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To the Director of the U.S. Patent and the U.S. Patent Anddinals and the U.S. Patent Anddress:    Daying Wang: 5. Sudhir Agrawal   Change of Name   City Cambridge   City Cambr	Form <b>PTO-1595</b> (Rev. 08/08) DMB No: 0651-0027 (exp. 9/30/2008)	09-29-2		U.S. DEPARTMENT OF COM United States Patent and Trader	
To the Director of the U.S. Patent and				Γ	
Name of conveying party(les)		103527	7220		
Name:	To the Director of the U.S. Patent and	ucindik Office: Please i	record the attached o		
Reambar Kandimalia: 2 Lashmi Bhagat; 3. Mallikarijuna Putta; 4. Daqing Wang; 5. Sudhir Agrawal   Internal Address:   Interna	1. Name of conveying party(ies)	2	2. Name and add	lress of receiving party(ies)	•
Additional name(s) of conveying party(ies) attached?	and the second of the second o		Name: Idera Pharm	aceuticals, Inc.	
Street Address: 167 Sidney Street   Street Address: 167 Sidney Street	i. Ekambar Kandimalia; 2. Lakshmi Bhagat; 3. Maliika Daqing Wang; 5. Sudhir Agrawal	arjuna Putta; 4.	Internal Address:		
Street Address: 167 Sidney Street	Additional name(s) of conveying party(ies) attach	ned? Yes X No			
Assignment			Street Address: _	167 Sidney Street	
Security Agreement	Execution Date(s) <u>1-2, 5. 9/18/08; 3. 9/17/08; 4</u>	4. 9/11/08			
State: MA   Country: US   Zip: 02139	X Assignment Me	-			
Government Interest Assignment Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? Yes X No Application or patent number(s): A. Patent Application No.(s)  12/192,432  Additional numbers attached? Yes X No B. Patent No.(s)  Additional number of applications and patents involved: Internal Address: Suite 1200  Street Address: Suite 1200  Street Address: Soo West Cummings Park  City: Woburn  State: MA Zip: 01801  Phone Number: 781-938-1805 Fax Number: 781-938-4777  Email Address: jzucchero@keownaw.com Signature  Signature  Country: us Zip: 02139  Additional name(s) & address(es) attached? Yes X No B. Patent No.(s)  6. Total number of applications and patents involved: 1  7. Total fee (37 CFR 1.21(h) & 3.41) \$40  Street Address: 500 West Cummings Park  Street Address: 500 West Cummings Park  Bencilosed None required (government interest not affecting title Bencilosed None required (government interest not affecting title Bencilosed None required (government interest not affecting title Bencilosed Authorized User Name Keown & Zucchero, LLP  Bencilosed Street Address: jzucchero@keownaw.com  Signature  Popolar Account Number 502285 Authorized User Name Keown & Zucchero, LLP  Bencilosed Signature	Security Agreement Ch	ange of Name	City: Cambridge		
Executive Order 9424, Confirmatory License  Other  Additional name(s) & address(es) attached?	Joint Research Agreement		State: MA		
Additional name(s) & address(es) attached?   Yes   No	Government Interest Assignment	]	Caustania	7	
A. Application or patent number(s):  A. Patent Application No.(s)  B. Patent No.(s)  12/192,432  Additional numbers attached? Yes No  5. Name and address to whom correspondence concerning document should be mailed:  Name: Keown & Zucchero, LLP  Internal Address: Suite 1200  Street Address: Souwest Cummings Park  City: Woburn  State: MA  Zip:01801  Phone Number: 781-938-1805  Fax Number: 781-938-1777  Email Address: jzucchero@keownaw.com  9. Signature:  Signature  This document is being filed together with a new application on B. Patent No.(s)  B. Patent No.(s)  6. Total number of applications and patents involved: 1  7. Total fee (37 CFR 1.21(h) & 3.41) \$40  Xauthorized to be charged to deposit account Enclosed  None required (government interest not affecting title 8. Payment Information  Deposit Account Number 502285  Authorized User Name Keown & Zucchero, LLP  Signature  1 23 - 228  Signature 89/26/2988 BYRRE 8989835 582285 12:  Total number of cares including and patents involved: 1  Additional numbers attached? Yes No.(s)	Executive Order 9424, Confirmator	y License	Country: US	Z IP: <u>02139</u>	
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State: MA Zip: 01801  Phone Number: 781-938-1805  Fax Number: 781-938-4777  Email Address: jzucchero@keownaw.com  9. Signature: 9-23-208  Signature 99/26/2008 DRYRNE 0000035 502285 121	Citv: Woburn	<u> </u>			
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Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Name of Person Signing

## **ASSIGNMENT**

WHEREAS we, Ekambar Kandimalla, being a citizen of the United States of America and residing at 6 Candlewood Lane, Southboro, Massachusetts USA 01772; Lakshmi Bhagat, being a citizen of India and residing at 1550 Worcester Street, Unit 605, Framingham, Massachusetts USA 01702; Mallikarjuna Putta, being a citizen of India and residing at 824 Arboretum Way, Burlington, Massachusetts USA 01803; Daqing Wang, being a citizen of China and residing at 7 Selfridge Road, Bedford, Massachusetts USA 01730; and Sudhir Agrawal, being a citizen of the United States of America and residing at 61 Lamplighter Drive, Shrewsbury, Massachusetts USA 01545, are inventors of certain new and useful inventions and discoveries, for which we have made an application for Letters Patent entitled TOLL LIKE RECEPTOR MODULATORS, which application was filed in the United States Patent and Trademark Office on August 15, 2008, and assigned Serial No. 12/192,432; and

WHEREAS Idera Pharmaceuticals, Inc., a corporation existing under the laws of Massachusetts, whose address is 167 Sidney Street, Cambridge, MA 02139, which together with its successors and assigns is hereinafter called "ASSIGNEE," is desirous of acquiring all right, title, interest, benefits, and privileges to and under said inventions and discoveries as hereinafter recited;

**NOW THEREFORE**, for and in consideration of good and valuable consideration furnished by ASSIGNEE to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservations:

1. Assign, transfer and convey to ASSIGNEE the entire right, title and interest in and to said inventions and discoveries, said application for Letters Patent, any and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation, continuation-in-part, and convention applications based in whole or in part upon said inventions or discoveries, or upon said applications, and any and all Letters Patent, reissues and extensions of Letters Patent granted for said inventions and

DOCKET NO. IDR-045US

PATENT REEL: 021604 FRAME: 0696 discoveries or upon said applications, and every priority right that is or may be predicated upon, or arise from, said inventions, said discoveries, said applications and said Letters Patent;

- Authorize ASSIGNEE to file patent applications in any or all countries on any or all of said inventions and discoveries in my name or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable, under International Conventions or otherwise;
- 3. Authorize and request the Commissioner of Patents and Trademarks of the United States of America and the empowered official of any other governments throughout the world to issue or transfer all said Letters Patent to ASSIGNEE as ASSIGNEE of the entire right, title and interest therein or otherwise as ASSIGNEE may direct;
- 4. Warrant that we have the full right to convey the entire right, title and interest herein assigned without encumbrance and have not knowingly conveyed to others any right, title or interest in said inventions, discoveries, applications or patents or any license to use the same, or to make, use, sell or import anything embodying or utilizing any of said inventions or discoveries;
- 5. Bind my heirs, legal representatives and assigns, as well as myself, to do, upon ASSIGNEE's request and at ASSIGNEE's expense, but without additional consideration to us or them, all acts reasonably serving to assure that said inventions and discoveries, said patent applications, and said Letters Patents shall be held and enjoyed by ASSIGNEE as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives and assigns as if this Assignment had not been made; and particularly to execute and deliver to ASSIGNEE all lawful application documents including petitions, specifications and oaths, and all assignments, disclaimers and lawful affidavits in form and substance as may be requested by ASSIGNEE; and to communicate to ASSIGNEE all facts known to me relating to said inventions and discoveries or the history thereof, and to testify as to the same in any court or proceeding; and to

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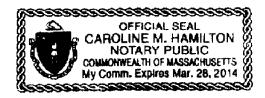
PATENT REEL: 021604 FRAME: 0697 furnish ASSIGNEE any and all documents, photographs, models, samples and other physical exhibits in my control or in the control of my heirs, legal representatives or assigns which may be useful for establishing the facts of my conceptions, disclosures, and reduction to practice of said invention and discoveries.

IN TESTIMONY WHEREOF, we have hereunto set our hands and seals.

Date:	September	ĺ	B	2008
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Ekambar Kandimalla

Then personally appeared before me this 18th day of September, 2008, the above named Exambar Vandinallumho acknowledged the execution of the foregoing instrument to be his free act and deed.



Osrolius M. Haintan Notary Public

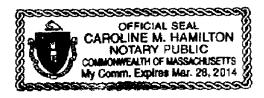
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Date: 09-18-08

dasshmi Bhasin

Lakshmi Bhagat

Then personally appeared before me this 18th day of September, 2008, the above named Loxshwi Bhagas who acknowledged the execution of the foregoing instrument to be his free act and deed.



Carolius M. Hauttar Notary Public

DOCKET NO. IDR-045US

PATENT REEL: 021604 FRAME: 0698

Date: 9/17/08	Rysey
	Mallikarjuna Putta
Then personally appeared before me this	1th day of September, 2008,
the above named Mallikarjuna Putta who acknow	owledged the execution of the
foregoing instrument to be his free act and deed.	
OFFICIAL SEAL CAROLINE M. HAMILTON NOTARY PUBLIC COMMONNEALTH OF MASSACHUSETTS My Comm. Expires Mer. 28, 2014	Carolitas M. Haintens Notary Public
Date: 9/11 /0 8	Daging Wang
Then personally appeared before me this the above named \_aq\aq\wave_q \wave_q \_who acknowledged	••••
foregoing instrument to be his free act and deed.  OFFICIAL SEAL  CAROLINE M. HAMILTON  NOTARY PUBLIC  COLMONWEALTH OF MASSACHUSETTS  My Comm. Expires Mar. 28, 2014	Caroleiro M. Harillar Notary Public
Date: 9-18-08	Sudhir Agrawal
Then personally appeared before me this _	

foregoing instrument to be his free act and deed.



**RECORDED: 09/26/2008** 

Carolino W. Handen Notary Public

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