PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------------|----------------|
| Antonin de Fougerolles | 05/01/2006 |
| Maria Frank-Kamenetsky | 03/27/2006 |
| Muthiah Manoharan | 04/04/2006 |
| Kallanthottathil G. Rajeev | 04/05/2006 |

RECEIVING PARTY DATA

| Name: | Alnylam Pharmaceuticals, Inc. |
|-----------------|-------------------------------|
| Street Address: | 300 Third Street |
| City: | Cambridge |
| State/Country: | MASSACHUSETTS |
| Postal Code: | 02142 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13043228 |

CORRESPONDENCE DATA

Fax Number: (650)938-5200

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (415) 875-2316

Email: shubl@fenwick.com

Correspondent Name: Susan T. Hubl

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Address Line 4: Mountain View, CALIFORNIA 94041

ATTORNEY DOCKET NUMBER: 16546 -3

NAME OF SUBMITTER: Susan T. Hubl, Reg. 47,668

Total Attachments: 5

PATENT REEL: 026052 FRAME: 0105 | \$40.00 130432

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PATENT REEL: 026052 FRAME: 0106

ASSIGNMENT

For valuable consideration, we, Antonin de Fougerolles, of 66 Summit Avenue, Brookline, MA 02446; Maria Frank-Kamenetsky, of 8 Fairbanks Street, Apt. #3, Brookline, MA 02446; Muthiah Manoharan, of 19 Rolling Lane, Weston, MA 02493; and Kallanthottathil G. Rajeev, of 30 Cambridgepark Drive, Apt 4101, Cambridge, MA 02140; hereby assign to ALNYLAM PHARMACEUTICALS, INC., a corporation of Delaware, having a place of business at 300 Third Street, Cambridge, MA 02142, and its successors and assigns (collectively hereinafter called "the Assignee"), our entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent by us and Philipp Hadwiger, entitled IRNA AGENTS TARGETING VEGF, filed January 25, 2006, and assigned U.S. Serial Number 11/340,080; this assignment, including said application, and any and all continuations, continuations-in-part, and divisional applications, and any and all United States and foreign patents (including reissues, reexaminations, extensions), utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our names or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventor's certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment, the effectiveness of this assignment including as of the filing date of the above-identified application and any applications from which the above-identified application claims benefit of.

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PATENT REEL: 026052 FRAME: 0107

| In WITNESS WHEREOF, I hereto set my hand and seal at <u>Cambudge</u> , this <u>1</u> day of <u>May</u> , 2006. |
|---|
| of <u>May</u> , 2006. |
| Antonin de Fougerobles |
| Commonwealth of Massachusetts County of Middlesex |
| On this 15+ day of May, 2006, before me, the undersigned notary public, personally appeared ANTONIN DE FOUGEROLLES, proved to me through satisfactory evidence of identity, which was Mass. Drive's Livers, to be the person whose name was signed on the preceding or attached document in my presence, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his knowledge and belief. |
| Om M. Saith. (official signature and seal of notary) |
| My commission expires March 7, 2008 |

| IN WITNESS WHEREOF, I hereto set my hand and seal at <u>lambridge Hass</u> , this <u>27</u> day of <u>March</u> , 2006. |
|---|
| Man Du - homen MARIA FRANK-KAMENETSKY |
| Commonwealth of Massachusetts County ofMiddlese |
| On this 29th day of March, 2006, before me, the undersigned notary public, personally appeared MARIA FRANK-KAMENETSKY, proved to me through satisfactory evidence of identity, which was Mess. Diver License, to be the person whose name was signed on the preceding or attached document in my presence, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of her knowledge and belief. |
| (official signature and seal of notary) |
| My commission expires March 7 2008. |

| IN WITNESS WHEREOF, I hereto set my hand and seal at CAMBRIDGE, MA, this 4 th day of April, 2006. |
|---|
| MUTHIAH MANOHARAN |
| Commonwealth of Massachusetts County of Middlesex |
| On this 4th day of April, 2006, before me, the undersigned notary public, personally appeared MUTHIAH MANOHARAN, proved to me through satisfactory evidence of identity, which was Mass. Drivers License, to be the person whose name was signed on the preceding or attached document in my presence, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his knowledge and belief. |
| (official signature and seal of notary) |
| My commission expires March 7, 2008 Ome M. Sairla Notary Public |

| IN WITNESS WHEREOF, I hereto set my hand and seal at Cambridge, MA, this fday of Anni), 2006. |
|--|
| KALLANTHOTTATHIL G. RAJEEV |
| Commonwealth of Massachusetts County of |
| On this |
| Om M. Saith. (official signature and seal of notary) |
| My commission expires March 7, 2008. |
| - |
| Notary Public |

DocNo 21286833

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PATENT REEL: 026052 FRAME: 0111

RECORDED: 03/30/2011