

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Muthiah MANOHARAN	08/01/2011
Martin MAIER	08/17/2011
Muthusamy JAYARAMAN	08/15/2011
Shigeo MATSUDA	08/02/2011
Narayanannair K JAYAPRAKASH	08/01/2011
Kallanthottathil G RAJEEV	08/08/2011
Akin AKINC	08/02/2011
Thomas A BAILLIE	08/04/2011

RECEIVING PARTY DATA

Name:	ALNYLAM PHARMACEUTICALS, INC.
Street Address:	300 Third Street
City:	Cambridge
State/Country:	MASSACHUSETTS
Postal Code:	02142

PROPERTY NUMBERS Total: 2

Property Type	Number
Application Number:	13153200
PCT Number:	US1139164

CORRESPONDENCE DATA

Fax Number: (917)332-3773
 Phone: 212-885-5000
 Email: jyeddo@blankrome.com
Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.
 Correspondent Name: Jay P. Lessler
 Address Line 1: Blank Rome LLP

CH \$80.00 13153200

Address Line 2: The Chrysler Building, 405 Lexington Ave
Address Line 4: New York, NEW YORK 10174

ATTORNEY DOCKET NUMBER:	135399.02700
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NAME OF SUBMITTER:	Judy Yeddo
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<p>Total Attachments: 8 source=AssignmentRecordation#page1.tif source=AssignmentRecordation#page2.tif source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif</p>

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies): Muthiah MANOHARAN (08/01/2011), Martin MAIER (08/17/2011), Muthusamy JAYARAMAN (08/15/2011), Shigeo MATSUDA (08/02/2011), Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		2. Name and address of receiving party(ies) Name: <u>ALNYLAM PHARMACEUTICALS, INC.</u> Internal Address: _____ Street Address: _____ 300 Third Street City: <u>Cambridge</u> State: <u>Massachusetts</u> Country: <u>United States of America</u> Zip: <u>02142</u> Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
3. Nature of conveyance/Execution Date(s): Execution Date(s): <u>in parentheses after inventor name</u> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Change of Name <input type="checkbox"/> Security Agreement <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____			
4. Application or patent number(s): A. Patent Application No.(s) <u>13/153,200</u> <u>PCT/US2011/39164</u> Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> This document is being filed together with a new application. B. Patent No.(s) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Jay P. Lessler</u> <u>BLANK ROME LLP</u> Internal Address: <u>Atty. Dkt.: 135399.01803</u> Street Address: <u>The Chrysler Building</u> <u>405 Lexington Ave.</u> City: <u>New York</u> State: <u>NY</u> Zip: <u>10174-0208</u> Phone Number: <u>(212) 885-5000</u> Fax Number: <u>(212) 885-5001</u> Email Address: <u>patents@blankrome.com</u>		6. Total number of applications and patents involved: <input type="text" value="2"/> 7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>80.00</u> <input checked="" type="checkbox"/> Authorized to be charged to deposit account <input type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title)	
9. Signature: <u>/Jay P. Lessler/</u> Signature <u>Jay P. Lessler - 41,151</u> Name of Person Signing		8. Payment Information Deposit Account Number <u>02-2555</u> Authorized User Name <u>Jay P. Lessler</u> Total number of pages including cover sheet, attachments, and documents: <input type="text" value="8"/>	

**RECORDATION FORM COVER SHEET (PTO-1595)
(supplemental sheet)**

Additional Conveying Party(ies)/Execution Date(s) (1. Continued):

Narayanannair K. JAYAPRAKASH (08/01/2011), Kallanthottathil G. RAJEEV (08/08/2011); Akin AKINC (08/02/2011); and Thomas A. BAILLIE (08/04/2011)

Additional Assignees (2. Continued):

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Assignee Name: _____

Internal Address:

Street Address:

City: _____ State: _____ Country: _____ Zip: _____

Additional Applications and/or Patents (4. Continued):

Additional Patent Application Numbers
4A. Continued:

Additional Patent Numbers
4B. Continued:

Additional numbers attached?

Yes No

ASSIGNMENT BY INVENTORS

THIS ASSIGNMENT by Muthiah MANOHARAN, Martin MAIER, Muthusamy JAYARAMAN, Shigeo MATSUDA, Narayanannair K. JAYAPRAKASH, Kallanthottathil G. RAJEEV, and Akin AKINC, each residing at 300 Third Street, Cambridge, Massachusetts 02142, and Thomas A. BAILLIE, residing at the University of Washington, School of Pharmacy, Box 357631, Seattle, WA 98195-7631 (collectively hereinafter referred to as Assignors);

WHEREAS, Assignors have invented certain new and useful improvements in **BIODEGRADABLE LIPIDS FOR THE DELIVERY OF ACTIVE AGENTS**, set forth in (i) U.S. Patent Application No. 13/153,200, filed on June 3, 2011 and (ii) International Application No. PCT/US2011/39164, filed on June 3, 2011; and

WHEREAS, ALNYLAM PHARMACEUTICALS, INC., a corporation organized under and pursuant to the laws of Delaware having its principal place of business at 300 Third Street, Cambridge, Massachusetts 02142 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent **in the United States and all foreign countries** which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the

same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

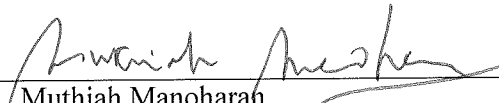
AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.


AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.


Date: 8/1/2011

Signature: 
Muthiah Manoharan


Date: 08/17/2011

Signature: 
Martin Maier

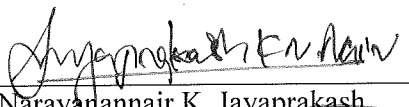
Date: Aug. 15, 2011

Signature: 
Muthusamy Jayaraman


Date: 8/2/2011

Signature: 
Shigeo Matsuda


Date: 8/1/2011

Signature: 
Narayanannair K. Jayaprakash

Date: 8/8/2011

Signature: 
Kallanthottathil G. Rajeev

Date: 8/2/2011

Signature: 
Akin Akinc

Date: _____

Signature: _____
Thomas A. Baillie

ASSIGNMENT BY INVENTORS

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NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent **in the United States and all foreign countries** which may be granted therefor and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the

same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

AND for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

AND Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Date: _____

Signature: _____
Muthiah Manoharan

Date: _____

Signature: _____
Martin Maier

Date: _____

Signature: _____
Muthusamy Jayaraman

Date: _____

Signature: _____
Shigeo Matsuda

Date: _____

Signature: _____
Narayanannair K. Jayaprakash

Date: _____

Signature: _____
Kallanthottathil G. Rajeev

Date: _____

Signature: _____
Akin Akinc

Date: 04 AUGUST 2011

Signature: 
Thomas A. Baillie