

04-30-2003

Case No. IN01539K

Form PTO-1595
(Rev. 10/02)

OMB No. 0651-0027 (exp. 6/30/2005)

Tab settings ⇌ ⇌ ⇌ ▼ ▼ ▼ ▼ ▼ ▼ ▼

102435003

U.S. DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Ashok Arasappan

Frank Bennett

Stephane L. Bogen

Additional name(s) of conveying party(ies) attached? ☒ Yes ☐ No

2. Name and address of receiving party(ies)

Name: Schering Corporation

Internal Address: 2000 Galloping Hill Road

Kenilworth, New Jersey 07033

Street Address: Same as above.

City: _____ State: _____ Zip: _____

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:



Assignment



Merger



Security Agreement



Change of Name



Other _____

Execution Date: February 25, 2003 and February 27, 2003

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.(s)

10/348,094

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Palaiyur S. Kalyanaraman

Internal Address: Schering-Plough Corporation

Patent Dept. K-6-1, 1990

Street Address: 2000 Galloping Hill Road

City: Kenilworth State: NJ Zip: 07033-0530

6. Total number of applications and patents involved: ☐

7. Total fee (37 CFR 3.41).....\$ 40.00

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

19-0365

Schering-Plough Corporation

(Attach duplicate copy of this page if paying by deposit account)

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.

Palaiyur S. Kalyanaraman, Reg. No. 34,634

Name of Person Signing

Signature

April 21, 2003

Date

Total number of pages including cover sheet, attachments, and documents: ☐ 15

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

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

04/29/2003 TDAZI 00000092 190365 10348094

01 FC18021 40.00 CH

PATENT

REEL: 014016 FRAME: 0470

FORM PTO-1619C
Expires 06/30/99
OMB 0651-0027

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)



Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Kevin X. Chen

Execution Date
Month Day Year
02 25 03

Name (line 2)

Execution Date
Month Day Year
02 25 03

Name (line 1) Edwin Jao

Execution Date
Month Day Year
02 25 03

Name (line 2)

Execution Date
Month Day Year
02 25 03

Name (line 1) Yi-Tsung Liu

Execution Date
Month Day Year
02 25 03

Name (line 2)

Receiving Party(ies)



Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1) Schering Corporation



If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1) 2000 Galloping Hill Road

Address (line 2)

Address (line 3) Kenilworth

City

NJ/USA

State/Country

07033

Zip Code

Name (line 1)



If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

Application Number(s) or Patent Number(s)



Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

10/348,094

Patent Number(s)

FORM PTO-1619C
Expires 06/30/99
OMB 0651-0027

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)

☒ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Raymond G. Lovey

Execution Date
Month Day Year
02 25 03

Name (line 2)

Execution Date
Month Day Year
02 27 03

Name (line 1) Vincent S. Madison

Name (line 2)

Execution Date
Month Day Year
02 25 03

Name (line 1) Latha G. Nair

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1) Schering Corporation

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

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Address (line 1) 2000 Galloping Hill Road

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Name (line 2)

Address (line 1)

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City

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Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/348,094

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RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)



Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) F. George Njoroge

Execution Date
Month Day Year
02 25 03

Name (line 2)

Name (line 1) Anil K. Saksena

Execution Date
Month Day Year
02 21 03

Name (line 2)

Name (line 1) Mousumi Sannigrahi

Execution Date
Month Day Year
02 25 03

Name (line 2)

Receiving Party(ies)



Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1) Schering Corporation



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Name (line 2)

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Address (line 1)

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City

State/Country

Zip Code

Application Number(s) or Patent Number(s)



Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

10/348,094

PATENT

REEL: 014016 FRAME: 0473

FORM PTO-1619C
Expires 06/30/99
OMB 0651-0027

RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) Srikanth Venkatraman

Execution Date
Month Day Year
02 25 03

Name (line 2)

Execution Date
Month Day Year
02 27 03

Name (line 1) Viyyoor M. Girijavallabhan

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1) Schering Corporation

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

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Address (line 3)

City

State/Country

Zip Code

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

10/348,094

Patent Number(s)

ASSIGNMENT

For good and valuable consideration paid to us,

(1) <u>ASHOK ARASAPPAN</u>	(8) <u>VINCENT S. MADISON</u>
(2) <u>FRANK BENNETT</u>	(9) <u>LATHA G. NAIR</u>
(3) <u>STEPHANE L. BOGEN</u>	(10) <u>F. GEORGE NJOROG</u>
(4) <u>KEVIN X. CHEN</u>	(11) <u>ANIL K. SAKSENA</u>
(5) <u>EDWIN JAO</u>	(12) <u>MOUSUMI SANNIGRAHI</u>
(6) <u>YI-TSUNG LIU</u>	(13) <u>SRIKANTH VENKATRAMAN</u>
(7) <u>RAYMOND G. LOVEY</u>	(14) <u>VIYYOOR M. GIRIJAVALABHAN</u>

respectively residing at

(1) <u>Bridgewater, NJ</u>	(8) <u>Mountain Lakes, NJ</u>
(2) <u>Cranford, NJ</u>	(9) <u>Edison, NJ</u>
(3) <u>Somerset, NJ</u>	(10) <u>Warren, NJ</u>
(4) <u>Edison, NJ</u>	(11) <u>Upper Montclair, NJ</u>
(5) <u>Warren, NJ</u>	(12) <u>Summit, NJ</u>
(6) <u>Morris Township, NJ</u>	(13) <u>Woodbridge, NJ</u>
(7) <u>West Caldwell, NJ</u>	(14) <u>Parsippany, NJ</u>

by **SCHERING CORPORATION**, a corporation organized under the laws of the State of New Jersey, United States of America, having its principal office at 2000 Galloping Hill Road, Kenilworth, New Jersey 07033, United States of America, (hereinafter called "**ASSIGNEE**"), we each do hereby sell, assign and transfer to said **ASSIGNEE** our entire rights, title and interest in all countries of the world in and to any and all of our inventions and discoveries described in the patent application entitled

NOVEL COMPOUNDS AS NS3-SERINE PROTEASE INHIBITORS OF HEPATITIS C VIRUS

and officially identified* by the United States Patent and Trademark Office as Application Number 10/348,094 filed on 01/21/2003, 20 , and/or by the World Intellectual Property Organization as International Patent Application Number PCT/US03/01752

filed on January 21, 2003, in and to the right to file patent applications in the name of **ASSIGNEE**, its designee, or in any or all of our names, at its election, on the aforesaid inventions and discoveries in all countries of the world, together with all rights of priority in the aforesaid countries deriving from the above-identified patent application under the International Convention for the Protection of Industrial Property, under the Inter-American Convention relating to Inventions, Patents, Designs and Industrial Models and under any other international arrangement to which the United States now is or hereafter becomes a signatory, in and to any and all Letters Patent that are granted from any of the aforesaid patent applications, in and to any applications claiming priority benefits to a provisional patent application or other applications filed on said inventions, and in and to any continuations, divisions, reissues, renewals and extensions thereof of any of said Letters Patent, the same to be held and enjoyed by said **ASSIGNEE**, its successors, assigns and other legal representatives, to the full ends of the terms for which all Letters Patent therefor may be granted, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

And we hereby covenant and agree that we will at any time, upon the request and at the expense of **ASSIGNEE**, execute and deliver any and all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, and Letters Patent and continuations, divisions, reissues, renewals and extensions thereof in **ASSIGNEE**, its successors, assigns or other legal representatives, including the execution and procurement of any and all further documents evidencing this assignment and sale as may be necessary or desirable for recording the same in the Patent Office of any country concerned, and that we will, at any time, upon the request and at the expense of **ASSIGNEE**, execute any additional or divisional applications for patents for said inventions and discoveries, or any part or parts thereof, and applications for patents of

confirmation, registration and importation based on said Letters Patent and on Letters Patent issuing from said additional or divisional applications and reissues, renewals and extensions therefor, and will make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of **ASSIGNEE**, its successors, assigns or other legal representatives.

*We hereby authorize **ASSIGNEE** to insert in this instrument the Application Number and the filing date of said application for Letters Patent when officially notified thereof.

Executed this 25 day of February, 2003.

Ashok Arasappan L.S.

ASHOK ARASAPPAN

ACKNOWLEDGEMENT

State of NEW JERSEY)
County of Union) s.s.:

On this 25 day of FEBRUARY, 2003, personally appeared before me
Ashok Arasappan to me known, and known by me to be the same person described
in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of
his (her) own free will for the purpose set forth.

(Seal)

Shawn M. Armstrong
Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 27 day of FEBRUARY, 2003.
Frank Bennett L.S.

FRANK BENNETT

ACKNOWLEDGEMENT

State of New Jersey)
County of Union) s.s.:

On this 27 day of FEBRUARY, 2003, personally appeared before me
Frank Bennett to me known, and known by me to be the same person described in
and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of
his (her) own free will for the purpose set forth.

(Seal)

Shawn M. Armstrong
Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 25 day of February, 2003.
Stephane L. Bogen L.S.

STEPHANE L. BOGEN

ACKNOWLEDGEMENT

State of NEW JERSEY)
County of Union) s.s.:

On this 25 day of FEBRUARY, 2003, personally appeared before me
Stephane L. Bogen to me known, and known by me to be the same person
described in and who executed the foregoing instrument, and acknowledged that he (she) executed
the same, of his (her) own free will for the purpose set forth.

(Seal)

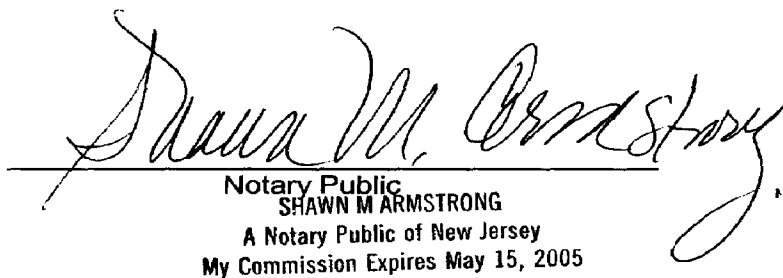

Shawn M. Armstrong
Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 25th day of February, 2003. L.S.**KEVIN X. CHEN****ACKNOWLEDGEMENT**State of New Jersey)
County of Union) s.s.:

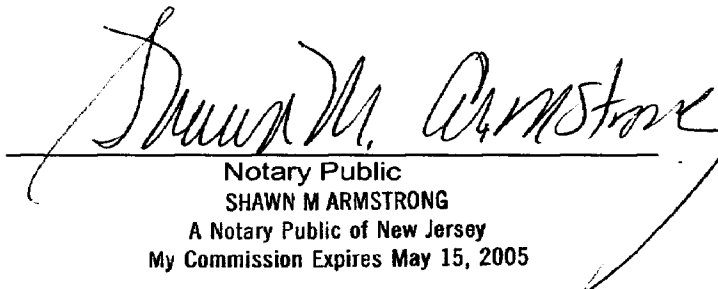
On this 25 day of FEBRUARY, 2003, personally appeared before me
Kevin X. Chen to me known, and known by me to be the same person described in
and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of
his (her) own free will for the purpose set forth.

(Seal)


Notary Public
SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005Executed this 25th day of Feb, 2003. L.S.**EDWIN JAO****ACKNOWLEDGEMENT**State of New Jersey)
County of Union) s.s.:

On this 25 day of FEBRUARY, 2003, personally appeared before me
Edwin Jao to me known, and known by me to be the same person described in and
who executed the foregoing instrument, and acknowledged that he (she) executed the same, of his
(her) own free will for the purpose set forth.

(Seal)


Notary Public
SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 25th day of February, 20 03.

Yi-Tsung Liu L.S.
YI-TSUNG LIU

ACKNOWLEDGEMENT

State of NEW JERSEY)
County of Union) s.s.:

On this 25 day of FEBRUARY, 20 03, personally appeared before me
Yi-Tsung Liu to me known, and known by me to be the same person described in
and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of
his (her) own free will for the purpose set forth.

(Seal)

Shawn M. Armstrong
Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 25th day of February, 20 03.

Raymond G. Lovey L.S.
RAYMOND G. LOVEY

ACKNOWLEDGEMENT

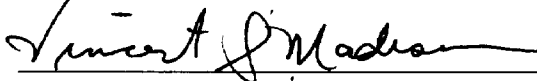
State of NEW JERSEY)
County of Union) s.s.:

On this 25 day of FEBRUARY, 20 03, personally appeared before me
Raymond G. Lovey to me known, and known by me to be the same person
described in and who executed the foregoing instrument, and acknowledged that he (she) executed
the same, of his (her) own free will for the purpose set forth.

(Seal)

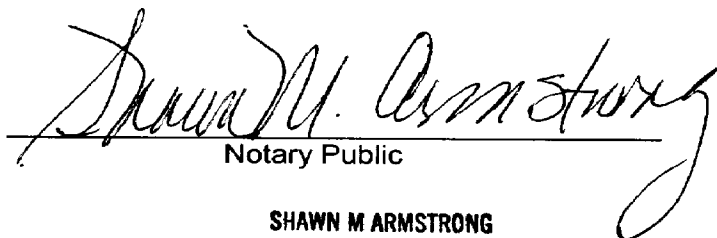
Shawn M. Armstrong
Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

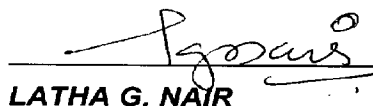
Executed this 27th day of February, 2003. L.S.**VINCENT S. MADISON****ACKNOWLEDGEMENT**State of New Jersey)
County of Union) s.s.:

On this 27 day of FEBRUARY, 2003, personally appeared before me
Vincent S. Madison to me known, and known by me to be the same person
described in and who executed the foregoing instrument, and acknowledged that he (she) executed
the same, of his (her) own free will for the purpose set forth.

(Seal)

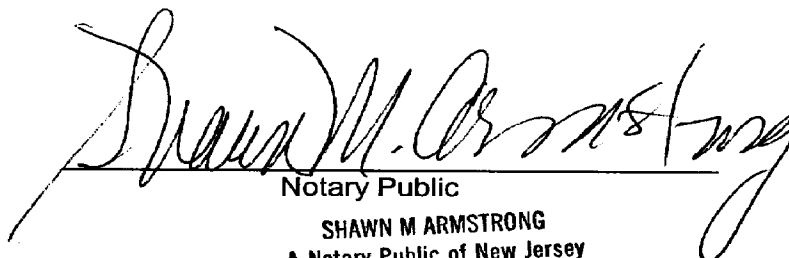

Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 25th day of Feb., 2003. L.S.
LATHA G. NAIR**ACKNOWLEDGEMENT**State of New Jersey)
County of Union) s.s.:

On this 25 day of FEBRUARY, 2003, personally appeared before me
Latha G. Nair to me known, and known by me to be the same person described in
and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of
his (her) own free will for the purpose set forth.

(Seal)


Notary Public
SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 25th day of February, 2003.

F. George Njoroge L.S.
F. GEORGE NJOROGÉ

ACKNOWLEDGEMENT

State of NEW JERSEY)
County of Union) s.s.:

On this 25 day of FEBRUARY, 2003, personally appeared before me
F. George Njoroge to me known, and known by me to be the same person described
in and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of
his (her) own free will for the purpose set forth.

(Seal)

Shawn M. Armstrong
Notary Public
SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 21 day of FEBRUARY, 2003.

Anil K. Saksena L.S.
ANIL K. SAKSENA

ACKNOWLEDGEMENT

State of NEW JERSEY)
County of ESSEX) s.s.:

On this 21 day of FEBRUARY, 2003, personally appeared before me
Anil K. Saksena to me known, and known by me to be the same person described in
and who executed the foregoing instrument, and acknowledged that he (she) executed the same, of
his (her) own free will for the purpose set forth.

(Seal)

Shawn M. Armstrong
Notary Public
SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 25 day of February, 2003.

M. Sannigrahi L.S.
MOUSUMI SANNIGRAHI

ACKNOWLEDGEMENT

State of NEW JERSEY)
County of Union) s.s.:

On this 25 day of FEBRUARY, 2003, personally appeared before me
Mousumi Sannigrahi to me known, and known by me to be the same
person described in and who executed the foregoing instrument, and acknowledged that he (she)
executed the same, of his (her) own free will for the purpose set forth.

(Seal)

Shawn M. Armstrong
Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 25 day of February, 2003.

Sri V. L.S.
SRIKANTH VENKATRAMAN

ACKNOWLEDGEMENT

State of NEW JERSEY)
County of Union) s.s.:

On this 25 day of FEBRUARY, 2003, personally appeared before me
Srikanth Venkatraman to me known, and known by me to be the same person
described in and who executed the foregoing instrument, and acknowledged that he (she) executed
the same, of his (her) own free will for the purpose set forth.

(Seal)

Shawn M. Armstrong
Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005

Executed this 21 day of February, 2003.V. M. Girijavallabhan L.S.

VIYYOOR M. GIRIJAVALLABHAN

ACKNOWLEDGEMENT

State of NEW JERSEY)
County of Union) s.s.:

On this 27 day of FEBRUARY, 2003, personally appeared before me
Viyyoor M. Girijavallabhan to me known, and known by me to be the same person
described in and who executed the foregoing instrument, and acknowledged that he (she) executed
the same, of his (her) own free will for the purpose set forth.

(Seal)

Shawn M. Armstrong
Notary Public

SHAWN M ARMSTRONG
A Notary Public of New Jersey
My Commission Expires May 15, 2005