03/29/2017 504296370

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4343051

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

## **CONVEYING PARTY DATA**

| Name                   | Execution Date |
|------------------------|----------------|
| ZHAOLIN WANG           | 03/19/2017     |
| PING YE                | 03/16/2017     |
| ALONSO RICARDO         | 03/16/2017     |
| KRISTOPHER JOSEPHSON   | 03/20/2017     |
| PAUL ANDERSON          | 03/17/2017     |
| MICHELLE DENISE HOARTY | 03/16/2017     |
| ZHONG MA               | 03/16/2017     |
| NATHAN EZEKIEL NIMS    | 03/17/2017     |
| EBERHARD SCHNEIDER     | 03/22/2017     |
| GREGOR SCHURMANN       | 03/26/2017     |
| PETER WAGNER           | 03/22/2017     |
| DOUGLAS A TRECO        | 03/16/2017     |
| HONG ZHENG             | 03/17/2017     |
| DANIEL ELBAUM          | 03/20/2017     |
| NICOLAS CEDRIC BOYER   | 03/21/2017     |

#### **RECEIVING PARTY DATA**

| Name:           | RA PHARMACEUTICALS, INC.                |
|-----------------|---|
| Traine.         | 100110000000000000000000000000000000000 |
| Street Address: | 87 CAMBRIDGE PARK DRIVE                 |
| City:           | CAMBRIDGE                               |
| State/Country:  | MASSACHUSETTS                           |
| Postal Code:    | 02140                                   |

## **PROPERTY NUMBERS Total: 1**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 15459035 |

#### **CORRESPONDENCE DATA**

Fax Number: (978)448-8721

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.

Phone: 978-448-8720

> **PATENT REEL: 041786 FRAME: 0781**

504296370

Email: docketing@dtwardlaw.com

Correspondent Name: DT WARD, PC

Address Line 1: 142A MAIN STREET

Address Line 4: GROTON, MASSACHUSETTS 01450

| ATTORNEY DOCKET NUMBER: | 2011.1001USCON2       |
|-------------------------|-----------------------|
| NAME OF SUBMITTER:      | JESSICA L. CHARLAND   |
| SIGNATURE:              | /Jessica L. Charland/ |
| DATE SIGNED:            | 03/29/2017            |

**Total Attachments: 12** 

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PATENT REEL: 041786 FRAME: 0782

### **ASSIGNMENT**

For good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to Ra Pharmaceuticals, Inc., having a place of business at 87 Cambridge Park Drive, Cambridge, Massachusetts 02140, for itself and its successors, transferees, and assigns (herein "ASSIGNEE") the following:

- 1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the following provisional application filed under 35 U.S.C. § 111(b), non-provisional application filed under 35 U.S.C. § 111(a), international application filed according to the Patent Cooperation Treaty (PCT), or U.S. national phase application filed under 35 U.S.C. § 371 ("APPLICATION"):
  - Application No. <u>15/459,035</u>, entitled <u>"PEPTIDE AND PEPTIDOMIMETIC INHIBITORS"</u> filed on <u>March 15, 2017</u>.
  - 2. The entire worldwide right, title, and interest in and to:
- (a) the APPLICATION; (b) all applications claiming priority from the APPLICATION; (c) all provisional, utility, divisional, continuation, substitute, renewal, reissue, and other applications related thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), and (c) above; and (e) all right of priority in the APPLICATION and in any underlying provisional or foreign application, together with all rights to sue for and recover damages for past acts of infringement, whether based on any patents listed herein, patents issuing from applications listed herein or provisional rights from any patent application listed herein.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not

Filed: March 15, 2017 Application No.: 15/459,035

hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

INVENTOR acknowledges the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

| Date          | Signature Name Zhaolin Wang |  |
|---------------|-----------------------------|--|
| Date 3/16/17  | Signature Ping Yc           |  |
| Date 03/16/17 | Signature                   | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,           |
| Date 3/20/17  | Signature                   | <del>yayd</del> inadada<br>Sa <u>ada</u> adadada |
| Date          | SignatureNamePaul Anderson  |  |

Filed: March 15, 2017 Application No.: 15/459,035

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| Date 3/19/2017   | Signature_<br>Name | Thav hin D           |
|------------------|--------------------|----------------------|
| Date 3/16/17     | Signature_<br>Name | Ping Ye              |
| Date 03/16   17- | Signature_         | Alonso Ricardo       |
| Date             | Signature_         |                      |
|                  | Name               | Kristopher Josephson |
|                  |                    |                      |
| Date             | Signature_         |                      |
|                  | Name               | Paul Anderson        |
|                  |                    |                      |

Filed: March 15, 2017 Application No.: 15/459,035

Attorney Docket No: 2011,1001USCON2

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| Date           | Signature_<br>Name | Zhaolin Wang         |
|----------------|--------------------|----------------------|
| Date 3/16/17   | Signature_<br>Name | Ping Ye              |
| Date 03/16/17  | Signature_<br>Name | Alonso Ricardo       |
| Date           | Signature_<br>Name | Kristopher Josephson |
| Date 3/17/2017 | Signature_<br>Name | Paul C. Audlison     |

Filed: March 15, 2017 Application No.: 15/459,035

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| Date             | Signature_         |                      |
|------------------|--------------------|----------------------|
|                  | Name               | Zhaolin Wang         |
| Date 3/16/17     | Signature_<br>Name | Ping Ye              |
| Date 93/16   17- | Signature_<br>Name | Alonso Ricardo       |
| Date             | Signature_<br>Name | Kristopher Josephson |
| Date             | Signature_<br>Name | Paul Anderson        |

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Attorney Docket No: 2011.1001USCON2

| Filed: March 15, 2017<br>Application No.: 15/459,035 |   |
|--|---|
| Date 3(10/17   | Signature Michelle Hoarty  Name Michelle Denise Hoarty      |
| Date 3/16/17   | Name Michelle Denise Hoarty  Signature Management Signature |
| Date   | Name Zhong Ma  Signature  Name Nathan Ezekiel Nims          |
| Date   | Signature Name Eberhard Schneider                           |
| Date   | Signature   |
| Date   | Signature<br>NamePeter Wagner                               |
| Date 3/16/17   | Signature Douglas A. Treco                                  |
| Date 03/17/2017                                      | Signature Hong Zheng  |

| Title: PEPTIDE AND PEPTIDOMIMETIC INHIBITORS Filed: March 15, 2017 Application No.: 15/459,035 |  |  |
|--|--|--|
|  |  |  |
| Date 3/16/17   | Signature Michelle Hoarty  Name Michelle Denise Hoarty |  |
| Date 3/16/17   | Signature Zhong Ma Zhong Ma                            |  |
| Date   | Signature Name Nathan Ezekiel Nims                     |  |
| Date   | Signature  |  |
| Date   | Signature Name Gregor Schurmann                        |  |
| Date 3/22/17   | Signature Vagner Peter Wagner                          |  |
| Date 3/10/17   | Signature Douglas A. Treco                             |  |
| Date   | Signature Name Hong Zheng                              |  |
|  |  |  |

Attorney Docket No: 2011.1001USCON2

| Application No.: 15/459,035        |                                |
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|                                    |                                |
| Date 3 16 17 Signature Name Michel | helle Woarty  Je Denise Hoarty |
| Date 3/16/17 Signature Name Zhong  | Ma Ma                          |
| Date 3/17/17 Signature Nathan      | Ezekiel Nims                   |
| Date Signature Name Eberha         | rd Schneider                   |
| Date Signature<br>Name Gregor      | Schurmann                      |
| Date Signature Name Peter V        | /agner                         |
| Date 3 16 (7 Signature Name Dougla | A. Treco                       |

3 of 4

Hong Zheng

Signature\_ Name\_\_\_

| Title: PEPTIDE AND PEPTIDOMIMETIC INHIBITORS Filed: March 15, 2017 Application No.: 15/459,035 |   |  |  |
|--|---|--|--|
|  |   |  |  |
| Date 3(10/17   | Signature Mehelle Hoarty  Name Michelle Denise Hoarty |  |  |
| Date 3/16/17   | Signature Zhong Ma  Name Zhong Ma                     |  |  |
| Date   | Signature Nathan Ezekiel Nims                         |  |  |
| Date   | Signature Name Eberhard Schneider                     |  |  |
| Date 3/26/17   | Signature W. Qu. Name Greger Schurmann                |  |  |
| Date   | Signature   |  |  |
| Date 3 10 (1)  | Signature Douglas A. Treco                            |  |  |
| Date   | Signature Name Hong Zheng                             |  |  |

| Title: PEPTIDE AND PEPTIDOMIMETIC INHIBITORS Filed: March 15, 2017 Application No.: 15/459,035 |  |  |  |
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| 3  |  |  |  |
| Date 3 10 17   | Signature Muhelle Hoarty  Name Michelle Denise Hoarty  |  |  |
| Date 3/16/17   | Signature Zhong Ma Zhong Ma                            |  |  |
| Date   | SignatureNameNathan Ezekiel Nims                       |  |  |
| Date 3/22/2017   | Signature Planta of Churcis () Name Eberhard Schneider |  |  |
| Date   | SignatureNameGregor Schurmann                          |  |  |
| Date   | Signature  |  |  |
| Date 3/16/17   | Signature Douglas A. Treco                             |  |  |
| Date   | Signature Name Hong Zheng                              |  |  |

Attorney Docket No: 2011.1001USCON2

| Title: PEPTIDE AND PEPTIDO<br>Filed: March 15, 2017<br>Application No.: 15/459,035 | MIMETIC INH        | BITORS              | ببت.        |
|--|--------------------|---------------------|-------------|
| Date 3/20//7   | Signature_<br>Name | Daniel Elbaum       | -           |
| Date   | Signature_         | Nicola Cadula Dover | <del></del> |

| Title: PEPTIDE AND PEPTIDO! Filed: March 15, 2017 Application No.: 15/459,035 | MIMETIC INHIBITORS        |
|---|---------------------------|
| Date  | Signature                 |
|   | Name Daniel Elbaum        |
| D 1 02 /2//2017   | Circutum (1997)           |
| Date <u>03/2/12017</u>  | Signature Nickelaia Payor |

Attorney Docket No: 2011.1001USCON2

**RECORDED: 03/29/2017** 

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PATENT REEL: 041786 FRAME: 0794