

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3359067

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
ANTONIN DE FOUGEROLLES	03/29/2011
GREGORY HINKLE	03/23/2011
STUART MILSTEIN	03/23/2011
ANDREW SPRAGUE	03/23/2011
RECEIVING PARTY DATA	
Name:	ALNYLAM PHARMACEUTICALS, INC.
Street Address:	30
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02142
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14042924
CORRESPONDENCE DATA	
Fax Number:	(617)871-3392
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
Phone:	6178717917
Email:	beth.obrien@novartis.com
Correspondent Name:	NIBR
Address Line 1:	700 MAIN STREET
Address Line 4:	CAMBRIDGE, MASSACHUSETTS 02139
ATTORNEY DOCKET NUMBER:	PAT054121-US-DIV05
NAME OF SUBMITTER:	BETH O'BRIEN
SIGNATURE:	/Beth O'Brien/
DATE SIGNED:	05/19/2015
Total Attachments: 10	
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(joint)

Patent Case PAT054121

ASSIGNMENT

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, we

Antonin DE FOUGEROLLES	citizen of Canada	Alnylam Pharmaceuticals, Inc. 300 Third Street Cambridge, MA 02142 USA
Gregory HINKLE	citizen of United States of America	Alnylam Pharmaceuticals, Inc. 300 Third Street Cambridge, MA 02142 USA
Stuart MILSTEIN	citizen of United States of America	Alnylam Pharmaceuticals, Inc. 300 Third Street Cambridge, MA 02142 USA
Andrew SPRAGUE	citizen of United States of America	Alnylam Pharmaceuticals, Inc. 300 Third Street Cambridge, MA 02142 USA

do hereby sell, assign and transfer to Alnylam Pharmaceuticals, Inc., a company organized under the laws of the United States of America, of 300 Third Street, Cambridge, MA 02142, USA, (hereinafter referred to as the "ASSIGNEE") and its successors, assigns and legal representatives, all of my right, title and interest for all countries of the world in and to (1) all of my inventions and discoveries described in the patent application(s) titled

ORGANIC COMPOSITIONS TO TREAT BETA-ENaC-RELATED DISEASES

and filed in the United States Patent and Trademark Office on _____, 20__ and accorded Application Number _____* and/or filed in the RO/ _____ on _____, 20__ and accorded International Patent Application Number PCT/ _____*, (2) the patent application(s) identified in (1), (3) all national stages of any international patent application identified in (1), (4) all other patent applications in all countries and regions claiming the priority of the provisional or non-provisional patent application filed in the United States Patent and Trademark Office on April 23, 2010 and accorded Application Number 61/327379 and filed in the United States Patent and Trademark Office on May 11, 2010 and accorded Application Number 61/333398, (5) for all patent applications, all rights of priority based upon the United States patent application identified in (4) in all countries and regions under the Paris Convention for the Protection of Industrial Property, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application identified in (4) is a provisional patent application, under 35 USC 119(e) (including the right to file patent applications on said inventions and discoveries in the names of **ASSIGNEE** or their designees or in our names, at their election and in accordance with applicable law in all countries and regions), (6) all continuations and divisions of any United States patent application or international patent application designating the United States identified in (1), any national stages of any international application identified in (1) and any patent applications within the scope of (4) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(4) and (6) hereinafter referred to collectively as "patent applications"), (7) all patents that are granted on any of said patent applications, (8) all registrations and confirmations of, and importation certificates based upon, one or more of said patents and applications for such registrations, confirmations and importation certificates and (9) all reissues, renewals and extensions of said patents, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such

PATENT

REEL: 035667 FRAME: 0299

And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, patents, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates and applications within the scope of (8) and (9) in **ASSIGNEE** or their successors, assigns or legal representatives, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives execute all additional patent applications within the scope of (3), (4) and (6) and all applications within the scope of (8) or (9) and (iii) 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** or their successors, assigns or legal representatives.

Executed this _____ day of _____, 20__.

ACKNOWLEDGEMENT

On this _____ day of _____, 20__, personally appeared before me _____ to me known and known by me to be the same person described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her) own free will for the purpose set forth.

Notary Public

Executed this 23 day of March, 2011

Gregory Hinkle L.S.
Gregory HINKLE

ACKNOWLEDGEMENT

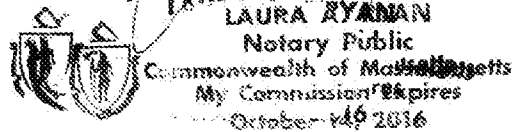
State of MA)

) s.s.:
County of Middlesex)

On this 23 day of March, 2011, personally appeared before me
Gregory Hinkle to me known and known by me to be the same person described
in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her)
own free will for the purpose set forth.

(Seal)

Laura A. Ryan
Notary Public



Executed this 23 day of March, 2011

Stuart Milstein L.S.
Stuart MILSTEIN

ACKNOWLEDGEMENT

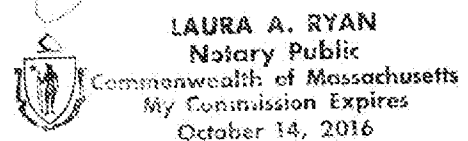
State of MA)

) s.s.:
County of Middlesex)

On this 23 day of March, 2011, personally appeared before me
Stuart Milstein to me known and known by me to be the same person described
in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her)
own free will for the purpose set forth.

(Seal)

Laura A. Ryan
Notary Public



Executed this 23 day of March, 2011.

Andrew M Sprague L.S.
Andrew SPRAGUE

ACKNOWLEDGEMENT

State of MA)

County of Middlesex) s.s.:
)

On this 23 day of March, 2011, personally appeared before me
Andrew Sprague to me known and known by me to be the same person described
in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her)
own free will for the purpose set forth.

(Seal)

Laura A Ryan
Notary Public




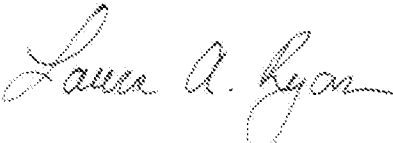
LAURA A. RYAN
Notary Public
Commonwealth of Massachusetts
My Commission Expires
October 14, 2016

Case No. PAT054121

ACCEPTANCE OF ASSIGNMENT

With reference to the Assignment to **Ainylam Pharmaceuticals, Inc.**, of an invention entitled "**ORGANIC COMPOSITIONS TO TREAT BETA-ENaC-RELATED DISEASES**" signed by Antonin DE FOUGEROLLES, Gregory HINKLE, Stuart MILSTEIN and Andrew SPRAGUE; this will certify that **Ainylam Pharmaceuticals, Inc.**, accepts such Assignment.

By :  **Ainylam Pharmaceuticals, Inc.**
Name : Steve Bossonie
Function : V.P. Intellectual Property
Date: April 5, 2011

 4/5/2011
LAURA A. RYAN
Notary Public
Commonwealth of Massachusetts
My Commission Expires
October 14, 2016



(joint)

Patent Case PAT054121

ASSIGNMENT

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, we

Antonin DE FOUGEROLLES	citizen of Canada	Alnylam Pharmaceuticals, Inc. 300 Third Street Cambridge, MA 02142 USA
Gregory HINKLE	citizen of United States of America	Alnylam Pharmaceuticals, Inc. 300 Third Street Cambridge, MA 02142 USA
Stuart MILSTEIN	citizen of United States of America	Alnylam Pharmaceuticals, Inc. 300 Third Street Cambridge, MA 02142 USA
Andrew SPRAGUE	citizen of United States of America	Alnylam Pharmaceuticals, Inc. 300 Third Street Cambridge, MA 02142 USA

do hereby sell, assign and transfer to Alnylam Pharmaceuticals, Inc., a company organized under the laws of the United States of America, of 300 Third Street, Cambridge, MA 02142, USA, (hereinafter referred to as the "**ASSIGNEE**") and its successors, assigns and legal representatives, all of my right, title and interest for all countries of the world in and to (1) all of my inventions and discoveries described in the patent application(s) titled

ORGANIC COMPOSITIONS TO TREAT BETA-ENaC-RELATED DISEASES

and filed in the United States Patent and Trademark Office on _____, 20__ and accorded Application Number _____ * and/or filed in the RO/ _____ on _____, 20__ and accorded International Patent Application Number PCT/ _____ *, (2) the patent application(s) identified in (1), (3) all national stages of any international patent application identified in (1), (4) all other patent applications in all countries and regions claiming the priority of the provisional or non-provisional patent application filed in the United States Patent and Trademark Office on April 23, 2010 and accorded Application Number 61/327379 and filed in the United States Patent and Trademark Office on May 11, 2010 and accorded Application Number 61/333398, (5) for all patent applications, all rights of priority based upon the United States patent application identified in (4) in all countries and regions under the Paris Convention for the Protection of Industrial Property, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application identified in (4) is a provisional patent application, under 35 USC 119(e) (including the right to file patent applications on said inventions and discoveries in the names of **ASSIGNEE** or their designees or in our names, at their election and in accordance with applicable law in all countries and regions), (6) all continuations and divisions of any United States patent application or international patent application designating the United States identified in (1), any national stages of any international application identified in (1) and any patent applications within the scope of (4) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(4) and (6) hereinafter referred to collectively as "patent applications"), (7) all patents that are granted on any of said patent applications, (8) all registrations and confirmations of, and importation certificates based upon, one or more of said patents and applications for such registrations, confirmations and importation certificates and (9) all reissues, renewals and extensions of said patents, registrations, confirmations and importation certificates, reexamination certificates issued for

PATENT

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said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said **ASSIGNEE** and their successors, assigns and legal representatives to the full ends of the terms for which said patents, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by us if this sale, assignment and transfer had not been made.

*We hereby authorize **ASSIGNEE** and their representatives to insert in this Assignment the filing date(s) and Application Number(s) of said patent application(s) when notified thereof.

And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, patents, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates and applications within the scope of (8) and (9) in **ASSIGNEE** or their successors, assigns or legal representatives, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of **ASSIGNEE** or their successors, assigns or legal representatives execute all additional patent applications within the scope of (3), (4) and (6) and all applications within the scope of (8) or (9) and (iii) 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** or their successors, assigns or legal representatives.

This Assignment is effective as from the earliest priority date as stated above.

Executed this 29 day of March, 2011.

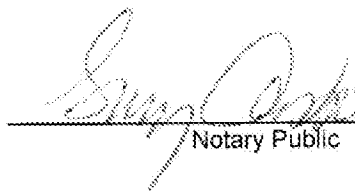
 L.S.
Antonin DE FOUGEROLLES

ACKNOWLEDGEMENT

State of Massachusetts)
) s.s.:
County of Middlesex)

On this 29 day of March, 2011, personally appeared before me
Antonin DE FOUGEROLLES to me known and known by me to be the same person described
in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her)
own free will for the purpose set forth.

(Seal)


Notary Public

Executed this _____ day of _____, 20__.

Gregory HINKLE L.S.

ACKNOWLEDGEMENT

State of _____)
) s.s.:
County of _____)

On this _____ day of _____, 20__, personally appeared before me _____ to me known and known by me to be the same person described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this _____ day of _____, 20__.

Stuart MILSTEIN L.S.

ACKNOWLEDGEMENT

State of _____)
) s.s.:
County of _____)

On this _____ day of _____, 20_____, personally appeared before me _____ to me known and known by me to be the same person described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this _____ day of _____, 20__.

Andrew SPRAGUE L.S.

ACKNOWLEDGEMENT

State of _____)
) s.s.:
County of _____)

On this _____ day of _____, 20__, personally appeared before me _____ to me known and known by me to be the same person described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

ACCEPTANCE OF ASSIGNMENT

With reference to the Assignment to Ainylam Pharmaceuticals, Inc., of an invention entitled "ORGANIC COMPOSITIONS TO TREAT BETA-ENAC-RELATED DISEASES" signed by Antonin DE FOUGEROLLES, Gregory HINKLE, Stuart MILSTEIN and Andrew SPRAGUE, this will certify that Ainylam Pharmaceuticals, Inc. accepts such Assignment.


Ainylam Pharmaceuticals, Inc.

By :

Name :

Function :

Date :



Steve Bossone

V.P. Intellectual Property

April 5, 2011

 4/5/2011



LAURA A. RYAN
Notary Public
Commonwealth of Massachusetts
My Commission Expires
October 14, 2016