

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HIROKI TASHIRO	04/27/2018
HIROYUKI MATSUOKA	05/07/2018
WATARU SAKAKIBARA	05/09/2018
SOICHIRO NOGAMI	05/11/2018
SATORU HABUKA	05/07/2018
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<b>Street Address:</b>	14-1, SOTOKANDA 4-CHOME, CHIYODA-KU,
<b>City:</b>	TOKYO
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	1010021
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15781365
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	P54541
<b>NAME OF SUBMITTER:</b>	DANIEL B. MOON
<b>SIGNATURE:</b>	/Daniel B. Moon/
<b>DATE SIGNED:</b>	06/04/2018
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 8</b>	

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**COMBINED INVENTOR'S DECLARATION AND ASSIGNMENT****DECLARATION**

The herein-identified application was made or authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

**Authorization to Permit Access to Application by Participating Office**

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the herein-identified patent application is filed access to the herein-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, KIPO, SIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the herein-identified patent application is filed to have access to the herein-identified patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the herein-identified patent application with respect to: 1) the herein-identified patent application-as-filed; 2) any foreign application to which the herein-identified patent application claims priority under 35 U.S.C. 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the herein-identified patent application; and 3) any U.S. application-as-filed from which benefit is sought in the herein-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Offices.

The undersigned hereby authorizes the U.S. attorney or agent appointed herein to accept and follow instructions from either his foreign patent agent or corporate representative, if any, as to any action to be taken in the Patent and Trademark Office regarding this application without direct communication between the U.S. attorney or agent and the undersigned.

Direct Correspondence to: **CUSTOMER NUMBER 07055**

At: Greenblum & Bernstein, P.L.C.  
1950 Roland Clarke Place  
Reston, VA 20191

Direct Telephone Calls to: Greenblum & Bernstein, P.L.C. (703) 716-1191

ASSIGNMENT

WHEREAS, **Hiroki TASHIRO**, a resident of Handa City, Aichi, Japan, whose mailing address is c/o DOWA THERMOTECH CO., LTD., 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 1010021 JAPAN, **Hiroyuki MATSUOKA**, a resident of Nagoya City, Aichi, Japan, whose mailing address is c/o DOWA THERMOTECH CO., LTD., 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 1010021 JAPAN, **Wataru SAKAKIBARA**, a resident of Nagoya City, Aichi, Japan, whose mailing address is c/o DOWA THERMOTECH CO., LTD., 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 1010021 JAPAN, **Soichiro NOGAMI**, a resident of Ota City, Gunma, Japan, whose mailing address is c/o DOWA THERMOTECH CO., LTD., 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 1010021 JAPAN and **Satoru HABUKA**, a resident of Nagoya City, Aichi, Japan, whose mailing address is c/o DOWA THERMOTECH CO., LTD., 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 1010021 JAPAN, hereinafter referred to as the ASSIGNORS, have invented a certain improvement relating to

**INTERMEDIATE LAYER FORMED BETWEEN BASE MATERIAL AND DLC  
LAYER AND FILM-FORMING METHOD THEREOF**

for which they have executed, on the same date as this assignment, an application for Letters Patent for the United States to be filed in the United States Patent and Trademark Office, which Application is a National Stage of International Application No. PCT/JP2016/086338, filed December 7, 2016.

If this Assignment is filed after the filing date of the above-identified application, the undersigned hereby authorize and request any one of the practitioners of record in this application associated with Customer No. 07055 including Neil F. Greenblum, Reg. No. 28,394, Bruce H. Bernstein, Reg. No. 29,027, Arnold Turk, Reg. No. 33,094, James L. Rowland, Reg. No. 32,674, Stephen M. Roylance, Reg. No. 31,296, William Pieprz, Reg. No. 33,630, Robert W. Mueller, Reg. No. 35,043, William E. Lyddane, Reg. No. 41,568, William S. Boshnick, Reg. No. 44,550, Steven B. Pollicoff 60,311, James P. Bonnamy 63,649, Jonathan R. Miller 59,834 and Walter A. Schlapkohl 64,416, of the firm Greenblum & Bernstein, P.L.C., whose address is 1950 Roland Clarke Place, Reston, Virginia 20191, to insert here in parenthesis (Application No. \_\_\_\_\_, filed \_\_\_\_\_) the filing date and application number of said application when known.

AND WHEREAS, **DOWA THERMOTECH CO., LTD.**, a corporation organized and existing under the laws of JAPAN, whose mailing address is 14-1, Sotokanda 4-chome, Chiyoda-ku, Tokyo 1010021 JAPAN, hereinafter known as the ASSIGNEE, is desirous of acquiring the entire right, title and interest for the United States in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations, and prolongations thereof.

NOW, THIS WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, said ASSIGNORS hereby assign, sell and transfer to said ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, for the United States including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor and all rights to sue for past and future infringement thereunder, said ASSIGNEE and its assigns and legal representatives to have, hold, exercise and enjoy the said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations, and prolongations thereof, with all the rights, powers, privileges, and advantages in any ways arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, reexaminations, and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives in as ample and beneficial a manner to all intents and purposes as the said ASSIGNORS might or could have held and enjoyed the same, if this assignment had not been made.

AND said ASSIGNORS hereby agree to execute all papers necessary to file applications in the United States for said invention and to assign the same to said ASSIGNEE, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing Letters Patent thereon.

AND said ASSIGNORS authorize and request the Commissioner of Patents to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith.

IN TESTIMONY WHEREOF, this assignment is executed by said ASSIGNOR(S), on the respective date(s) indicated below.

First Witness (Optional):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

田代 裕樹

\_\_\_\_\_  
Hiroki TASHIRO

Apr. 27, 2018

\_\_\_\_\_  
Date

Second Witness (Optional):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

IN TESTIMONY WHEREOF, this assignment is executed by said ASSIGNOR(S), on the respective date(s) indicated below.

First Witness (Optional):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

松岡 宏之

Hiroyuki MATSUOKA

May. 7, 2018

Date

Second Witness (Optional):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)





IN TESTIMONY WHEREOF, this assignment is executed by said ASSIGNOR(S), on the respective date(s) indicated below.

First Witness (Optional):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

野上惣一郎

\_\_\_\_\_  
**Soichiro NOGAMI**

May. 11. 2018

\_\_\_\_\_  
Date

Second Witness (Optional):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

IN TESTIMONY WHEREOF, this assignment is executed by said ASSIGNOR(S), on the respective date(s) indicated below.

First Witness (Optional):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)

羽根 肇  
Satoru HABUKA

May. 7, 2018  
Date

Second Witness (Optional):

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Date)