PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Angelika Fretzen	10/20/2010
Steven Witowski	10/19/2010
Alfredo Grossi	10/07/2010
Hong Zhou	10/08/2010

RECEIVING PARTY DATA

Name:	Ironwood Pharmaceuticals, Inc.
Street Address:	301 Binney Steet
City:	Cambridge
State/Country:	MASSACHUSETTS
Postal Code:	02142

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12851330

CORRESPONDENCE DATA

Fax Number: (269)337-7823

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 2693377700

Email: amckenna@honigman.com

Correspondent Name: Kelly T. Murphy

Address Line 1: 350 East Michigan Ave., Suite 300 Address Line 4: Kalamazoo, MICHIGAN 49007

ATTORNEY DOCKET NUMBER:	223355/080US1/301886
NAME OF SUBMITTER:	Kelly T. Murphy

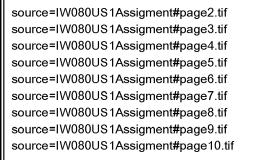
Total Attachments: 10

501330699

source=IW080US1Assigment#page1.tif

PATENT REEL: 025194 FRAME: 0386 0 1285133(

CH \$40,00 1



ASSIGNMENT

I/We,

- 1. Angelika Fretzen (DE Citizen); 7 Avon Street, Somerville, MA 02143,US;
- 2. Steven Witowski (US Citizen); 171 Laurel Street, Melrose, MA 02176, US;
- 3. Alfredo Grossi, (US Citizen); 102 Ten Hills Road, Somerville, MA 02145, US; and
- 4. Hong Zhao (China Citizen); 74 Craigie Street, Apt. 31, Somerville, MA 02143 US; for good and valuable consideration, receipt of which is hereby acknowledged, have assigned, sold and transferred to, and do hereby assign, sell and transfer to, Ironwood Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware and having an office and a place of business at 301 Binney Street Cambridge, Massachusetts 02142, USA, its successors and assigns, all hereinafter referred to as the ASSIGNEE:
- (1) the entire right, title and interest in the United States and in all countries throughout the world in and to any and all of my/our inventions and discoveries disclosed in the United States Application for Patent entitled: Formulations Comprising Linaclotide, filed in the United States Patent and Trademark Office on August 5, 2010, under Application Number 12/851,330 including any renewals, revivals, reissues, reexaminations, extensions, continuations, and divisions thereof, and any substitute applications therefor;
- (2) the full and complete right to file patent applications in the name of the ASSIGNEE, its designee, or in my/our names at the election of the ASSIGNEE or its designee, on the aforesaid inventions, discoveries and applications in the United States and in any other country of the world and in and to any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof; and
- (3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any other country of the world, and in and to any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof; and
- (4) the entire right, title and interest in and to all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the above inventions, discoveries and applications including, but not limited to, the following priority application(s):

61/231,725	United States	August 6, 2009
Application No.	Country	Filing Date

and all rights of priority in any country of the world deriving from the above-identified International Patent Application.

I/We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made.

I/We agree, at any time, upon the request of the ASSIGNEE to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries or applications, and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

I/We further agree at any time to execute and to deliver upon request of the ASSIGNEE such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect the rights of the ASSIGNEE under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

SIGNATURES ON THE FOLLOWING PAGES

	ANGELIKA FRETZEN
	Date: 20 October 2010
State of MASSACHUSETTS County of Middlesex	
which were <u>ressource Knowledge</u> , to be t	e, the undersigned notary public, personally me through satisfactory evidence of identification he person whose name is signed on this document of the document are truthful and accurate to the
Notary Public My Commission Expires: 13, 2004.	TO THE WAS THE TO THE TOTAL PROPERTY OF MANY O
	STEVEN WITOWSKI
	Date:
State ofCounty of	
On thisday of, 20, before me appeared STEVEN WITOWSKI, proved to me which were, to be the and who swore or affirmed to me the contents of best of his/her knowledge and belief.	the undersigned notary public, personally through satisfactory evidence of identification are person whose name is signed on this document of the document are truthful and accurate to the
Notary Public My Commission Expires:	

3

ALFREDO GROSSI

Date: 7-0crosee-2010 State of MASSACHUSETTS
County of MIDDLESER On this 1 day of become, 2010, before me, the undersigned notary public, personally appeared ALFREDO GROSSI, proved to me through satisfactory evidence of identification which were PERSONAL KNOWLEDGE, to be the person whose name is signed on this document and who swore or affirmed to me the contents of the document are truthful and accurate to the best of his/her knowledge and belief. Notary Public
My Commission Expires: 1/3/17/14. HONG ZHAO Date: 6/08/20/0 State of Massachusetts
County of Mipplesex On this \(\frac{\gamma}{\lorentheta} \) day of \(\frac{\gamma \corr \gamma \corr \gamma}{\lorentheta} \), 20 \(\frac{10}{\lorentheta} \), before me, the undersigned notary public, personally appeared HONG ZHAO, proved to me through satisfactory evidence of identification which were PERSONAL KNOWLEDGE, to be the person whose name is signed on this document and who swore or affirmed to me the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

Notary Public
My Commission Expires: 13/2014.

4

By: Halley E. Gilbert, Esq.

Title: Halley E. Gilbert, Esq.

Vice President & General Counsel

Date: 10 (20/10)

Commonwealth of Massachusetts

County of Middle SEX

On this \bigcirc day of \bigcirc day of \bigcirc before me, the undersigned notary public, personally appeared \bigcirc day of \bigcirc (name of document signer), proved to me through satisfactory evidence of identification which were \bigcirc (name of document signer), to be the person whose name is signed on this document and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

Notary Public

My Commission Expires: 1/31/2614.

ACKNOWLEDGMENT OF ASSIGNEE

ACTIVE.8257302.1



ASSIGNMENT

I/We,

- 1. Angelika Fretzen (DE Citizen); 7 Avon Street, Somerville, MA 02143,US;
- 2. Steven Witowski (US Citizen); 171 Laurel Street, Melrose, MA 02176, US;
- 3. Alfredo Grossi, (US Citizen); 102 Ten Hills Road, Somerville, MA 02145, US; and
- 4. Hong Zhao (China Citizen); 74 Craigie Street, Apt. 31, Somerville, MA 02143 US; for good and valuable consideration, receipt of which is hereby acknowledged, have assigned, sold and transferred to, and do hereby assign, sell and transfer to, Ironwood Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware and having an office and a place of business at 301 Binney Street Cambridge, Massachusetts 02142, USA, its successors and assigns, all hereinafter referred to as the ASSIGNEE:
- (1) the entire right, title and interest in the United States and in all countries throughout the world in and to any and all of my/our inventions and discoveries disclosed in the United States Application for Patent entitled: Formulations Comprising Linaclotide, filed in the United States Patent and Trademark Office on August 5, 2010, under Application Number 12/851,330 including any renewals, revivals, reissues, reexaminations, extensions, continuations, and divisions thereof, and any substitute applications therefor;
- (2) the full and complete right to file patent applications in the name of the ASSIGNEE, its designee, or in my/our names at the election of the ASSIGNEE or its designee, on the aforesaid inventions, discoveries and applications in the United States and in any other country of the world and in and to any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof; and
- (3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any other country of the world, and in and to any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof; and
- (4) the entire right, title and interest in and to all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the above inventions, discoveries and applications including, but not limited to, the following priority application(s):

61/231,725	United States	August 6, 2009
Application No.	Country	Filing Date

and all rights of priority in any country of the world deriving from the above-identified International Patent Application.

I/We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made.

I/We agree, at any time, upon the request of the ASSIGNEE to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries or applications, and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

I/We further agree at any time to execute and to deliver upon request of the ASSIGNEE such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect the rights of the ASSIGNEE under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

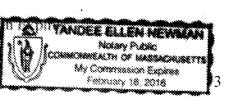
SIGNATURES ON THE FOLLOWING PAGES

	ANGELIKA FRETZEN
	Date:
State of County of	
On this day of 0(1000, 2010, before me, appeared ANGELIKA FRETZEN, proved to me which were, to be the and who swore or affirmed to me the contents of best of his/her knowledge and belief.	the undersigned notary public, personally e through satisfactory evidence of identification e person whose name is signed on this document of the document are truthful and accurate to the
Notary Public My Commission Expires:	
	STEVEN WITOWSKI
	Date: 19-0ct 2010
State of MIGHUMULHS County of MADUSK	

On this day of Other, 2010, before me, the undersigned notary public, personally appeared STEVEN WITOWSKI, proved to me through satisfactory evidence of identification which were a firmed to me the contents of the document are truthful and accurate to the best of his/her knowledge and belief.

Notary Public

My Commissi



	ALFREDO GROSSI
	Date:
State ofCounty of	
On thisday of, 20, before me, the appeared ALFREDO GROSSI, proved to me throu which were, to be the pe and who swore or affirmed to me the contents of the best of his/her knowledge and belief.	gh satisfactory evidence of identification
Notary Public My Commission Expires:	
	HONG ZHAO
	Date:
State ofCounty of	
On this day of, 20, before me, the appeared HONG ZHAO, proved to me through sati were, to be the person who swore or affirmed to me the contents of the dochis/her knowledge and belief.	sfactory evidence of identification which hose name is signed on this document and
Notary Public My Commission Expires:	

ACTIVE.8257302.1

RECORDED: 10/26/2010

5