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PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Keiichiro Mori	05/18/2012
Makoto Takemura	05/18/2012

RECEIVING PARTY DATA

Name:	SUMCO Corporation
Street Address:	2-1, Shibaura 1-chome
Internal Address:	Minato-ku
City:	Tokyo
State/Country:	JAPAN
Postal Code:	1058634

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13512735

CORRESPONDENCE DATA

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Mail.

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ATTORNEY DOCKET NUMBER: 109684-28

NAME OF SUBMITTER: Thomas J. Engellenner

Total Attachments: 4

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> PATENT REEL: 028288 FRAME: 0710

OP \$40 00 13512735

ASSIGNMENT BY INVENTOR

THIS ASSIGNMENT, made by Keiichiro MORI, c/o SUMCO CORPORATION, 2-1, Shibaura 1-chome, Minato-ku, Tokyo 1058634 Japan (hereinafter referred to as Assignor(s));

WHEREAS, Assignor has invented certain new and useful improvements CLEANING METHOD, set forth in application the specification of which was filed on 29 September, 2010 as PCT International Application Number PCT/JP2010/005868.

WHEREAS, SUMCO Corporation having a place of business at 2-1, Shibaura 1-chome, Minato-ku, Tokyo 1058634 Japan (hereinafter referred to as Assignee), desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignor has sold, assigned, transferred and set over, and by these presents sell, assign, transfer and set over, unto Assignee, successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and any and all Letters Patent in the United States and all foreign countries which may be granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by Assignee, for own use and benefit and the use and benefit of successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignor, had this sale and assignment not been made.

AND for the same consideration, Assignor hereby represent and warrant to Assignee, successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignor is the sole and lawful owner of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignor hereby covenant and agree to and with Assignee, successors, legal representatives and assigns, that Assignor will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of

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any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignor hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, successors, legal representatives and assigns.

AND Assignor hereby grant the following individuals 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 United States Patent and Trademark Office for recordation of this document:

NUTTER MCCLENNEN & FISH LLP

All practitioners at Customer Number 21125

AND Assignor acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

WITNESS my hand and seal this	18	_ da;	y of	<u>May</u>		
		By:	Keli	chiro	MORI	
		-	Keiich	iro MOR		•

ASSIGNMENT BY INVENTOR

THIS ASSIGNMENT, made by Makoto TAKEMURA, c/o SUMCO CORPORATION, 2-1, Shibaura 1-chome, Minato-ku, Tokyo 1058634 Japan (hereinafter referred to as Assignor(s));

WHEREAS, Assignor has invented certain new and useful improvements CLEANING METHOD, set forth in application the specification of which was filed on 29_September.2010 as PCT International Application Number PCT/JP2010/005868.

WHEREAS, SUMCO Corporation having a place of business at 2-1, Shibaura 1-chome, Minato-ku, Tokyo 1058634 Japan (hereinafter referred to as Assignce), desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

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AND for the same consideration, Assignor hereby represent and warrant to Assignee, successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignor is the sole and lawful owner of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND for the same consideration, Assignor hereby covenant and agree to and with Assignee, successors, legal representatives and assigns, that Assignor will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of

PATENT REEL: 028288 FRAME: 0713 any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

AND Assignor hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters Patent to be issued thereon, for the sole use and benefit of Assignee, successors, legal representatives and assigns.

AND Assignor hereby grant the following individuals 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 United States Patent and Trademark Office for recordation of this document:

NUTTER MCCLENNEN & FISH LLP

All practitioners at Customer Number 21125

AND Assignor acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

WITNESS my hand and seal this _	18	day of _	May .	
		- M	at	Takemura
				KEWITE V