### PATENT ASSIGNMENT

## Electronic Version v1.1

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| CONVEYING PARTY DATA   |                               |                |                 |  |  |  |  |
|  | Name Execution Date           |                |                 |  |  |  |  |
| Masayuki Kitagawa  | Masayuki Kitagawa 12/27/2011  |                |                 |  |  |  |  |
| Chieko Seno 12/22/2011   |                               |                |                 |  |  |  |  |
| Keiko Ebara 12/22/2011   |                               |                |                 |  |  |  |  |
| Kazutoshi Takashio   | Kazutoshi Takashio 01/06/2012 |                |                 |  |  |  |  |
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| PROPERTY NUMBERS Total: 1  |                               |                |                 |  |  |  |  |
| Property Type  |                               |                | Number          |  |  |  |  |
| Application Number: 13319175   |                               |                |                 |  |  |  |  |
| Application Number:     13319175     5216       CORRESPONDENCE DATA     EVEN     EVEN  |                               |                |                 |  |  |  |  |
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| NAME OF SUBMITTER:   |                               |                | Kevin S. Lemack |  |  |  |  |
| Total Attachments: 2<br>source=441P138-Assignment#page1.tif<br>source=441P138-Assignment#page2.tif   |                               |                |                 |  |  |  |  |

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#### (ATTORNEY DOCKET NO. 441P138)

# ASSIGNMENT

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 Serial No. <u>13/319,175</u>, Filed <u>November 7, 2011</u> (based on PCT International Application No. PCT/JP2010/058034 filed May 12, 2010)
 WHEREAS Masayuki KITAGAWA, Chieko SENO, Keiko EBARA and Kazutoshi TAKASHIO respectively citizens of Japan of c/o NIPPON KAYAKU KABUSHIKI KAISHA Pharmaceuticals Research Laboratories, 31-12, Shimo 3-chome, Kita-ku, Tokyo 1158588 Japan.

(hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in

" POLYMER CONJUGATE OF BIOACTIVE SUBSTANCE HAVING HYDROXY GROUP"

for which an application for Letters Patent of the United States of America has been executed by the undersigned

| on | Dec. | 22, | 2011 | Dec. | 22, | 2011 | Dec. | 27,2 | 2011, Jan | .6,2012; | and |
|----|------|-----|------|------|-----|------|------|------|-----------|----------|-----|
|    |      |     |      |      |     |      |      |      |           |          |     |

WHEREAS,

Nippon Kayaku Kabushiki Kaisha (a corporation duly organized and existing under the laws of Japan), of

11-2, Fujimi 1-chome, Chiyoda-ku, Tokyo 1028172 JAPAN

(assignee),

its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America;

NOW, THEREFORE, in consideration of the sum of One Dollar (\$1.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents do sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America and its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America and its territories, and in and to any and all divisions, reissues, continuations and extensions thereof for the full term or terms for which the same may be granted.

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The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may

be declared concerning this application or continuation, division or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents and Trademarks to issue any and all Letters Patents of the United States of America resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the 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.

The undersigned hereby grant(s) the law firm of Nields, Lemack & Frame, LLC of 176 East Main Street - Suite 5, Westboro, Massachusetts 01581, U. S. A. the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

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

| Date _ | Danber 27, 2011, N   | ame of Inventor | Magayahi<br>Masayuki KIT    | KITagama<br>AGAWA |
|--------|----------------------|-----------------|-----------------------------|-------------------|
| Date   | December 22, 2011, N | ame of Inventor | Chieko SENO                 | Seno              |
| Date _ | December 22. 201(, N | ame of Inventor | Keiko<br>Keiko EBARA        | Ebara             |
| Date   | January 6, 2012, N   | ame of Inventor | Kagutoshi<br>Kazutoshi TAKA |                   |

### PATENT REEL: 027529 FRAME: 0979

### **RECORDED: 01/13/2012**