501935115 05/25/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Noboru KATO	05/21/2012

RECEIVING PARTY DATA

Name:	MURATA MANUFACTURING CO., LTD.
Street Address:	10-1, Higashikotari 1-chome
Internal Address:	Nagaokakyo-shi
City:	Kyoto-fu
State/Country:	JAPAN
Postal Code:	617-8555

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13481694

CORRESPONDENCE DATA

Fax Number: (703)390-1277 Phone: 7033909051

Email: dave.washington@sbpatentlaw.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name: STUDEBAKER BRACKETT PC
Address Line 1: 12700 Sunrise Valley Drive

Address Line 2: Suite 102

Address Line 4: Reston, VIRGINIA 20191

ATTORNEY DOCKET NUMBER: 002000-102

NAME OF SUBMITTER: Donald R. Studebaker

Total Attachments: 1 source=ASN#page1.tif

PATENT

REEL: 028273 FRAME: 0886

OF \$40.00 13481694

STUDEBAKER & BRACKETT PC

Attorney Docket No. 002000-102

ASSIGNMENT OF APPLICATION FOR UNITED STATES LETTERS PATENT

including any and all renewals, reiseues and prolongations trieffor, for the said assigner as successors and assigns, in as ample and beneficial a manner as the said assignor might or could have held and enjoyed the same, if this assignment had not been made. AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof. AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith. The undersigned hereby grant(s) the law firm of STUDEBAKER & BRACKETT PC 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.	Sugar Sugar Salay Salay Sugar Salay Sugar Salay Sugar	
X the inventor(s) declaration for said application being executed concurrently with the execution of this instrument, said application to be filed in the United States Patent and Trademark Office; said application having been filed in the United States Patent and Trademark Office on, authorization being hereby given to the practitioners associated with the STUDEBAKER & BRACKETT PC authorization being hereby given to the practitioners associated with the STUDEBAKER & BRACKETT PC authorization being hereby given to the practitioners associated with the STUDEBAKER & BRACKETT PC authorization being hereby given to the practitioners associated with the STUDEBAKER & BRACKETT PC authorization being hereby given to the practitioners associated with the STUDEBAKER & BRACKETT PC authorization being hereby given to the patent practice of the state of America being designated.	WHEREAS Noboru KATO herainafter referred to collectively as the assignor, has invented a certain improvement relating to:	nement west. S.
[] said application having been filed in the United States Patent and Trademark Office on, authorization being hereby given to the practitioners associated with the STUDEBAKER & BRACKETT-PC CUSTOMER NUMBER 78198. to insert here in parentheses (Application Serial No		
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Serial No	[] sald application having been filed in the United States Patent and Trademark Office on, authorization being hereby given to the practitioners associated with the <u>Srudebaker & Bracket Customer Number 78198</u> , to insert here in parentheses (Application Serial No) the application united by the property of sald application when known;	
Nagokakyo-shi, Kyoto-fu 617-8555, JAPAN, nerematier reterred to a first earlier in this, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said easignee to said assignor, the receipt of which is hereby acknowledged, said assigns, the full and assigns, sells and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof; seid assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patents which may be granted therefor, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and benefical a manner as the said assignee, and said assignee's successors and assigns, in as ample and benefical a manner as the said assignee, and said assignee's successors and assigns, in as ample and benefical a manner as the said assignee's successors or assigns, any and all facts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof. AND said assigner authorizes and reques	[] said application having been flied under the Patent Cooperation Treaty on Serial No, the United States of America being designated.	
NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration paid by said assignee to said assigner, the receipt of which is hereby acknowledged, said assigner hereby assigns, selfs and transfers to said assignee, and said assignee's successors and assigns, the full and exclusive right, title and interest in and to said application, including any and all divisions and continuations thereof, and in and to said invention and any and all patients which may be granted therefor, including any and all renewals, reissues and prolongations thereof; seid assignee, and said assignee's successors and assigns, to have, hold, exercise and enjoy the said application, including any and all divisions and continuations thereof, and the said invention and any and all patients which may be granted therefor, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise arising from or appertaining thereto, for and during the term or terms of any and all such patients when granted, including any and all renewals, reissues and prolongations thereof, for the use and benefit of said assignee, and said assignee's successors and assigns, in as ample and beneficial a manner as the said assignee, or could have held and enjoyed the same, if the assignment had not been made. AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof. AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith. The undersigned hereby grant(s) the law firm of STUDEBAKER & BRACKETT PC the power to insert on this Assignment has been exec	Nagaokakyo-shi, Kyoto-fu 617-8555, JAPAN, hereinanter referred to as the assigned, the sale and interest in and to said application, including any and all divisions and continuithe entire right, title and interest in and to said invention and any and all patents which may be granted therefor, including an all repeateds, referred to as the results and prolongations thereof;	ations y and
AND said assignor hereby agrees to perform, upon the request of said assignee, or said assignee's successors or assigns, any and all acts relating to the obtaining or to the asserting of said patents, including any and all renewals, reissues and prolongations thereof. AND said assignor authorizes and requests the Commissioner of Patents and Trademarks to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said assignee, and said assignee's successors and assigns, in accordance herewith. The undersigned hereby grant(s) the law firm of STUDEBAKER & BRACKETT PC 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. This Assignment has been executed by the undersigned on the date(s) opposite the undersigned name(s).	NOW, that for and in consideration of One Dollar (\$1.00), and other good and valuable consideration by said assignee to said assignor, the receipt of which is hereby acknowledged, said assignor is assigne, sells and transfers to said assignee, and said assignee's successors and assigns, the ful exclusive right, title and interest in and to said application, including any and all divisions and continue thereof, and in and to said invention and any and all patents which may be granted therefor, including any all renewals, reissues and prolongations thereof; seid assignee, and said assignee's successors and as to have, hold, exercise and enjoy the said application, including any and all divisions and continuations to have, hold, exercise and enjoy the said application, including any and all divisions and continuations to have, hold, exercise and any and all patents which may be granted therefor, including any and all renewals in anywise reissues and prolongations thereof, with all the rights, powers, privileges and advantages in anywise from or appertaining thereto, for and during the term or terms of any and all such patents when granted thereof, for the use and benefit of said assigned assignee's successors and assigns, in as ample and beneficial a manner as the said assigned and said assignee's successors and assigns, in as ample and beneficial a manner as the said assigned as could have beld and enjoyed the same, if this assignment had not been made.	II and ations ations by and signs, sereof, exals, arising anted, ignee, might
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Dete: May 21, 2014 Signature: Noboru KATO	name(s).	
	Date: May 21, 2014 Signature: Noboru KATO Name: Noboru KATO	-yanganagsagag

PATENT REEL: 028273 FRAME: 0887

RECORDED: 05/25/2012