

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5589014

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SUMIO KATO	04/22/2019
MASATAKA OGASAWARA	04/22/2019
TOSHIHARU MORIYA	03/11/2019
KATSUYA IWASHINA	03/12/2019
HIRONORI IWAKURA	03/11/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	MITSUI MINING & SMELTING CO., LTD.
<b>Street Address:</b>	1-11-1 OSAKI, SHINAGAWA-KU
<b>City:</b>	TOKYO
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	141-8584
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16473335
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Phone:</b>	216 566 9700
<b>Email:</b>	millar@rankinhill.com
<b>Correspondent Name:</b>	RANKIN, HILL & CLARK LLP
<b>Address Line 1:</b>	23755 LORAIN ROAD, SUITE 200
<b>Address Line 4:</b>	NORTH OLMSTED, OHIO 44070
<b>ATTORNEY DOCKET NUMBER:</b>	TIA-45760
<b>NAME OF SUBMITTER:</b>	KAZUTO ISHIHARA
<b>SIGNATURE:</b>	/Kazuto Ishihara/
<b>DATE SIGNED:</b>	06/25/2019
<b>Total Attachments: 1</b>	
source=45760_Assignment#page1.tif	

ASSIGNMENT

For good and valuable consideration received of the hereinafter named assignee(s), receipt of which is hereby acknowledged, we the undersigned, **Sumio KATO, Masataka OGASAWARA, Toshiharu MORIYA, Katsuya IWASHINA, and Hironori IWAKURA** hereby sell and assign to **Mitsui Mining & Smelting Co., Ltd.**, a corporation of the country of Japan and having a place of business at **1-11-1, Osaki, Shinagawa-ku, Tokyo 141-8584 Japan**, assignee's successors and assigns, the entire right, title and interest, so far as concerns the United States and the Territories and Possessions thereof and all foreign countries, in and to the inventions in

**DELAFOSSITE-TYPE OXIDE FOR EXHAUST GAS PURIFICATION CATALYST, AND EXHAUST GAS PURIFICATION CATALYST USING SAME**

set forth in the application for United States Letters Patent executed by the undersigned on the respective dates set forth below, said application for United States Letters Patent, any and all other applications for Letters Patent on said inventions in countries foreign to the United States, including all divisional, renewal, substitute, continuation and Convention applications based in whole or in part upon said inventions or upon said applications, and any and all Letters Patent and reissues and extension of Letters Patent granted for said inventions or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said applications and said Letters Patent; said assignee being hereby authorized to file patent applications in any or all countries on any or all said inventions in the name of the undersigned or in the name of said assignee or otherwise as said assignee may deem advisable, under the International Convention or otherwise; the Commissioner of Patents of the United States of America and the empowered officials of all other governments being hereby authorized to issue or transfer all said Letters Patent to said assignee in accordance herewith; this assignment being under covenant, not only that full power to make the same is had by the undersigned, but also that such assigned right is not encumbered by any grant, license, or other right heretofore given, and that the undersigned will do all acts reasonably serving to assure that the said inventions, patent applications and Letters Patent shall be held and enjoyed by said assignee as fully and entirely as the same could have been held and enjoyed by the undersigned if this assignment had not been made, and particularly to execute and deliver to said assignee all lawful documents including petitions, specifications, oaths, assignments, invention disclaimers, and lawful affidavits in form and substance which may be requested by said assignee, to furnish said assignee with all facts relating to said inventions or the history thereof and any and all documents, photographs, models, samples or other physical exhibits which may be useful for establishing the facts of conception, disclosure and reduction to practice of said inventions, and to testify in any proceedings relating to said inventions, patent applications and Letters Patent.

Attested by:

Signed:

Dated:

Tatsuhito Yamamoto

Sumio Kato  
Sumio KATO

April 22, 2019

Tatsuhito Yamamoto

Masataka Ogasawara  
Masataka OGASAWARA

April 22, 2019

Takao Taguchi

Toshiharu Moriya  
Toshiharu MORIYA

March 11, 2019

Takao Taguchi

Katsuya Iwashina  
Katsuya IWASHINA

March 12, 2019

Takao Taguchi

Hironori Iwakura  
Hironori IWAKURA

March 11, 2019