PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Ratna Ray	09/03/2008
Ranjit Ray	09/03/2008
Arnab Basu	06/12/2008
Tatsuo Kanda	06/12/2008

RECEIVING PARTY DATA

Name:	Saint Louis University
Street Address:	221 North Grand Boulevard
City:	Saint Louis
State/Country:	MISSOURI
Postal Code:	63103

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11506161

CORRESPONDENCE DATA

Fax Number: (888)494-3114

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

Phone: 314 704 2060

Email: brettonr@charter.net

Correspondent Name: Randolph H Bretton

Address Line 1: 4579 Laclede Ave. #194

Address Line 4: Saint Louis, MISSOURI 63108

NAME OF SUBMITTER: Randolph H Bretton

Total Attachments: 5

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PATENT REEL: 021844 FRAME: 0451

UNITED STATES PATENT ASSIGNMENT

WHEREAS, Ratna Ray of St. Louis, Missouri, Ranjit Ray of St. Louis, Missouri; Arnab Basu of Natick, Massachusetts, and Tatsuo Kanda of Affton, Missouri; (hereinafter referred to as "ASSIGNOR"), for an invention (the "INVENTION") relating to an improvement in COMPOSITIONS AND METHODS FOR GENERATION OF INFECTIOUS HEPATITIS C VIRUS IN IMMORTALIZED HUMAN HEPATOCYTES and has executed an application for a United States patent based thereon (Serial Number 11/506,161, filed August 17, 2006 (118691 (SLU 06-023))) (the "APPLICATION"); AND, WHEREAS, Saint Louis University, a non-profit organization, having its principal place of business at 221 N. Grand Boulevard, St. Louis, Missouri 63103 (hereinafter referred to as "ASSIGNEE"), is desirous of acquiring certain rights thereunder;

NOW, THEREFORE, for one dollar and other good and valuable consideration, receipt of all of which is hereby acknowledged, ASSIGNOR has agreed to and does hereby sell, assign, and transfer unto said ASSIGNEE the entire right, title and interest in and throughout the United States of America (including its territories and dependencies) and all countries foreign thereto in and to said INVENTION, said APPLICATION, any other United States application (including divisional, continuing, or reissue applications) based in whole or in part on said APPLICATION or in whole or in part on said INVENTION, any foreign applications based in whole or in part on any of the aforesaid United States applications or in whole or in part on said INVENTION, and any and all patents (including extensions thereof) of any country which have been or may be granted on any of the aforesaid applications or on said INVENTION or any part thereof;

TO BE HELD AND ENJOYED by said ASSIGNEE, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by ASSIGNOR had no sale and assignment of said interest been made; AND ASSIGNOR hereby authorizes and requests the Commissioner of Patents of the United States of America to issue any and all United States patents which may be granted upon said United States applications or any of them, or upon said INVENTION or any part thereof, to said ASSIGNEE;

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AND ASSIGNOR, his successors and assigns, hereby agrees to execute without further consideration any further lawful documents and any further assurances, and any divisional, continuing, reissue, or other applications for patents of any country, that may be deemed necessary by said ASSIGNEE fully to secure to said ASSIGNEE its interest as aforesaid in and to said INVENTION or any part thereof, and in and to said several patents or any of them;

AND ASSIGNOR hereby covenants and agrees with said ASSIGNEE, its successors and assigns, that ASSIGNOR has granted no right or license to make, use, or sell said INVENTION, to anyone except said ASSIGNEE, that prior to the execution of this assignment, ASSIGNOR'S right, title and interest in said INVENTION has not been otherwise encumbered, and that ASSIGNOR has not executed and will not execute any instrument in conflict herewith.

Ratura for RATNA RAY

Date: 9/3/08

ACKNOWLEDGMENT

STATE OF (1) I STOULD CITY OF Shirt Die

On this On thi to me personally known to be the person described, and said RATNA RAY acknowledged said instrument to be his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official

seal the day and year first above written.

My Commission Expires:

SEAL St. Louis County. State of Massouri

My Commission Expires 11/14/2009 Commission Number 08798734

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ACKNOWLEDGMENT

STATE OF N .SS. (CITY OF St. 1

On this Oday of 2008, before me appeared RANJIT RAY to me personally known to be the person described, and said RANJIT RAY acknowledged said instrument to be his free act and deed.

In Testimony Whereof, I have hereunto set my hand and affixed my official

seal the day and year first above written.

My Commission Expires:

SEAbjuence D. Holmes, Notary Public Success County, State of Missouri My Commission Expired 11/14/2003

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ARNAB BASU		
ARNAB BASU		
Date: 6 / 12 / 08		
ACKNOWLEDGMENT		
STATE OF Massachusetts		
STATE OF Massachusetts CITY OF Woxester) SS.		
On this 12 day of, 2008, before me appeared ARNAB BASU to me personally known to be the person described, and said ARNAB BASU acknowledged said instrument to be his free act and deed.		
In Testimony Whereof, I have hereunto set my hand and affixed my official seal the day and year first above written.		
Kim R. Kapteyn Notary Public		
My Commission Expires:		
8/3/13 [SEAL]		

Jatsus Kanda
TATSUO KANDA
Date: 6/12 /2008
ACKNOWLEDGMENT
CITY OF <u>CHIBA</u>
COUNTRY JAPAN)
On this _/2 day of, 2008, before me appeared TATSUO KANDA to me personally known to be the person described, and said TATSUO KANDA acknowledged said instrument to be his free act and deed. In witness thereof, I have hereunto set my hand on the day and year first
bove written. Hyoko Handa
<u>KYOKO KANDA</u> PRINT NAME
CITY OF <u>CHIBA</u>
COUNTRY JAPAN)

RECORDED: 11/17/2008

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