PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Shinya IWASA	05/23/2011

RECEIVING PARTY DATA

Name:	Elpida Memory, Inc.
Street Address:	2-1, Yaesu 2-chome
City:	Chuo-ku, Tokyo
State/Country:	JAPAN
Postal Code:	104-0028

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13117864

CORRESPONDENCE DATA

Fax Number: (202)293-7860

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 202-293-7060

Email: bmurray@SUGHRUE.COM
Correspondent Name: SUGHRUE MION, PLLC

Address Line 1: 2100 PENNSYLVANIA AVENUE, N.W.

Address Line 2: SUITE 800

Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20037

ATTORNEY DOCKET NUMBER: Q124858

NAME OF SUBMITTER: Brian T. Murray, New Appl. Specialist

Total Attachments: 1

source=ASSIGNMENT_AS_FILED#page1.tif

OP \$40.00 13117

PATENT REEL: 026362 FRAME: 0431

Assignment

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUB MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011 the filing date and application number of said application when known. Date: May 23, 2011	hereinafter collec	i secionaria	hase jegnantad and	ais impragaments in	POPPER PROGRAMMENT OF THE PROGRA
Whereas, Elpida Memory, Inc. 2-1, Yaesu 2-chome, Chuo-ku, Tokyo 104-0028 Japan (assignce), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor; Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assigns (s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assignes; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011	SEMICONDUCT	OR DEVICE	HAVING ESD ST	RUCTURE	**************************************
Whereas, Elpida Memory, Inc. 2-1, Yaesu 2-chome, Chuo-ku, Tokyo 104-0028 Japan (assignce), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor; Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assigns(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – U.S. Patent and Trademark Office to issue any Lotters Patent granted upon the invention set forth in the application to the assignee, its successors and assignes; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUB MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011	AADUUDAA, marana marana cayaa aa				PROFESSIONAL PROFE
Whereas, Elpida Memory, Inc. 2-1, Yaesu 2-chome, Chuo-ku, Tokyo 104-0028 Japan (assignce), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor; Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011 the filing date and application number of said application when known. Date: May 23, 2011 Junga Junas Shinya iWASA Date: Other May 23, 2011 Junas Sugara Called evidence of execution under 35 U.S.C. §261)				the United States of An	nerica therefor on
2-1, Yaesu 2-chome, Chuo-ku, Tokyo 104-0028 Japan (assignce), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor; Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011 the filing date and application number of said application when known. Date: May 23, 2011			10 ti	mory Inc	
(assignce), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor; Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignce in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUB MION, PLLC of 2100 Pennsylvania Aveaue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117.864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011	Whereas,	***************************************	· · · · · · · · · · · · · · · · · · ·	THE REPORT OF THE PERSON OF TH	
(assignce), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor; Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assigns(s), hereby sell, assign and transfer to the above named assignce, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011		***************************************			
Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director – U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011 the filing date and application number of said application when known. Date: May 23, 2011 Junya Junya Shinya IWASA Date: s/ Date: s/ Chegalization not required for recording but is prima facio evidence of execution under 35 U.S.C. §261)		10890 104	HUZO Japan	endabbes/bescore v	
Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011 the filing date and application number of said application when known. Date: May 23, 2011 Junga Juna Juna Signification when known. Date: May 23, 2011 Junga Juna Juna Signification when known. Chegalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)		ě			· · · · · · · · · · · · · · · · · · ·
Now therefore, for valuable consideration, receipt whereof is hereby acknowledged, I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011					the application and
I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUB MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011 the filing date and application number of said application when known. Date: May 23, 2011 Junga Junga Junga Shinya IWASA Date: Solution not required for recording but is prima facic evidence of execution under 35 U.S.C. §261)		•	-		
assignce, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUB MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 , filled May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011		•	•	-	• -
invention disclosed therein for the United States of America, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director—U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUB MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya WASA Date: S/ Date: S/ Date: S/ Clegalization not required for recording but is prima facic evidence of execution under 35 U.S.C. §261)					
under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011 the filing date and application number of said application when known. Date: May 23, 2011 Shinya IWASA Date: S/ Date: S/ Date: S/ Clegalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)					
under 35 U.S.C. §119, and I/we request the Director — U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011 the filing date and application number of said application when known. Date: May 23, 2011 Shinya IWASA Date: S/ Date: S/ Date: S/ Clegalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)	nvention disclos	sed therein fo	r the United States	of America, including	the right to claim priority
any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117.864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya IWASA Date: S/ Date: S/ Chegalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)					
Successors and assigns; and Twee will execute without further consideration all papers deemed necessary by the assignee in connection with the United States application when called upon to do so by the assignee. If we hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya WASA Date: Story A Character of execution under 35 U.S.C. \$261) Chegalization not required for recording but is prima facie evidence of execution under 35 U.S.C. \$261)	any Letters Pater	at arouted the	on the invention se	t forth in the application	to the assionee its
necessary by the assignee in connection with the United States application when called upon to do so by the assignee. It hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya WASA Date: S/ Date: S/ CLegalization not required for recording but is prima facie evidence of execution under 35 U.S.C. \$261)					
I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117.864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya IWASA Date: s/ Date: s/ Date: s/ Date: s/ Date: s/ Clegalization not required for recording but is prima facile evidence of execution under 35 U.S.C. §261)					
I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117.864 and Confirmation number 8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya WASA Date: s/ Date: s/ Date: s/ CLegalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)	successors and a	ssigns; and I/	we will execute wi	thout further considerat	ion all papers deemed
Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number 13/117,864 and Confirmation number 8486 filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya IWASA Date: s/ Date: s/ Date: s/ CLegalization not required for recording but is prima facile evidence of execution under 35 U.S.C. \$261)	successors and a necessary by the	ssigns; and I/ assignce in c	we will execute wi	thout further considerat	ion all papers deemed
(Application number 13/117.864 and Confirmation number 8486 filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya Chuasa Shinya IWASA Date: S/ Date: S/ CLegalization not required for recording but is prima facile evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi	ssigns; and I/ assignee in c gnee.	we will execute wi connection with the	thout further considerate United States applicati	tion all papers deemed on when called upon to
8486 , filed May 27, 2011) the filing date and application number of said application when known. Date: May 23, 2011 Shinya Wasa Shinya IWASA Date: S Date: S CLegalization not required for recording but is prima facile evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We her	ssigns; and I/ assignce in c gnee. cby authorize	we will execute wi connection with the and request our at	thout further considerate United States application to the total of th	ion all papers deemed on when called upon to ON, PLLC of 2100
and application number of said application when known. Date: May 23, 2011 Shinya IWASA Date: St Date: St Chegalization not required for recording but is prima facine evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Ay	ssigns; and I/ assignce in c gnee. eby authorize eby, NW, V	we will execute with the connection with the and request our at Yashington, DC 20	thout further considerate United States application to the states application to the states applicated to the states appl	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses
Date: May 23, 2011 Shinya IWASA Date: S Date: S CLegalization not required for recording but is prima facile evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nu	ssigns; and I/ assignce in c gnee. eby authorize renue, NW, V nber13	we will execute with the connection with the cand request our at Washington, DC 20/117,864	thout further considerate United States application torneys SUGHRUE MI 037-3213 to insert here and Confirmation n	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
Date: St Date: St Chegalization not required for recording but is prima facing evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nur 8486	ssigns; and I/ assignce in c gnee. eby authorize ehue, NW, V nber13	we will execute with the connection with the cand request our at Washington, DC 20/117.864	thout further considerate United States application torneys SUGHRUE MI 037-3213 to insert here and Confirmation in 27, 2011	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
Date: St Date: St Chegalization not required for recording but is prima facile evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nur 8486	ssigns; and I/ assignee in c gnee. eby authorize /enue, NW, V nber13	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
Date: St Date: St Chegalization not required for recording but is prima facing evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nu 8486 and application 1	ssigns; and I/ assignee in c gnee. eby authorize /enue, NW, V nber13	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
Date: St Date: St Chegalization not required for recording but is prima facile evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nu 8486 and application 1	ssigns; and I/ assignee in c gnee. eby authorize /enue, NW, V nber13	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
Date: State: Sta	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nu 8486 and application 1	ssigns; and I/ assignee in c gnee. eby authorize /enue, NW, V nber13	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
Date: s/ (Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application num 8486 and application in the document of the second of the sec	ssigns; and I/ assignee in c gnee. eby authorize /enue, NW, V nber13	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
s/ (Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application num 8486 and application in the document of the second of the sec	ssigns; and I/ assignce in c gnee. eby authorize venue, NW, V nber13 aumber of sai	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
s/ (Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nur. 8486 and application 1 Date: May 23 Date:	ssigns; and I/ assignce in c gnee. eby authorize venue, NW, V nber13 aumber of sai	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
s/ (Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nur. 8486 and application 1 Date: May 23 Date:	ssigns; and I/ assignce in c gnee. eby authorize venue, NW, V nber13 aumber of sai	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)	successors and a necessary by the do so by the assi I/We her Pennsylvania Av (Application number 8486 and application in May 23 Date: May 23 Date: Date:	ssigns; and I/ assignce in c gnee. eby authorize venue, NW, V nber13 aumber of sai	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application number 8486 and application in May 23 Date: May 23 Date: Date:	ssigns; and I/ assignee in c gnee. eby authorize /enue, NW, V nber13 number of sai , 2011 s/ s/	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nur. 8486 and application i Date: May 23 Date: Date:	ssigns; and I/ assignee in c gnee. eby authorize /enue, NW, V nber13 number of sai , 2011 s/ s/	was will execute with the connection with the cand request our at Washington, DC 20 /117.864 May did application when	thout further considerate United States application to the states application to the states application of the states application of the states application of the states and Confirmation of the states are states and Confirmation of the states are states as a state of the states application of the states are states as a state of the states are state	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number
Witness: Ship grad	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application numerical and application numerical Date: Date: Date: Date:	ssigns; and I/ assignee in c gnee. cby authorize /enue, NW, V mber 13 number of sai , 2011 s/ s/	we will execute with the connection with the cand request our at Washington, DC 20/117,864 If filed May in a phing a Shinya IWASA	thout further considerate United States applicate torneys SUGHRUE MI 037-3213 to insert here and Confirmation in 27, 2011 is known.	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number) the filing date
find the state of	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application nu 8486 and application i Date: Date: Date:	ssigns; and I/ assignee in c gnee. cby authorize /enue, NW, V mber 13 number of sai , 2011 s/ s/	we will execute with the connection with the cand request our at Washington, DC 20/117,864 If filed May in a phing a Shinya IWASA	thout further considerate United States applicate torneys SUGHRUE MI 037-3213 to insert here and Confirmation in 27, 2011 is known.	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number) the filing date
	successors and a necessary by the do so by the assi I/We hen Pennsylvania Av (Application number 8486 and application number May 23 Date: May 23 Date: Calcium May 23 Date: May 23	ssigns; and I/ assignee in c gnee. cby authorize /enue, NW, V mber13 number of sai , 2011 s/ s/ s/	we will execute with the connection with the cand request our at Washington, DC 20/117,864 If filed May in a phing a Shinya IWASA	thout further considerate United States applicate torneys SUGHRUE MI 037-3213 to insert here and Confirmation in 27, 2011 is known.	ion all papers deemed on when called upon to ON, PLLC of 2100 in parentheses number) the filing date

PATENT REEL: 026362 FRAME: 0432

RECORDED: 05/31/2011