01/15/2019 505279318

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5326090

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YOSUKE SHIMAMOTO	11/30/2018
NAOKI MATSUDA	12/03/2018
HIDEO MAENO	12/03/2018
JUNYA OKIDA	11/29/2018

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Street Address:	1-1, KOYAKITA 1-CHOME
City:	ITAMI-SHI, HYOGO
State/Country:	JAPAN
Postal Code:	664-0016

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16318021

CORRESPONDENCE DATA

Fax Number: (202)344-8300

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Phone: 202-344-4000

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MICHAEL A. SARTORI, PH.D. **Correspondent Name:**

Address Line 1: P.O. BOX 34385 Address Line 2: **VENABLE LLP**

Address Line 4: WASHINGTON, D.C. 20043-9998

ATTORNEY DOCKET NUMBER:	092396.496051
NAME OF SUBMITTER:	KAILIE R. MACKEVERICAN
SIGNATURE:	/Kailie R. MacKeverican/
DATE SIGNED:	01/15/2019

Total Attachments: 4

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> **PATENT REEL: 048013 FRAME: 0746** 505279318

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PATENT REEL: 048013 FRAME: 0747

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

ASSIGNMENT

		Application No.				Filed	÷	•••••	
nsert Name(s) of Inventor(s)	-	WHEREAS, Junya OKIDA	Yosuke SH	IMAMOTO,	Naoki M	IATSUDA,	Hideo	MAENO,	and
nsert Title of Invention		(hereinafter designa Cutting Inse		gned) has (hav	e) invented (certain new a	nd useful ir	nprovemen	ts in
nsert Date of Signing of Application Insert Name of Assignee	•	for which an applic undersigned (except on Novemb on Decemb WHEREAS,		nrovisional appl 18, Nove 8	ication). mber 3(0, 2018	, and	een execu	ted by the
nsert Address of Assignee	•	of 1-1, Koy	akita 1-cho	ome, Itan	i-shi,	Hyogo 60	54-0016	5 Japan	
CHECK BOX F APPROPRIATE	-	its heirs, successed desirous of acquir Letters Patent(s) in any and all the NOW, THER hand paid, the recothe undersigned herecondesigned her	ng the entire ri that may be gran oreign countries FORE, in consider the properties of the consideration in the consideration of which is	ght, title and nted therefor s. deration of th hereby ackno	interest in in the Unit ne sum of T wledged, a	and to said ed States of en Dollars (nd other goo	I invention America \$10.00) to od and val	n and in a and o the unde uable con	nd to any ersigned in sideration,

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

PATENT REEL: 048013 FRAME: 0748 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 patent(s) or 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 November 30 2018 ,	Name of Inventor Yosuke Shimamoto Yosuke SHIMAMOTO	
(2) Date <u>December 3, 2018</u> .	Name of Inventor Nack: Marsuda	
	Naoki MATSUDA Name of Inventor Hideo Maeno	
(3) Date	Hideo MAENO	•••
(4) Date	Name of Inventor Junya OKIDA	
(5) Date	Name of Inventor	
(6) Date	Name of Inventor	***
(7) Date	Name of Inventor	

- 1	ATTORNEY	DOCKET	NO.
	f:		

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

ASSIGNMENT

		Application No.	Filed	
Insert Name(s) of Inventor(s)	*** ***	WHEREAS, Yosuke S Junya OKIDA	HIMAMOTO, Naoki MATSUDA, Hideo MAENO, a	and
Insert Title of Invention	**************************************	(hereinafter designated as the under Cutting Insert	rsigned) has (have) invented certain new and useful improvements	in
Insert Date of Signing of Application Insert Name of Assignee	200\$	undersigned (except in the case of a November 29, 20) on December 3, 2	2018, November 30, 2018, and	d by the
Insert Address of Assignee	:: : ::::::::	of 1-1, Koyakita 1-c	chome, Itami-shi, Hyogo 664-0016 Japan	
CHECK BOX IF APPROPRIATE		desirous of acquiring the entire Letters Patent(s) that may be grain any and all foreign countring NOW, THEREFORE, in con-	esentatives and assigns (hereinafter designated as the Assi e right, title and interest in and to said invention and in and granted therefor in the United States of America and ries. Insideration of the sum of Ten Dollars (\$10.00) to the unders is hereby acknowledged, and other good and valuable consideration.	d to any

NOW, THEREFORE, in consideration of the sum of Ten Dollars (\$10.00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries;

and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

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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.

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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			11110
	<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	ž	osuke SHIMAMOTO)	
(2) Date _。		Name of Inventor	Naoki MATSUDA		Luci
(3) Date ,	·····			· · · · · · · · · · · · · · · · · · ·	derrie:
(4) Date (Vovember 29, 2018.		ideo MAENO Junya OKIYA	Ohrl	*****
(6) Date	······································	Name of Inventor			acces :
(7) Date		Name of Inventor	***************************************		manana (

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