

08-07-1998



100786798

To The Honorable Commissioner of  
thereof.

rd the attached original documents or copy

MRD 8-498

1. Name of conveying parties:  
Jeremy Nathans, Amir Rattner, Philip M. Smallwood  
and Hui Sun

2. Name and address of receiving party  
Name: Johns Hopkins University

Internal Address:

Additional name(s) of conveying party(ies)  
attached? ( ) YES (X) NO

Street Address: Homewood-Charles & 34th Street

3. Nature of Conveyance:  
(X) Assignment ( ) Merger  
( ) Security Agreement  
( ) Change of Name  
( ) Other:

City: Baltimore

State Maryland ZIP 21218

Execution Date: 4/16/98

Additional name(s) & address attached? ( ) YES (X) NO

4. Application number(s) or patent number(s):  
If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.09/032,438 filed 2/27/98 | B. Patent No.(s)

Additional numbers attached? ( ) YES (X) NO

5. Name and address of party to whom correspondence  
concerning documents should be mailed:  
Name: Lori Y. Beardell  
Internal Address: WOODCOCK WASHBURN KURTZ  
MACKIEWICZ & NORRIS LLP  
One Liberty Place - 46th Floor  
Philadelphia, Pennsylvania 19103-7301

6. Total number of applications and patents involved:  
One

7. Total fee (37 CFR 3.41):.....\$40.00  
(X) Enclosed  
( ) Authorized to be charged to Deposit Account  
Number 23-3050

Street Address: WOODCOCK WASHBURN KURTZ  
MACKIEWICZ & NORRIS LLP  
One Liberty Place - 46th Floor  
1650 Market Street  
Philadelphia, Pennsylvania 19103-7301

8. Please charge any deficiency or credit any  
overpayment to Deposit Account Number 23-3050

DO NOT USE THIS SPACE

9. Statement and signature.  
*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true  
copy of the original document.*

Lori Y. Beardell/34,293  
Name of Person Signing/Reg. No.

*Lori Y. Beardell*  
Signature

July 30, 1998  
Date

Total number of pages including cover sheet, attachments, and document: 5

Mail documents to be recorded with required cover sheet information to:

08/06/1998 TTON11 00000235 09032438

01 FC:581

40.00 DP

Commissioner of Patents and Trademarks  
Box Assignments  
Washington, D.C. 20231

**PATENT  
Joint Inventors**

**DOCKET NO.: BYLR-0065**

**(Pending Application;  
Serial No. Known)**

**ASSIGNMENT**

WHEREAS, Rando Allikmets, Kent L. Anderson, Michael Dean, Mark Leppert, Richard A. Lewis, Yixin Li, James R. Lupski, Jeremy Nathans, Amir Rattner, Noah F. Shroyer, Nanda Singh, Philip Smallwood, and Hui Sun, residing respectively at 5564 Rivendale Place, Frederick, MD 21703, P.O. Box 540071 Houston, TX 77254, 1362 Hitchingpost Lane, Frederick, MD 21703, 1466 Westminster Ave. Salt Lake City, UT 84105, 11223 Hermosa Court, Houston, TX 77024, 4045 Linkwood Dr., Apt. 636, Houston, TX 77025, 11102 Ashcroft, Houston, TX 77096, 5510 S. Bend Rd. Baltimore, MD 21209, 6503 Copper Ridge Dr. Apt 202 Baltimore, MD 21209, 4516 ½ Mt. Vernon Street Houston, TX 77006, 1027 Riches Ave., Salt Lake City UT 84106, 5022 Woodbine Road Woodbine, MD 21797, 906A Hooper Avenue Baltimore, MD 21229, are the joint inventors of a patent application filed in the United States Patent and Trademark Office, identified as Serial No. **09/032,438**, filed **February 27, 1998**, entitled **Nucleic Acid and Amino Acid Sequences for ATP-Binding Cassette Transporter and Methods of Screening for Agents that Modify ATP-Binding Cassette Transporter** (herein called the "Invention"); and

WHEREAS, **Johns Hopkins University** hereinafter referred to as the assignee, of **Homewood-Charles & 34th. Street Baltimore, MD 21218**, is desirous of acquiring the entire right, title and interest of **Jeremy Nathans, Amir Rattner, Philip M. Smallwood, and Hui Sun**, hereinafter referred to as "assignors", in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

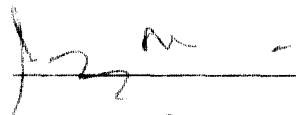
NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to each of us in hand paid by said assignee, and other good and valuable consideration, the receipt of which is hereby acknowledged, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, our entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said corresponding patent application(s), and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignee, to file in our names corresponding patent applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

**PATENT  
Joint Inventors**

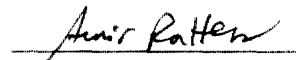
AND we hereby covenant that we have full right to convey our entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said patent application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks 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 any applications as aforesaid, to issue to said assignee, as assignee of our entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of any corresponding patent application(s) aforesaid, in accordance with the terms of this assignment.

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

 (L.S.)

 (L.S.)

 (L.S.)

 (L.S.)

**PATENT  
Joint Inventors**

**[WHERE ALL INVENTORS/CONTRIBUTORS SIGN BEFORE THE SAME NOTARY:]**

Maryland :

SS

COUNTY OF Baltimore :

On this 16<sup>th</sup> day of April, 1998, before me personally came the above named JEREMY NATHANS to me personally known and known to me to be the same individuals who executed the foregoing assignment, and who acknowledged to me that execution of the same was of each person's own free will for the use and purposes therein set forth.



\_\_\_\_\_  
Notary Public

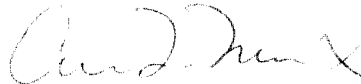
**[WHERE INVENTORS/CONTRIBUTORS SIGN BEFORE SEPARATE NOTARIES:]**

Maryland :

SS

COUNTY OF Baltimore :

On this 16<sup>th</sup> day of April, 1998, before me personally came the above named AMIR RAFTNER to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.



\_\_\_\_\_  
Notary Public

Maryland :

SS

COUNTY OF Baltimore :

**PATENT  
Joint Inventors**

On this 16<sup>th</sup> day of April, 1998 before me personally came the above named Philip A. Smallwood to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

*Carl J. Trux*

\_\_\_\_\_  
Notary Public

Maryland:

SS

COUNTY OF Baltimore:

On this 16<sup>th</sup> day of April, 1998 before me personally came the above named Hui Sun to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

*Carl J. Trux*

\_\_\_\_\_  
Notary Public

\_\_\_\_\_:

SS

COUNTY OF \_\_\_\_\_:

On this \_\_\_\_ day of \_\_\_\_\_, 19\_\_, before me personally came the above named ~~Hui Sun~~ to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.

\_\_\_\_\_  
Notary Public