

RECORDATION FORM COVER SHEET

05-03-1999

Our Ref.: 1232-18



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

101027803

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

<b>1. Name of conveying party(ies):</b> Susumu Nakagaw      Hideki Jona Norikazu Otake      Shigemitsu Okada Hideo Kiyonaga      Masayuki Ogawa Koji Yamada      Hideaki Imamura		<b>2. Name and address of receiving party(ies):</b> Name: BANYU PHARMACEUTICAL CO., LTD. Internal Address: _____ Street Address: 2-3, Nihombashi Honcho 2-chome, Chuo-ku City: Tokyo State/Country: Japan Zip: 103-8416	
Additional name/s of conveying party/ies attached? <input checked="" type="checkbox"/>		Additional name/s & address/es attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>3. Nature of conveyance:</b> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Assignment <input type="checkbox"/> Change of Name <input type="checkbox"/> Other _____			
Execution Date: April 12, 1999			
<b>4. Application number(s) or patent number(s):</b> If this document is being filed together with a new application, the execution date of the application is: April 12, 1999			
A. Patent Application No(s). (1) (2) (3) 04/27/1999 ASELLN 00000006 09294091 02 FC:561		B. (1) (2) (3) 09/294091	
Additional numbers attached <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			
<b>5. Name and address of party to whom correspondence concerning document should be mailed:</b> Name: Arthur R. Crawford Internal Address: _____ Street Address: Nixon & Vanderhye P.C. 1100 North Glebe Road 8 <sup>th</sup> Floor City: Arlington State: VA Zip: 22201		<b>6. Total number of applications &amp; patents involved:</b> 1	
		<b>7. Total fee (37 CFR 3.41)</b> \$ 40.00 <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> Authorized to be charged to deposit account #14-1140	
		<b>8. The Commissioner is hereby authorized to charge any deficiency in the fee(s) filed, or asserted to be filed, or which should have been filed herewith (or with any paper thereafter filed in this application by this firm) to our Account No. 14-1140.</b>	
<b>DO NOT USE THIS SPACE</b>			
<b>9. Statements and signature.</b> 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.			
Arthur R. Crawford Name of Person Signing Reg. No. 25,327		[Signature] Signature April 19, 1999 Date	
Total number of pages including original cover sheet, attachments, and document: [7]			

RECORDATION FORM COVER SHEET

**PATENTS ONLY**

Our Ref.: 1232-18

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

1. Name of conveying party(ies):  
Ryosuke Ushijima

2. Name:  
Street Address:  
City:  
State:  
Zip:

4. Application number(s) or patent number(s):

A. Patent Application No(s).

(4)  
(5)  
(6)  
(7)  
(8)  
(9)

B. Patent No(s).

(4)  
(5)  
(6)  
(7)  
(8)  
(9)

# ASSIGNMENT OF PATENT APPLICATION

(1) Susumu NAKAGAWA whose full post office address is 32 - 1, Aza Gomae,  
(2) OoazaYokoochi, Kouta - cho, Nukata - gun, Aichi 444 - 0114 JAPAN  
(Inventors) (3) \_\_\_\_\_ and  
(4) \_\_\_\_\_

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

(Assignee) (5) BANYU PHARMACEUTICAL CO., LTD.  
(Address) (6) of 2 - 3, Nihombashi, Honcho 2 - chome, Chuo - ku, Tokyo 103 - 8416 JAPAN

(hereinafter designated as the Assignee) the entire right, title and interest for the United States, its territories, dependencies and possessions, and for the country of

(Other Countries) (7) \_\_\_\_\_ in the invention, and all applications for patent and any Letters Patent which may be granted therefor, known as

(Title) (8) CARBAPENEM DERIVATIVES (Case No. \_\_\_\_\_)

for which the undersigned has (have) executed on even date herewith an application for patent in the United States of America or, if not on even date, then has executed

(9) on \_\_\_\_\_ or has already filed in

(10) U.S. appln. Serial Number \_\_\_\_\_, filed on \_\_\_\_\_

(11) The undersigned acknowledges an obligation of assignment of this invention to said assignee at the time the invention was made.

1) The undersigned agree(s) to execute all papers and documents necessary in connection with the application or any interference which may be declared and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient and further to perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

2) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

3) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed and will not execute, any agreement in conflict herewith.

4) The undersigned hereby grant(s) the firm of NIXON & VANDERHYE P.C. the power to insert on this assignment any further identification which may be necessary to desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned signature(s).

Date 12/04/1999 Signature of Inventor (1) Susumu NAKAGAWA *Susumu Nakagawa*  
Date \_\_\_\_\_ Signature of Inventor (2) \_\_\_\_\_  
Date \_\_\_\_\_ Signature of Inventor (3) \_\_\_\_\_  
Date \_\_\_\_\_ Signature of Inventor (4) \_\_\_\_\_

# ASSIGNMENT OF PATENT APPLICATION

(Inventors) (1) Norikazu OTAKE, Hideo KIYONAGA and Koji YAMADA whose full post office  
(2) address is equally c/o BANYU PHARMACEUTICAL CO., LTD. Tsukuba  
(3) Research Institute, 3, Okubo, Tsukuba - shi, Ibaraki 300 - 2611 JAPAN and  
(4) \_\_\_\_\_

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Date	12/04/1999	Signature of Inventor (1)	Norikazu OTAKE	<i>Norikazu Otake</i>
Date	12/04/1999	Signature of Inventor (2)	Hideo KIYONAGA	<i>Hideo Kiyonaga</i>
Date	12/04/1999	Signature of Inventor (3)	Koji YAMADA	<i>Koji Yamada</i>
Date	_____	Signature of Inventor (4)	_____	_____

# ASSIGNMENT OF PATENT APPLICATION

(1) Hideki JONA and Hideaki IMAMURA whose full post office address is equally  
(2) c/o BANYU PHARMACEUTICAL CO., LTD. Tsukuba Research Institute, 3, Okubo,  
(Inventors) (3) Tsukuba - shi, Ibaraki 300 - 2611 JAPAN and  
(4) \_\_\_\_\_

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Date 12/04/1999 Signature of Inventor (1) Hideki JONA *Hideki Jona*  
Date 12/04/1999 Signature of Inventor (2) Hideaki IMAMURA *Hideaki Imamura*  
Date \_\_\_\_\_ Signature of Inventor (3) \_\_\_\_\_  
Date \_\_\_\_\_ Signature of Inventor (4) \_\_\_\_\_

# ASSIGNMENT OF PATENT APPLICATION

(1) Shigemitsu OKADA and Ryosuke USHIJIMA whose full post office address is equally  
(2) c/o BANYU PHARMACEUTICAL CO., LTD. Okazaki Site, 9 - 1 Kamimutuna  
(Inventors) (3) 3 - chome, Okazaki - shi, Aichi 444 - 0858 JAPAN and  
(4) \_\_\_\_\_

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Date 12/04/1999 Signature of Inventor (1) Shigemitsu OKADA *Shigemitsu Okada*  
Date \_\_\_\_\_ Signature of Inventor (2) Ryosuke USHIJIMA  
Date \_\_\_\_\_ Signature of Inventor (3) \_\_\_\_\_  
Date \_\_\_\_\_ Signature of Inventor (4) \_\_\_\_\_

# ASSIGNMENT OF PATENT APPLICATION

(Inventors) (1) Masayuki OGAWA whose full post office address is c/o BANYU PHARMACEUTICAL  
(2) CO., LTD. Menuuma Site, 810, Ooaza Nishijo, Menuuma - machi, Osato - gun,  
(3) Saitama 360 - 0214 JAPAN and  
(4) \_\_\_\_\_

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Date 12/04/1999 Signature of Inventor (1) Masayuki OGAWA Masayuki Ogawa  
Date \_\_\_\_\_ Signature of Inventor (2) \_\_\_\_\_  
Date \_\_\_\_\_ Signature of Inventor (3) \_\_\_\_\_  
Date \_\_\_\_\_ Signature of Inventor (4) \_\_\_\_\_

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Date _____	Signature of Inventor (1)	Shigemitsu OKADA
Date 12/04/1999	Signature of Inventor (2)	Ryosuke USHIJIMA <i>Ryosuke Ushijima</i>
Date _____	Signature of Inventor (3)	_____
Date _____	Signature of Inventor (4)	_____