**PATENT ASSIGNMENT COVER SHEET**

**SUBMISSION TYPE:** NEW ASSIGNMENT

**NATURE OF CONVEYANCE:** ASSIGNMENT

### CONVEYING PARTY DATA

<table>
<thead>
<tr>
<th>Name</th>
<th>Execution Date</th>
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<tbody>
<tr>
<td>HIROMI ASO</td>
<td>12/02/2013</td>
</tr>
<tr>
<td>MASAAKI TSUCHIHASHI</td>
<td>09/10/2013</td>
</tr>
<tr>
<td>TETSUO TAKANO</td>
<td>12/02/2013</td>
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### RECEIVING PARTY DATA

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<thead>
<tr>
<th>Name:</th>
<th>MITSUBISHI RAYON CO., LTD.</th>
</tr>
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<tbody>
<tr>
<td>Street Address:</td>
<td>1-1, MARUNOUCHI 1-CHOME, CHIYODA-KU</td>
</tr>
<tr>
<td>City:</td>
<td>TOKYO</td>
</tr>
<tr>
<td>State/Country:</td>
<td>JAPAN</td>
</tr>
<tr>
<td>Postal Code:</td>
<td>100-8253</td>
</tr>
</tbody>
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**PROPERTY NUMBERS Total: 1**

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<tr>
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<tr>
<td>Application Number</td>
<td>14123915</td>
</tr>
</tbody>
</table>

### CORRESPONDENCE DATA

- **Fax Number:** (703)413-2220
- **Phone:** (703) 413-3000
- **Email:** Gtesfaye@oblon.com

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

- **Correspondent Name:** OBLON, SPIVAK, ET AL.
- **Address Line 1:** 1940 DUKE STREET
- **Address Line 4:** ALEXANDRIA, VIRGINIA 22314

**ATTORNEY DOCKET NUMBER:** 426058US99PCT

**NAME OF SUBMITTER:** GENET TESFAYE

**Signature:** /Genet Tesfaye/

**Date:** 12/04/2013

**EPAS ID:** PAT2636941
Assignment of Application

WHEREAS, I (WE) Hiromi ASO of Otake-shi, Japan
Masashi TSUCHIHASHI of Wakayama-shi, Japan; and
Tetsuo TAKANO of Wakayama-shi, Japan

have invented certain new and useful improvements in:

OIL AGENT FOR CARBON FIBER PRECURSOR ACRYLIC FIBER,
OIL COMPOSITION FOR CARBON FIBER PRECURSOR ACRYLIC FIBER,
PROCESSED-OIL SOLUTION FOR CARBON-FIBER PRECURSOR ACRYLIC FIBER, AND METHOD FOR PRODUCING CARBON-FIBER PRECURSOR ACRYLIC FIBER BUNDLES, AND CARBON-FIBER BUNDLE USING CARBON-FIBER PRECURSOR ACRYLIC FIBER BUNDLES

for which an application for Letters Patent was executed on

(Application No. .................................., filed ..................................), and

WHEREAS, Mitsubishi Rayon Co., Ltd.
(hereinafter referred to as “ASSIGNEE”) having a place of business at: 1-1, Marunouchi 1-chome, Chiyoda-ku,
Tokyo 100-8253 Japan

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS ($5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.
Further, I (WE) agree that I (WE) will communicate to said ASSIGNEE or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letter Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Oblon, Spivak, McClelland, Maier & Neustadt, P.C. of 1940 Duke Street Alexandria, Virginia 22314 the power to insert on this assignment any further identification, including the application number and filing date, which 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.

Date: December 2, 2013

Hiromi Aso

(Ms. Signature of Inventor)

Date:

(Ms. Signature of Inventor)

Masaaki TSUCHIHASHI

(Date:)

(Tsuo TAKANO)

(Date:)

(Date:)

(Date:)

(Date:)

(Date:)

(Date:)

(Date:)

(Date:)

(Date:)

(Date:)

(Date:)

(Date:)

Date:

(Date:)

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

03/03
Assignment of Application

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Massaki TSUCHIHASHI of Wakayama-shi, Japan; and

Tetsuo TAKANO of Wakayama-shi, Japan

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PROCESSED-OIL SOLUTION FOR CARBON-FIBER PRECURSOR ACRYLIC FIBER, AND METHOD FOR PRODUCING CARBON-FIBER PRECURSOR ACRYLIC FIBER BUNDLE, AND CARBON-FIBER BUNDLE USING CARBON-FIBER PRECURSOR ACRYLIC FIBER BUNDLE

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03/03
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Date: ________________ (Signature of Inventor) Hiromi ASO  
Date: 9.10.2013 (Signature of Inventor) Masaaki TSUCHIHASHI  
Date: December 2, 2013 (Signature of Inventor) Tetsuo TAKANO

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.  
ATTORNEYS AT LAW  
1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

03/03

RECORDED: 12/04/2013  
PATENT REEL: 031716 FRAME: 0690