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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Lawrence C. Brody	05/13/2008
James Mills	05/14/2008
Faith Pangilinan	05/13/2008
Anne Parle-McDermott	04/17/2008
John Scott	04/17/2008
Anne Molloy	04/16/2008
Peadar Kirke	04/23/2008

RECEIVING PARTY DATA

IIName:	Government of the United States of America, represented by the Secretary, Department of Health and Human Services	
Street Address:	6011 Executive Boulevard, Suite 325	
Internal Address:	Office of Technology Transfer	
City:	Rockville	
State/Country:	MARYLAND	
Postal Code:	20852	

Name: The Provost Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth near Dublin	
Street Address:	College Green Dublin
City:	2 Dublin
State/Country:	IRELAND

Name:	The Health Research Board	
Street Address:	73 Lower Baggot Street	
City:	2 Dublin	
State/Country:	IRELAND	

PROPERTY NUMBERS Total: 1

PATENT

REEL: 021055 FRAME: 0289

500559374

Property Type
Application Number:

CORRESPONDENCE DATA

Fax Number: (312)616-5700

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

Email: email@leydig.com

Correspondent Name: John Kilyk, Jr.

Address Line 1: 180 N. Stetson Avenue

Address Line 2: Two Prudential Plaza, Suite 4900

Address Line 4: Chicago, ILLINOIS 60601

ATTORNEY DOCKET NUMBER: 701903

NAME OF SUBMITTER: John Kilyk, Jr.

Total Attachments: 9

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> PATENT REEL: 021055 FRAME: 0290

PATENT
Attorney Docket No. 701903
DHHS Ref. No. E-149-2005/0-US-02

Leydig, Voit & Mayer, Ltd. Two Prudential Plaza, Suite 4900 180 N. Stetson Avenue Chicago, Illinois 60601-6780

ASSIGNMENT

WHEREAS, WE, Lawrence C. Brody, James Mills, and Faith Pangilinan, employees of the Department of Health and Human Services, have co-invented a certain invention entitled:

METHODS AND MATERIALS FOR IDENTIFYING POLYMORPHIC VARIANTS, DIAGNOSING SUSCEPTIBILITIES, AND TREATING DISEASE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on December 17, 2007, under U.S. Application No. 11/958,126, and

WHEREAS, we are some of the applicants named in the above-identified application for a U.S. patent; and

WHEREAS, the conditions under which said invention was made are such as to entitle the Government under Paragraph 1(a) of Executive Order 10096 to the entire right, title, and interest herein, both domestic and foreign; and

WHEREAS, the Government of the United States of America (hereinafter referred to as Assignee), is desirous of acquiring our entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

Now, Therefore, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignee, represented by the Secretary, Department of Health and Human Services, our full and exclusive rights in and to the invention in the U.S. and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignee to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

UPON SAID CONSIDERATION, we convey to the Assignee the right to make application in its own behalf for protection of the invention in the U.S. and countries foreign to the U.S. and to claim under the Patent Cooperation Treaty, the International Convention Page 1 of 4

PATENT REEL: 021055 FRAME: 0291 and/or other international arrangement for any such application the date of the U.S. application (or any other application on the invention) to gain priority with respect to other applications.

WE DO HEREBY COVENANT and agree with the Assignee that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignee, execute and deliver such additional assignments and other writings and do such additional acts as the Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

Page 2 of 4

In re Appln. of Brody et al. Attorney Docket No. 701903

Date May 14, 2008	James Mills
STATE OF)	
COUNTY OF Montgomery	
to be the same person whose name is acknowledged that he/she signed and of for the uses and purposes therein set for	appeared James Mills, who is personally known to me subscribed to the foregoing assignment document, and delivered the document as his/her free and voluntary act orth.
{SEAL} SEAL SEAL	Mulisa (Market) Notary Public My Commission Expires: 9/1/2010

In re Appln. of Brody et al. Attorney Docket No. 701903

Date 05/13/2008	1 Pais U
	Faith Pangilinan
STATE OF MARYLAND)	
STATE OF MARYLAND) COUNTY OF MONTEOMERY)	
me to be the same person whose name is s	med Faith Pangilinan, who is personally known to subscribed to the foregoing assignment document, and delivered the document as his/her free and ein set forth.
{SEAL}	Notary Public My Commission Expires: 9-1-10
· .	My Commission Expires: 7 1 70 = 100 My Commission Expires: 7 1 7 1 7 0 = 100 My

PATENT Attorney Docket No. 701903 DHHS Reference No. E-149-2005/0-US-02

> Leydig, Voit & Mayer, Ltd. Two Prudential Plaza, Suite 4900 180 North Stetson Avenue Chicago, Illinois 60601-6731

ASSIGNMENT

WHEREAS, WE, Anne Parle-McDermott, John Scott, and Anne Molloy, employees of The Provost Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth Near Dublin and Peadar Kirke, an employee of The Health Research Board have co-invented a certain invention entitled:

METHODS AND MATERIALS FOR IDENTIFYING POLYMORPHIC VARIANTS, DIAGNOSING SUSCEPTIBILITIES, AND TREATING DISEASE

for which invention we have executed an application (provisional or non-provisional) for a U.S. patent, which was filed on December 17, 2007, under U.S. Application No. 11/958,126, and

WHEREAS, The Provost Fellows and Scholars of the College of the Holy and Undivided Trinity of Queen Elizabeth Near Dublin, College Green Dublin, 2 Dublin, Ireland and The Health Research Board, 73 Lower Baggot Street, 2 Dublin, Ireland, hereinafter referred to as Assignees, is desirous of acquiring my entire domestic and foreign right, title, and interest in and under the invention described in the patent application.

Now, Therefore, for good and valuable considerations, the receipt and sufficiency of which are hereby acknowledged, we assign and transfer to the Assignees and the Assignees' legal representatives, successors and assigns the full and exclusive rights in and to the invention in the U.S. and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisionals, reissues, reexaminations, National phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and we do hereby authorize and request the Commissioner of Patents to issue U.S. patents to the above-mentioned Assignee agreeably with the terms of this assignment document.

WE HEREBY AUTHORIZE the Assignees to insert in this assignment document the filing date and application number of the application if the date and number are unavailable at the time this document is executed.

UPON SAID CONSIDERATION, we convey to the Assignees the right to make application in its own behalf for protection of the invention in the U.S. and countries foreign to the U.S. and to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of the U.S. application (or any other application on the invention) to gain priority with respect to other applications.

Page 1 of 5

In re Appln, of Boyd et al. Attorney Docket No. 701903

WE DO HEREBY COVENANT and agree with the Assignees that we will not execute any writing or do any act whatsoever conflicting with the terms of this assignment document set forth herein, and that we will at any time upon request, without further or additional consideration, but at the expense of the Assignees, execute such additional assignments and other writings and do such additional acts as the Assignees may deem necessary or desirable to perfect the Assignees' enjoyment of this assignment, and render all necessary assistance in making application for and obtaining original, continuation, continuation-in-part, divisional, reissued, reexamined, and National phase patents of the U.S. or of any and all foreign countries on the invention, and in enforcing any rights or choses in action accruing as a result of such applications or patents, and by executing statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind, and inure to the benefit of, the assigns and legal representatives of all parties hereto.

IN WITNESS WHEREOF, we have hereunder set our hands on the dates shown below.

Date 12 April 2008

Date 17 April 2008

Date 17/ Aluit 2002

Anne Parle-McDermott

Witness

Williamo

Page 2 of 5

In re Appin. of Boyd et al. Attorney Docket No. 701903

Date	17/ APRIL /2=08	Ru Sodi
Date	17/408	Johnsoon Parllus
Date	17.4.08	Witness Michael Witness

REEL: 021055 FRAME: 0297

In re Appln. of Boyd et al. Attorney Docket No. 701903

Date	16 April 08	Ame Nolloy.
Date _	17/4/08	Anné Molfoy Par O Aul Cuo
Date	17-4-08	Witness Wing Wils

Witness

In re Appln. of Boyd et al. Attorney Docket No. 701903

Date april 23, 2008

Date <u>Gaeil 23 2008</u>

Date April 23 2008

Peadar Kirke

Witness

Marie

Witness

PATENT ge 5 of 5

REEL: 021055 FRAME: 0299

RECORDED: 06/05/2008