and interests assigned by this Assignment.

May & 4	Date:
Gary Al Freeman	
Commonwealth of Massachusetts)	
County of Middlesex) ss.:	
On the day of Ocember	in the year 20before me, the undersigned,
a Notary Public in and for said State, personally ap	opeared Gary A. Freeman
personally known to me or proved to me on the ba	sis of satisfactory evidence to be the
individual(s) whose name(s) is (are) subscribed to	the within instrument and acknowledged to me
that he/she/they executed the same in his/her/their	capacity(ies), and that by his/her/their
signature(s) on the instrument, the individual(s), o	r the person upon behalf of which the
individual(s) acted, executed the instrument.	
Notes	SALY BUND



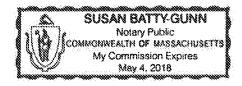
***************************************		Date:
Jing Pan		
All Control of the Co		
Commonwealth of Massachusetts)	
) ss.	
County of)	
On the day of		in the year 20 before me, the undersigned,
a Notary Public in and for said State	e, personally a	appeared Jing Pan ,
personally known to me or proved t	o me on the b	pasis of satisfactory evidence to be the
individual(s) whose name(s) is (are) subscribed to	o the within instrument and acknowledged to me
that he/she/they executed the same	in his/her/thei	ir capacity(ies), and that by his/her/their
signature(s) on the instrument, the i	ndividual(s),	or the person upon behalf of which the
individual(s) acted, executed the ins	strument.	
	Not	ary Public

A		Date:
Ziad F. Elghazz	awi	
State)) ss	**
County of	ý	
On the	day of	in the year 20 before me, the undersigned,
a Notary Public i	n and for said State, pers	sonally appeared Ziad F. Elghazzawi
personally know	n to me or proved to me	on the basis of satisfactory evidence to be the
individual(s) who	ose name(s) is (are) subs	cribed to the within instrument and acknowledged to me
that he/she/they	executed the same in his	/her/their capacity(ies), and that by his/her/their
•		dual(s), or the person upon behalf of which the
individual(s) acto	ed, executed the instrume	ent.
		Notary Public

The Assignee hereby acknowledges and accepts the foregoing assignment.

Assignee: Zoll Medical Corporation
Signature: Date: $\frac{2}{\sqrt{17}}$
Name: Kuangshin Tai
Title: Intellectual Property Counsel, Zoll Medical Corporation
Commonwealth of Massachusetts)) ss.; County of Middlesex
County of Middlesex)
On the day of in the year 20/7 before me, the undersigned,
a Notary Public in and for said State, personally appeared Kuangshin Tai
personally known to me or proved to me on the basis of satisfactory evidence to be the
individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me
that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their
signature(s) on the instrument, the individual(s), or the person upon behalf of which the
individual(s) acted, executed the instrument.
const

Salary Public



ASSIGNMENT

For valuable consideration, the receipt of which we acknowledge, and intending to be bound legally, we, Gary A. Freeman of Waltham, MA, Jing Pan of Newton, MA, and Ziad F. Elghazzawi of Newton, MA, each individually assign to ZOLL MEDICAL CORPORATION, a corporation formed under the laws of Massachusetts and having a principal place of business at 269 Mill Road, Chelmsford, MA 01824, and its successors, transferees, and assigns (collectively the "Assignee"), all of our individual and joint right, title, and interest throughout the world in the patent application titled "System for Assisting Rescuers in Performing Cardio-Pulmonary Resuscitation (CPR) on a Patient," filed in the United States Patent and Trademark Office on December 6, 2017, as Application No. 15/833,288 (the "Application"), including without limitation: (a) the subject matter of the Application (the "Subject Matter"); (b) the Application and all other applications that may be made for, and all patents, utility models, design registrations, creative works, and other rights of exclusion and inventors' certificates for any of the Subject Matter, and all applications claiming the benefit of or priority to the Application (including without limitation divisionals, continuations, continuations-in-part, reexaminations, reissues, supplemental examinations, continued prosecution applications, post-grant reviews, inter partes reviews, renewals, and extensions), and all applications to which the Application claims priority or of which the Application claims the benefit (including without limitation provisional applications), in every country or region (collectively the "Applications and Granted Rights"); (c) the right to claim priority based on and the benefit of the filing date of any of the Applications and Granted Rights under the Paris Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other applicable treaties or conventions, and (d) the right to pursue, collect, and retain in the Assignee's name or otherwise, damages and any other remedies arising from any past, present, or future infringement of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment.

We authorize the Assignee to apply for and pursue protection for any or all of the Subject Matter, the Applications and Granted Rights, and any other rights assigned by this Assignment in all countries, regions, and territories of the world, in our names or in the Assignee's name.

We represent and warrant that we have the right and power to make this Assignment and that we have not made and will not make any other assignment that conflicts with this

1

ZOLL Docket No. Z10661US-07 Webb Docket No. 7460-1708303

Assignment. We authorize the Assignee, its successors and assigns, and its representatives, to insert in or on this Assignment the filing date and application number of the Application or of any Applications and Granted Rights, including any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office or foreign equivalent thereof for recordation of this Assignment.

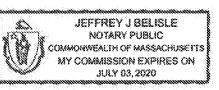
We will communicate to the Assignee (or at the request of the Assignee to other parties) all known facts in any form relating to the Subject Matter, will execute and provide all oaths and declarations, statements, testimony, assignments, powers of attorney, applications, and documents, and will perform all other lawful acts necessary or desirable to secure fully to the Assignee the rights, titles, and interests assigned by this Assignment.

2

	***************************************	200000	Date:	
Gary A. Free	eman		***	
	th of Massachusetts)) ss.::		
County of Mi	ddlesex)		
On the	day of		in the year 20_	_before me, the undersigned,
a Notary Publ	ic in and for said Stat	e, personally	y appeared <u>Gary A</u>	Freeman ,
personally kn	own to me or proved	to me on the	basis of satisfacto	ory evidence to be the
individual(s)	whose name(s) is (are) subscribed	to the within inst	rument and acknowledged to me
that he/she/th	ey executed the same	in his/her/th	eir capacity(ies), a	and that by his/her/their
				on behalf of which the
individual(s)	acted, executed the in	strument.		
(-)	, .			
		N	otary Public	

	000000000	Date:
Jing Pan	,,,,,,,,,,,	
Commonwealth of Massachusetts)) ss.\$	
County of)	
On the day of		in the year 20 before me, the undersigned,
a Notary Public in and for said Sta	te, persona	Ily appeared Jing Pan
personally known to me or proved	to me on th	he basis of satisfactory evidence to be the
individual(s) whose name(s) is (are	e) subscribe	ed to the within instrument and acknowledged to me
that he/she/they executed the same	in his/her/	their capacity(ies), and that by his/her/their
-		(s), or the person upon behalf of which the
individual(s) acted, executed the ir		
	~ 1	Notary Public

State Massachusens) ss.: County of Worlers On the 12 day of Remble in the year 20 17 before me, the undersigned a Notary Public in and for said State, personally appeared Ziad F. Elghazzawi personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument. Notary Public	Ziad F. Elghazzawi	Date: 12/12/2017
County of workers and for said State, personally appeared Ziad F. Elghazzawi personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.		
On the	State Masiachusens)	:
a Notary Public in and for said State, personally appeared Ziad F. Elghazzawi personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.	County of Worleite)	
personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.	On the 12 day of Weemble	in the year 20 before me, the undersigned,
individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.	a Notary Public in and for said State, pers	onally appeared Ziad F. Elghazzawi
that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.	personally known to me or proved to me o	on the basis of satisfactory evidence to be the
signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.	individual(s) whose name(s) is (are) subsc	cribed to the within instrument and acknowledged to m
individual(s) acted, executed the instrument.	that he/she/they executed the same in his/	her/their capacity(ies), and that by his/her/their
Lilealith Landing and the second and	signature(s) on the instrument, the individ	iual(s), or the person upon behalf of which the
Notary Publik	individual(s) acted, executed the instrume	mr. Ill dool l
		Notary Public



The Assignee hereby acknowledges and accepts the foregoing assignment.

Assignee: Zoll Medical Corporation

Signature: Date: 9/8

Name: Kuangshin Tai

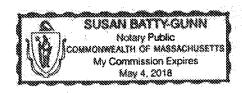
Title: Intellectual Property Counsel, Zoll Medical Corporation

Commonwealth of Massachusetts

County of Middlesex

On the day of how long in the year 20 before me, the undersigned, a Notary Public in and for said State, personally appeared Kuangshin Tai personally known to me or proved to me on the basis of satisfactory evidence to be the individual(s) whose name(s) is (are) subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their capacity(ies), and that by his/her/their signature(s) on the instrument, the individual(s), or the person upon behalf of which the individual(s) acted, executed the instrument.

Notary Public



Attorney Docket No.: 04644-0320001

ASSIGNMENT

For valuable consideration, we, Ziad F. Elghazzawi, of 115 Sheridan Street, Newton, MA 02465; and Jing Pan, of 11 Ellison Rd., Newton, MA 02459; hereby assign to ZOLL MEDICAL <u>CORPORATION</u>, a corporation of <u>Massachusetts</u>, having a place of business at 269 Mill Road, Chelmsford, Massachusetts 01824, 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 DEFIBRILLATOR INCLUDING LIGHT SENSOR, filed July 23, 2012 assigned U.S. Serial Number 13/555,439 , and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; 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 2

Attorney Docket No.: 04644-0320001

DATE: 8/27/12 Ziad F. ELGHAZZAWI
STATE OF Massachusts) SS.
COUNTY OF Middleney
On August 27, 30/2, before me, the undersigned, a notary public for the State of Sta
WITNESS my hand and official seal.
HELEN O. LEARY Motory Public Massachusetta Gammission Emptres Jul 11, 2018
DATE: 8/29/12 JING PAN
STATE OF Messachusetts) COUNTY OF Messachusetts) SS.
On August 29, 20/2, before me, the undersigned, a notary public for the State of States o
WITNESS my hand and official seal.

Assignment Page 2 of 2

HELEN D. LEARY Notary Public