# 503228079 03/20/2015

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3274697

SUBMISSION TYPE:			NEW ASSIGNMENT			
NATURE OF CONVEYANCE:			ASSIGNMENT			
CONVEYING PARTY	DATA					
		1	Name		Execution Date	
MEDUSA SCIENTIFIC, LLC					06/04/2013	
RECEIVING PARTY	<b>ΔΤΑ</b>					
Name:	TM IP I	TM IP HOLDINGS, LLC				
Street Address:	6969 E	6969 E. SUNRISE DRIVE, SUITE 100				
City:	TUCSC	TUCSON				
State/Country:	ARIZO	ARIZONA				
Postal Code:	85750	85750				
PROPERTY NUMBER	RS Total: 1					
Property Type			Number			
Application Number: 1		13841889				
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CORRESPONDENCE	DATA					
•		(520)8	)882-7643			
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using a fax number,	if provided	<b>d; if th</b> a 520-88	at is unsuccessful, it will be s			
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<i>using a fax number,</i> Phone: Email: Correspondent Name	<i>if provided</i> e:	<b>d; if th</b> 520-88 cgee@ NORM 4640 I	<b>at is unsuccessful, it will be s</b> 82-7623 ⊉hayes-soloway.com /IAN P. SOLOWAY			
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#### ASSIGNMENT

WHEREAS, Medusa Scientific LLC, a limited liability company organized and existing under the laws of the State of Arizona and having an office and place of business at 6969 E. Sunrise Drive, Suite 100, Tucson, Arizona 85750, ("ASSIGNOR") is the owner and original filer of the inventions and patents listed in Schedule A (the "APPLICATIONS") annexed hereto and made a part hereof; and

WHEREAS, TM IP Holdings, LLC, a limited liability company organized and existing under the laws of the State of Arizona and having an office and a place of business at 6969 E. Sunrise Drive, Suite 100, Tucson, Arizona 85750 ("ASSIGNEE") is desirous of acquiring the entire right, title and interest in and to the APPLICATIONS, in the United State of America, and in its territories and dependencies and in all countries

NOW, THEREFORE, TO WHOM IT MAY CONCERN: be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, the ASSIGNOR has sold, assigned and transferred to the ASSIGNEE, its successors, assigns or other legal representatives, the full and exclusive right, title and interest in and to the APPLICATIONS in the United States of America, its territories and dependencies and in all countries foreign to the United States of America.

ASSIGNOR hereby authorizes the ASSIGNEE, its successors, assigns or other legal representatives, to apply for a patent or similar protection directly in its own name based on the APPLICATIONS, including, but not limited to any divisional applications, continuation applications, continuation-in-part applications and foreign applications.

### PATENT REEL: 035215 FRAME: 0060

ASSIGNOR represents to the ASSIGNEE that it has not and shall not execute any writing or do any act whatsoever that conflicts with this Assignment. ASSIGNOR further agrees to execute all additional instruments and to do all things necessary for carrying out the purpose of this instrument and for maintaining, obtaining and enforcing the APPLICATIONS, all patents issuing from the APPLICATIONS, and all rights based on the APPLICATIONS, without additional consideration, but at the expense of the ASSIGNEE, and its successors.

Signed this 4th day of June, 2013 by

Daniel L. Hodges, CEO Assignor, Medusa Scientific LLC

State of Arizona ) ) ss. County of Pima )

The foregoing instrument was acknowledged before me this 4th day of June, 2013, by Daniel L. Hodges, represented to be authorized signatory for Medusa Scientific, LLC, on behalf of Medusa Scientific LLC

amara Unlle Notary Public

My Commission Expires:



#### SCHEDULE A ASSIGNED PATENT APPLICATIONS

#### U.S. Patent Appln Serial No. 13/841,889 For: TRANSPOSITIONAL MODULATION SYSTEMS AND METHOD

PCT International Patent Appln Serial No. PCT/US13/32565 For: TRANSPOSITIONAL MODULATION SYSTEMS AND METHOD

U.S. Prov. Patent Appln. Serial No. 61/794,942 For: TRANSPOSITIONAL MODULATION FOR OPTICAL COMMUNICATION

U.S. Prov.Patent Appln. Serial No. 61/794,786 For: TIME-SHIFT-LOCKED-LOOP

U.S. Prov. Patent Appln. Serial No. 61/798,120 For: QUADRATURE TRANSPOSITIONAL MODULATION

U.S. Prov. Patent Appln. Serial No. 61/794,642 For: TRANSPOSITIONAL MODULATION FOR ULTRASOUND

U.S. Prov. Patent Appln. Serial No. 61/798,437 For: THE CONVEYANCE OF INFORMATION AS A TIME OR PHASE ANGLE DIFFERENCE

> PATENT REEL: 035215 FRAME: 0062

**RECORDED: 03/20/2015**