

## 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>
DAISUKE IGAWA	01/04/2022
YUSUKE DOHI	01/04/2022
TETSUYA YAMAMOTO	01/04/2022
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	JFE STEEL CORPORATION
<b>Street Address:</b>	2-3, UCHISAIWAI-CHO 2-CHOME, CHIYODA-KU
<b>City:</b>	TOKYO
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	100-0011
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	17770573
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(215)656-3398
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<b>Correspondent Name:</b>	IP GROUP OF DLA PIPER LLP (US)
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<b>ATTORNEY DOCKET NUMBER:</b>	JFE-22-1106/308692-491
<b>NAME OF SUBMITTER:</b>	T. DANIEL CHRISTENBURY
<b>SIGNATURE:</b>	/TDC/
<b>DATE SIGNED:</b>	04/20/2022
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 2</b>	
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source=CombinedDecAssign#page2.tif	

JFE-22-1106

**COMBINED DECLARATION/ASSIGNMENT**

WHEREAS, we

Daisuke IGAWA of Chiyoda-ku, Tokyo , JAPAN  
Yusuke DOHI of Chiyoda-ku, Tokyo , JAPAN  
Tetsuya YAMAMOTO of Chiyoda-ku, Tokyo , JAPAN

(hereinafter referred to as "the undersigned"), have made an invention entitled

METHOD FOR ESTIMATING SURFACE TENSION OF INERT STRUCTURE IN COAL,  
METHOD FOR ESTIMATING SURFACE TENSION OF COAL, AND METHOD FOR  
PRODUCING COKE

identified in International Application No.PCT/JP2020/038830,

and US application No. 17/770,573 (DLA Piper is authorized to insert the Serial No. when known)

the above-identified application was made or authorized to be made by the person executing this Declaration;

I/we believe that we are the original joint inventors of a claimed invention in the application;

I/we hereby acknowledge that any willful false statement made in this Declaration is punishable under 18 USC §1001 by fine or imprisonment of not more than five (5) years, or both.

WHEREAS, JFE STEEL CORPORATION , with offices at 2-3, Uchisaiwaicho 2-chome, Chiyoda-ku, Tokyo 100-0011, Japan (hereinafter referred to as "assignee"), is desirous of acquiring the entire right, title and interest in said invention, said US application and all letters patent issuing for said invention,

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and of other good and valuable consideration, receipt of which is hereby acknowledged, the undersigned, intending to be legally bound, does hereby sell, assigns and transfers to the assignee the entire right, title and interest, for the United States of America, its territories and possessions, and for all foreign countries, in said invention, including said US application, all divisions and continuations thereof, all rights to claim priority based thereon, all rights to file foreign applications on said invention, and all letters patent and reissues thereof, issuing for said invention in the United States of America and in any and all foreign countries.

It is agreed that the undersigned shall be legally bound, upon request of the assignee, or its successors or assigns or a legal representative thereof, to supply all information and evidence of which the undersigned has knowledge or possession, relating to the making and practice of said invention, to testify in any legal proceeding relating thereto, to execute all instruments proper to patent the invention in the United States of America and foreign countries in the name of the assignee, and to execute all instruments proper to carry out the intent of this instrument. If the

undersigned includes more than one individual, these obligations shall apply to all of the undersigned both individually and collectively.

The rights and property herein conveyed by the undersigned are free and clear of any encumbrance.

EXECUTED on the dates set forth below.

January, 4, 2022

Date

January, 4, 2022

Date

January 4, 2022

Date

Daisuke IGAWA

Daisuke IGAWA

Yusuke DOHI

Yusuke DOHI

Tetsuya Yamamoto

Tetsuya YAMAMOTO