504961800 06/15/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5008547

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAISUKE HIGASHI	04/16/2018
YUSUKE MATSUDA	04/16/2018
SATORU KUKINO	04/19/2018
TAKASHI KANDA	04/19/2018
KATSUMI OKAMURA	04/23/2018

RECEIVING PARTY DATA

Name:	SUMITOMO ELECTRIC HARDMETAL CORP.
Street Address:	1-1, KOYAKITA 1-CHOME
City:	ITAMI-SHI, HYOGO
State/Country:	JAPAN
Postal Code:	664-0016
Name:	SUMITOMO ELECTRIC INDUSTRIES, LTD.
Name: Street Address:	SUMITOMO ELECTRIC INDUSTRIES, LTD. 5-33, KITAHAMA 4-CHOME, CHUO-KU
	·
Street Address:	5-33, KITAHAMA 4-CHOME, CHUO-KU

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16062686

CORRESPONDENCE DATA

Fax Number: (202)344-8300

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PATENT REEL: 046096 FRAME: 0927

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ATTORNEY DOCKET NUMBER:	092396.432621	
NAME OF SUBMITTER:	KAILE R. MACKEVERICAN	
SIGNATURE:	/Kailie R. MacKeverican/	
DATE SIGNED:	06/15/2018	
Total Attachments: 4		
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PATENT REEL: 046096 FRAME: 0928

ATTORNEY DOCKET NO.

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

		Application No.	Filed	****
Insert Name(s) of Inventor(s)	***	WHEREAS,	(1) Taisuke HIGASHI, (2) Yusuke MATSUDA,	
or anyonicon(o)		(3)Satoru KU	JKINO, (4) Takashi KANDA and (5) Katsumi OKAMURA	
Insert Title of Invention	-	(hereinafter designated Cutting Tool	ted as the undersigned) has (have) invented certain new and useful improvements	in
Insert Date of		and the second s	sation for Letters Patent of the United States of America has been execute in the case of a provisional application).	d by the
Signing of Application	-	on April 16,	April 17, April 19 and April 23, 2018	; and
Insert Name ⇒ of Assignee	=	WHEREAS,	(1) SUMITOMO ELECTRIC HARDMETAL CORP. and	
		(2)Sumitomo	Electric Industries, Ltd.	
Insert Address of Assignee	-		Koyakita 1-chome, Itami-shi, Hyogo 664-0016 Japa ahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0041	
CHECK BOX IF APPROPRIATE	→	desirous of acquir	ors, legal representatives and assigns (hereinafter designated as the Assi ing the entire right, title and interest in and to said invention and in and that may be granted therefor in the United States of America and foreign countries.	-
		hand paid, the rece the undersigned ha and transfer unto s of America, its terr to any and all Lett	EFORE, in consideration of the sum of Ten Dollars (\$10.00) to the underselept of which is hereby acknowledged, and other good and valuable considuas (have) sold, assigned and transferred, and by these presents does selevated Assignee the full and exclusive right to the said invention in the United ritories, dependencies and possessions and the entire right, title and interesters Patent(s) which may be granted therefor in the United States of America and possessions, and if the box above is designated, in any and also a support of the said invention in the united States of America and possessions, and if the box above is designated, in any and also account of the said invention in the united States of America and possessions, and if the box above is designated, in any and also account of the said invention in the united States of America and possessions, and if the box above is designated, in any and also account of the said invention in the united States of America and possessions, and if the box above is designated, in any and also account of the said invention in the united States of America and possessions, and if the box above is designated, in any and also account of the said invention in the united States of America and Invention in the U	deration, II, assign d States st in and erica, its

PATENT REEL: 046096 FRAME: 0929

term or terms for which the same may be granted.

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agree(s) to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorize(s) the request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents resulting from said application or any continuing, divisional, conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Venable LLP the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

The undersigned hereby covenant(s) that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

(1) Date Apr: 16, 20(8	Name of Inventor Vaisure Higashi Taisuke HIGASHI
(2) Date	Name of InventorYusuke MATSUDA
(3) Date April 19.2018	, Name of Inventor Satoru Keeking
	Satoru KUKINO , Name of Inventor Takashi KOKDA
•	Takashi KANDA . Name of Inventor Katsumi Chamura
	Katsumi OKAMURA , Name of Inventor
(7) Date	

ATTORNEY DOCKET NO.

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

ASSIGNMENT

		Application No.	Filed	
Insert Name(s) of Inventor(s)	-	WHEREAS,	(1)Taisuke HIGASHI, (2)Yusuke MATSUDA,	
		(3)Satoru KU	JKINO, (4)Takashi KANDA and (5)Katsumi OKAMURA	
Insert Title of Invention	-	(hereinafter designate Cutting Tool	ted as the undersigned) has (have) invented certain new and useful improvements in	
Insert Date of			nation for Letters Patent of the United States of America has been executed by in the case of a provisional application).	the
Signing of Application	-	on April 16	6, 2018 : and	
Insert Name	-	WHEREAS,	(1) SUMITOMO ELECTRIC HARDMETAL CORP. and	
of Assignee		(2)Sumitomo	Electric Industries, Ltd.	
Insert Address of Assignee	-	of (1)1-1, F	Koyakita 1-chome, Itami-shi, Hyogo 664-0016 Japan a	nd
or resigned		(2)5-33, Kita	ahama 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0041 Japa	an
CHECK BOX F APPROPRIATE	-	desirous of acquiri	ors, legal representatives and assigns (hereinafter designated as the Assignee) ing the entire right, title and interest in and to said invention and in and to a that may be granted therefor in the United States of America and foreign countries.	
		hand paid, the rece the undersigned ha and transfer unto s of America, its terri to any and all Lette	EFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned eipt of which is hereby acknowledged, and other good and valuable considerations (have) sold, assigned and transferred, and by these presents does sell, assigned the full and exclusive right to the said invention in the United State itories, dependencies and possessions and the entire right, title and interest in a ters Patent(s) which may be granted therefor in the United States of America, encies and possessions, and if the box above is designated, in any and all foreign.	ion, sign tes and its
		and to any and all	divisions, reissues, continuations, conversions and extensions thereof for the f	full

term or terms for which the same may be granted.

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In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).

(1) Date	, Name of Inventor
	Taisuke HIGASHI Name of Inventor Y MATSUDA
(3) Date	, Name of Inventor
(4) Date	, Name of Inventor
(5) Date	, Name of Inventor
(6) Date	, Name of Inventor
(7) Date	, Name of Inventor