

05-23-2001

FORM PTO-1595  
1-31-92

101726197

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

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

1. Name of conveying party(ies): med  
Ying LUO, Wen YU and James LORENS 5-18-01  
 Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

3. Nature of Conveyance:  
☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_  
 Execution Date: 30 April 2001

2. Name and address of receiving party(ies):  
 Name: RIGEL PHARMACEUTICALS, INC.  
 Internal Address: \_\_\_\_\_  
 Street Address: 240 East Grand Avenue  
 City: South San Francisco  
 State: California Zip: 94080  
 Country: U.S.A.  
 Additional name(s) & address(es) attached? ☐ Yes ☒ 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.(s)

09/133,944

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:  
 Name: Robin M. SILVA  
 Internal Address: FLEHR HOHBACH TEST  
ALBRITTON & HERBERT LLP  
 Street Address: Four Embarcadero Center - Suite 3400  
 City: San Francisco  
 State: 94109-2485 Zip: 94111-4187

6. Total number of applications and patents involved: 1  
 7. Total fee (37 CFR \$ 3.41):...\$ 40.00  
☒ Enclosed  
☐ Authorized to be charged to deposit account  
 8. Deposit account number: 06-1300  
 Please debit any underpayment or credit any overpayment to the above deposit account.  
 Our Order No. A-66252/RMS/DHR  
 (Attach duplicate of this page if paying by deposit account)

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VOE

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.

Robin M. SILVA  
 Name of Person Signing

Robin M. Silva  
 Signature

16 May 2001  
 Date

Total number of pages including cover sheet, attachments and document: [ 4 ]

OMB No. 0651-0011 (exp. 4/94)

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

Honorable Commissioner of Patents and Trademarks  
 Box Assignments  
 Washington, DC 20231

File No. A-66252/RMS/DHRRev. 8/93 (39811)  
SF-1052012v1

PATENT  
 REEL: 011813 FRAME: 0575

**ASSIGNMENT**

WHEREAS, the undersigned, **Ying Luo**, 32 Chester Circle, Los Altos, California; **Pei Wen Yu**, 1060 Carolan Avenue, #117, Burlingame, California and **James Lorens**, 7 Berenda Way, Portola Valley, California (hereinafter termed "Inventors"), have invented certain new and useful improvements in SHUTTLE VECTORS and have executed an application for a United States patent disclosing and identifying the invention as Serial No. 09/133,944, filed August 14, 1998; and

WHEREAS, Rigel Pharmaceuticals, Inc. (hereinafter termed "Assignee"), a corporation of the State of California, having a place of business at 240 East Grand Avenue, South San Francisco, State of California, is desirous of acquiring the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventors' certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventors to have been received in full from said Assignee:

1. Said Inventors do hereby sell, assign, transfer and convey unto said Assignee, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.

2. Said Inventors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and

4. Said Inventors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

Ying Luo

.)  
 ) ss.  
 .)

(Seal)

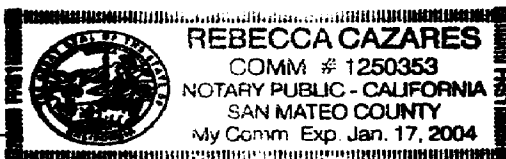
By *Pei Wen Yu*  
Pei Wen Yu

County of San Mateo )  
State of California ) ss.  
 )

On this 30 day of April, in the year 2001, before me, Rebecca Cazares  
Notary Public of the State of Calif., personally appeared Pei Wen Yu, personally  
known to me (or proved to me on the basis of satisfactory evidence) to be the person whose  
name is subscribed to the within instrument, and acknowledged to me that he/she executed the  
same in his/her authorized capacity(ies), and that by his/her signature on the instrument the  
person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Rebecca Cazares



(Seal)

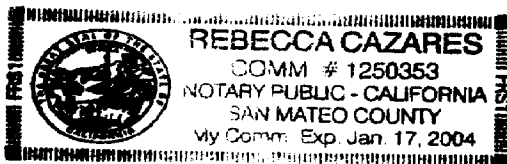
By *James Lorens*  
James Lorens

County of San Mateo )  
State of California ) ss.  
 )

On this 30 day of April, in the year 2001, before me, Rebecca Cazares  
Notary Public of the State of CALIF., personally appeared James Lorens, personally  
known to me (or proved to me on the basis of satisfactory evidence) to be the person whose  
name is subscribed to the within instrument, and acknowledged to me that he/she executed the  
same in his/her authorized capacity(ies), and that by his/her signature on the instrument the  
person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature Rebecca Cazares



(Seal)