PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2781927

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ELLIS MENG	10/19/2007
YU-CHONG TAI	10/17/2007
MARK S. HUMAYUN	10/18/2007
RAJAT AGRAWAT	10/19/2007
RONALEE LO	10/19/2007
JASON SHIH	10/19/2007
KENRICK KUWAHARA	10/19/2007
PO-YING LI	10/19/2007
DAMIEN RODGER	10/19/2007
PO-JUI CHEN	10/17/2007

RECEIVING PARTY DATA

Name:	THE UNIVERSITY OF SOUTHERN CALIFORNIA	
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State/Country:	CALIFORNIA	
Postal Code:	90089-2561	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13493611

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: RPN-001C2

502735321 REEL: 032513 FRAME: 0155

PATENT -

NAME OF SUBMITTER:	SABINE M. VOLKMER WARD
SIGNATURE:	/Sabine M. Volkmer Ward/
DATE SIGNED:	03/24/2014
Total Attachments: 9	
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PATENT REEL: 032513 FRAME: 0156

Client Code: USC020.001A

ASSIGNMENT

Application No.: 11/686,310 Filing Date: March 14, 2007

WHEREAS, We, Ellis Meng, a United States citizen, residing at 520 Palo Verde Avenue, Pasadena, California 91107, Yu-Chong Tai, a United States citizen, residing at 3191 E. California Boulevard, Pasadena, California 91107, Mark S. Humayun, a United States citizen, residing at 2757 Sleepy Hollow Piace, Glendale, California 91206, Rajat Agrawal, an Indian citizen, residing at 77 D Price Street, Rediands, California 92373, Ronalee Lo, a United States citizen, residing at 231 N. Nicholson Avenue, Montercy Park, California 91755, Jason Shih, a United States citizen, residing at 20420 Via Cadiz, Yorba Linda, California 92886, Kenrick Kuwahara, a United States citizen, residing at 5719 Ostin Avenue, Woodland Hills, California 91367, Po-Ying Li, a Taiwanese citizen, residing at 2715 S. Hoover Street, Apt. 2, Los Angeles, California 90007, Damien Rodger, a United States citizen, residing at 1001 E. Villa Street, #15, Pasadena, California 9106, have invented certain new and useful improvements in a MEMS DEVICE AND METHOD FOR DELIVERY OF THERAPEUTIC AGENTS for which we have filed an application for Letters Patent in the United States, Application No. 11/686,310, filed on March 14, 2007;

AND WHEREAS, The University of Southern California (hereinafter "ASSIGNEE"), with its principal place of business at Hughes Center, Suite EEB 131, 3740 McClintock Avenue, Los Angeles, California 90089-2561, desires to acquire the entire right, title, and interest in and to said improvements and said Application.

NOW, THEREFORE, in consideration of good and valuable consideration, the receipt of which is hereby acknowledged, we, said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto said ASSIGNEE, its successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under said improvements, and said application including all provisional applications relating thereto (including but not limited to U.S. Provisional Application No. 60/781,969, filed on March 14, 2006), and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may be easier be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE DO HEREBY sell, assign, transfor, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned bereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND WE HEREBY covenant and agree that we will communicate to said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing and reissue applications, make all rightful oaths and generally do everything possible to aid said ASSIGNEE, its

PATENT REEL: 032513 FRAME: 0157

Application No.: 11/686,310	Client Code: USC020.001	LA
Filing Date: March 14, 2007	Page	32

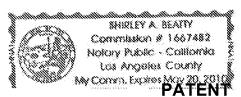
successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries. IN TESTIMONY WHEREOF, I hereunto set my hand and scal this 19 day of evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. **ISEAL** Notary Signature IN TESTIMONY WHEREOF, I bereunto set my hand and scal this _____ day of 2007. Yu Chong Tai STATE OF COUNTY OF _____, 2007, before me, _____ personally appeared Yu Chong Tai, personally known to me (or 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 sufnorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person soted, executed the instrument. WITNESS my hand and official seal. [SEAL] Notary Signature

Application No.: 11/686,310 Client Code: USC020,001A Filing Date: March 14, 2007 Page 2

successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries. IN TESTIMONY WHEREOF, I hereunto set my hand and seal this ____ day of Ellis Meng STATE OF COUNTY OF On ______, 2007, before me, ______, notary public, personally appeared Ellis Meng, personally known to me (or 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 she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. WITNESS my hand and official seal. [SEAL] Notary Signature ***** IN TESTIMONY WHEREOF, I hereunto set my hand and seal this STATE OF California)

COUNTY OF LOS Avgeles

on Oct. 17, 2007, before me, Shirley A. Beachy, notary public, personally appeared Yu Chong Tai, personally known to me for proved to me on the hasis of satisfactory ewidence) 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. WITNESS my hand and official seal. [SEAL]



REEL: 032513 FRAME: 0159

Application No.: 11/686,310 Client Code: USC020,001A Filing Date: March 14, 2007 Page 3

IN TESTIMONY WHEREOF, I berewate set mg hand and seal this 12th day of
<u> California 2007.</u>
<u> </u>
Mark S. Hummyun
STATE OF CONFORMIA) ss.
COUNTY OF Los Arandes
On 2007, before me, Walton Java Light motary public, personally appeared Mark S. Humayun, personally known to me (or proved to me on the basis of
2007, Defere inc, and the large increased was a second to the begin 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.
WITNESS.my.band.and.official.sest
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[SPAL] SPALI STATE STATES STAT
Village by Carry Congress (2000)
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IN TESTIMONY WHEREOF, I become set my hand and seal this 19 day of
IN TESTIMONY WHEREOF, I bereinto set my band and seal this 19 day of OCTODER, 2007.
<u>Detables</u> , 2007.
IN TESTIMONY WHEREOF, I bereunto set my hand and seal this 19 day of OCTODOR, 2007. Rajat Agrawat
<u>Detables</u> , 2007.
Privile 1 2007. Rajat Agrawat STATE OF Collefornia 3 30.
DENOISE, 2007. Rajat Agriwat STATE OF Collefornia SO, COUNTY OF Los Arracles
DENOISE, 2007. Rajat Agriwat STATE OF Collefornia SO, COUNTY OF Los Arracles
COUNTY OF Los Angeles On OCT 19 2007, before me, Angeles Jones Terring, notary mublic.
Rajat Agrawat STATE OF Collegation COUNTY OF Los Ariacles On OCT 19 267, 2007, before me, Arraya Jones I array public, personally appeared Rajat Agrawat, personally known to me (or 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
Rajat Agrawat STATE OF Colefornita COUNTY OF Los Argades On Off 19 2007, before me, Arrange Touring, notary public, personally appeared Rajat Agrawat, personally known to me (or 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
Rajat Agrawat STATE OF Collegation COUNTY OF Los Ariacles On OCT 19 267, 2007, before me, Arraya Jones I array public, personally appeared Rajat Agrawat, personally known to me (or 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
Rajat Agrawat STATE OF Colefornita COUNTY OF Los Anacles On COLID 1887 2007, before me, Anacles 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. WITNESS in Apartment and acknowledged to me that the instrument of the person, or the entity upon behalf of which the person acted, executed the instrument.
Rajat Agrawat STATE OF Colefornia COUNTY OF Los Aracles OnCCI 19 767 2007, before me, Arracles notary public, personally appeared Rajat Agrawat, personally known to me (or 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 WITHER TO A STATE TO A S
Enjat Agrawat STATE OF Collegation COUNTY OF Los Argades On UCT 19 Met 2007, before me, Argades Agrawat, personally known to me (or 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 setsed, executed the instrument WITHES his signature described to the within instrument. WITHES his signature of the instrument of the person setsed, executed the instrument. WITHES his signature of the instrument. Notice Signature Notice Signature Notice Signature
Rajat Agrawat STATE OF Collegantia COUNTY OF Los Ariacles On CCI 19 Wes 2007, before me, Arrives Constitutes, notary public, personally appeared Rajat Agrawat, personally known to me (or 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 seted, executed the instrument. WITNESS in Francisco Casteries [SEAL] [SEAL]

Client Code: USC020,001A

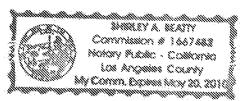
Filing Date: March 14, 2007 Page 4 WHEREOF, I hereunto get my hand and seal this 14 day of Ronalce Lo STATE OF Colifornia COUNTY OF LOS Angeles ____, 2007, before me, <u>Arychie</u> personally appeared Ronalee Lo, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that she executed the same in her authorized capacity, and that by her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument. [SEAL] Papas California B Los Angeles Coully Secon Busines (ex. 27, 200) Notary Signature IN TESTIMONY WHEREOF, I hereunto set my hand and seal this Jason Shib STATE OF 33. COUNTY OF personally appeared Jason Shih, personally known to me (or 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. WITNESS my hand and official scal. [SEAL] Notary Signature

Application No.: 11/686,310

PATENT REEL: 032513 FRAME: 0161

Application No.: 11/686,310 Client Code: USC020.001A Filing Date: March 14, 2007 Page 4

IN TESTIMO		unto set my hand and seal this day of
		Ronalee Lo
STATE OF	88,	
COUNTY OF		
evidence) to be the per that she executed the s	son whose name is subscrib same in her authorized capa	notary public, on to me (or proved to me on the basis of satisfactory ped to the within instrument, and acknowledged to me acity, and that by her signature on the instrument the on acted, executed the instrument.
WITNESS my	hand and official scal.	
[SEAL]		Notary Signature
STATE OF COLLECTION COUNTY OF LOSA On LOSA personally appeared Jac exidence) to be the personal that he executed the se	ss. 2007, before me son Shih, personally known is subscribune in his authorized capac	e, Stilley A. Deathy, notary public, to me (or proved to me on the habis of satisfactory ped to the within instrument, and acknowledged to me city, and that by his signature on the instrument the on acted, executed the instrument.
WITNESS my l [SEAL]	hand and official seal.	Shirlagh Scall Notary Signature
*******	******	******************



Application No.: 11/686,310	Client Code: TJSC020.001/
Filing Date: March 14, 2007	Page

IN TESTIMONY WHEREOF, I bereunto (X\frac{1}{1}\) 2007.	cet my hand and ceal this 10 day of Kenrick Kuwahara
STATE OF California COUNTY OF LOS Argoles	
	ne is subscribed to the within instrument, and uthorized capacity, and that by his signature on the
WITNESS my hand and official small AMERICA (OSES TURNER) CONNOCIONALE COMPANIES Extra America County Los America County Dr Comm Factor De 27, 2000	Son Signature
IN TESTIMONY WHEREOF, I hereunto	set my hand and seal this 19 day of
atate of Colifornia - 1	- -
country on Los Angeles) 38.	
	o the within bastrument, and acknowledged to me, and that by his signature on the instrument the
WITNESS to band and afficial spal. ANNOREA JONES TURNER COMM. #1838501 COMM. #1838501 Los Angeles County	Notaly Signatury

Application No.: 11/686,310 Client Code: USC020,001A Filing Date: March 14, 2007 Page 6 TESTIMONY WHEREOF, I bereunto set my hand and seal this Damien Rodger STATE OF California _ 2007, before me, <u>}417170117</u> personally appeared Damien Rodger, personally known to me (or 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 oupscity, and that by his signature on the instrument the person, or the entity upon behalf of which the person octed, executed the instrument WITNESS my hand and official scal.

ANNUAL JAMES TURNER COMM #1539191 (SEAL) CONTRACTOR STATES OF THE CONTRACTOR STATES OF THE CONTRACTOR STATES OF THE CONTRACTOR OF THE CONTRACTO Los Angeles Caumby IN TESTIMONY WHEREOF, I hereupto set my hand and scal this _____ day of , 2007. Po-Jui Chen STATE OF \$8. COUNTY OF , 2007, before me, _____, notary public, personally appeared Po-Jui Chen, personally known to me (or 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.

Notacy Signature

WITNESS my hand and official scal.

4173240 082307

[SEAL]

PATENT

Application No.: 11/686,310 Client Code: USC020.001A Filing Date: March 14, 2007

Page 6

IN TESTIMONY WHEREOF, I hereunto , 2007.	set my hand and seal this day of
	Damien Rodger
STATE OF }	
COUNTY OF	
On 2007, before me, personally appeared Damien Rodger, personally kn satisfactory evidence) to be the person whose nan acknowledged to me that he executed the same in his at instrument the person, or the entity upon behalf of which	ne is subscribed to the within instrument, and athorized capacity, and that by his signature on the
WITNESS my hand and official seal.	
[SEAL]	Notary Signature

October, 2007.	set my hand and scal this /7th day of
STATE OF California	La Jui Chen
On Cot. 17, 2007, before me, personally appeared Fo Jui Chen, personally known to evidence) to be the person whose name is subscribed to that he executed the same in his authorized capacity, person, or the entity upon behalf of which the person ac	me for proved to me on the basis of satisfactory the within instrument, and acknowledged to me and that by his signature on the instrument the
WITNESS my hand and official seal. [SEAL]	Shirley A Beath Notary Signature
4173240 082307	SHRLEY A. SEATTY SHRLEY A. SEATTY Commission # 1667482 Notory Public - Coshomic § Los Angeles County # Ny Comm. Equipment (1997)

PATENT REEL: 032513 FRAME: 0165

RECORDED: 03/24/2014