### 502737343 03/25/2014

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT2783947 Stylesheet Version v1.2

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Yumiko OSHIKA	03/25/2014
Chisato YOSHIMURA	03/25/2014
Chie NAKASHIMA	03/25/2014

### **RECEIVING PARTY DATA**

Name:	Brother Kogyo Kabushiki Kaisha				
Street Address:	ss: 15-1 Naeshiro-cho, Misuho-ku				
City:	Nagoya-shi, Aichi-ken				
State/Country:	Japan				
Postal Code:	467-8561				

## **PROPERTY NUMBERS Total: 1**

Property Type	Number			
Application Number:	14224521			

### **CORRESPONDENCE DATA**

**Fax Number:** (703)836-2787

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

US Mail.

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Email: email@oliff.com
Correspondent Name: JAMES A. OLIFF
Address Line 1: OLIFF, PLC

Address Line 2: P.O. BOX 320850

Address Line 4: ALEXANDRIA, VIRGINIA 22320-4850

ATTORNEY DOCKET NUMBER: 159979

NAME OF SUBMITTER: ANGELA M. NOLAN

SIGNATURE: /Angela M. Nolan/

DATE SIGNED: 03/25/2014

**Total Attachments: 1** 

502737343

source=3.25.14 159979 Assignment#page1.tif

PATENT REEL: 032518 FRAME: 0881

## **ASSIGNMENT**

(1-9) Insert Name (s) (3) Chisato YOSHIMURA (6) (6) Insert Name (s) (7) Chisato YOSHIMURA (7) (7) Insert Name of Assignee (10) Insert Name of Insert Na		•	(1)	Yumiko OSI	HIKA	enners es en d'étable en en man	(5)			
(1) Insert Name of Assignee (10) Sent Hand (11) Insert Identification for the content of the con	(1-8)	Insert	(2)	Chisato YO	SHIMURA		(6)			
19   In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each Name of Assignee   19   BROTHER KOGYO KABUSHIKI KAISHA   16-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi-ken, 467-8581 Japon (herdinafter designated as the Assignee)   15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi-ken, 467-8581 Japon (herdinafter designated as the Assignee)   15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi-ken, 467-8581 Japon (herdinafter designated as the Assignee)   15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi-ken, 467-8581 Japon (herdinafter designated as the Assignee)   15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi-ken, 467-8581 Japon (herdinafter designated as the Assignee)   15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi-ken, 467-8581 Japon (herdinafter designated has the Assignee)   15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi-ken, 467-8581 Japon (herdinafter designated has the Assignee)   15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi-ken, 467-8581 Japon   15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Alchi			(3)	Chie NAKAS	SHIMA		(7)			
In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(t) to assign, and hereby does assign, transfer and as over to Assignee  (10) Insert Address of Assignee  (110) Insert Address of Assignee  (121) Insert Address of Assignee  (122) Insert Date of State of Sta			(4)							
Assignee (10) Insert Address of Assignee (10) Insert Address of Assignee (10) Insert Address of Assignee (11) Insert (hereinafter designated as the Assignee) the entire right, title and laterest for the United States of America as defined in 35 U.S.C. §100. In the Invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, substitute, and relissue application(s), and all Letter Patent, extractiscien, resesues and reexamination certificates that may be granted on the invention known as for invention such as Title, Case Number, or Foreign Application Number  (Attorney Docket Nc. 159979 for which the undersigned has (have) executed an application for patent in the United States of America (12) Insert Date of Signing of Signing of Signing of Application  (13) Alternative (13) U.S. application Seniel Number Identification for filled applications filled March 25, 2014  (13) Alternative (14) U.S. application Seniel March 25, 2014  (15) Insert Date of Signing of Case and Case				In conside each of the ur	eration of the su	m of one d	ollar (\$1.00) and c			
(12) Insert Date of Signing of (12) on May 15 2014  (Insertable of Signing of Catalogue of Catalogue of Signing of Catalogue of Signing of Catalogue of Cat	(9)		(9)	BROTHER	KOGYO KABU	JSHIKI KA	ISHA			
as defined in 35 U.S.C. \$100, in the invention, and in all applications for patient including any and all Letter Patent, extensions, revisues and reexamination certificates that may be granted on the invention known as the identification of invention such as Title, Case Number, or Foreign Application Number for Foreign Application Number for Foreign Application Number for Which the undersigned has (have) executed an application for patent in the United States of America (12) Insert Date of Signing of (12) on MGY. 25, 2044  Application 1 (13) U.S. application Serial Number Identification for filled applications filled March 25, 2014  1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisional or release applications as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any applications and patents as the Assignees may deem necessary.  3) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any applications on the invention, and any patent(s) issuing thereon, and any interference.  3) The undersigned agree(s) to execute all papers are decuments and perform any act which may be declared concerning any applications or confirmation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and gloing forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with any patent agreements.  4) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with the undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue o reexamination a grant of a valid U	(10)		(10)	15-1 Naesh	15-1 Naeshiro-cho, Mizuho-ku, Nagoya-shi, Aichi-ken, 467-8561 Japan					
Identification of Invention such as Title, Case Number, or Foreign Application Number  for which the undersigned has (have) executed an application for patent in the United States of America  (12) Insert Date of Signing of Application  (13) Alternative (13) U.S. application Serial Number  Identification for filed applications  (14) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisional or release applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with susting papers and patents as the Assignees may deem necessary.  (2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any applications and patents as the Assignees may deem necessary.  (3) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.  (3) The undersigned agree(s) to percent all affirmative acts which may be necessary in connection with calms or provisions of the International Convention for Protection of Industrial Property or similar agreements.  (4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.  (5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) into executed, and will not execute, any agreements in conflic herewith.  (5) The undersigned hereby grant(s) the fi				as defined in 35 U.S.C. §100, in the invention, and in all applications for patent including any and all provisional, non-provisional, divisional, continuation, substitute, and reissue application(s), and all Letters						
Application Number  for Which the undersigned has (have) executed an application for patent in the United States of America  for which the undersigned has (have) executed an application for patent in the United States of America  (12) Insert Date of Signing of (12) on MCX. 2.5, 2.014  (13) Alternative (13) U.S. application Serial Number  (14) Insert Date of Signing of (12) on MCX. 2.5, 2.014  (14) Alternative (13) U.S. application Serial Number  (15) Insert Date of Signing of (12) on MCX. 2.5, 2.014  (16) Alternative (17) U.S. application Serial Number  (17) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisional or elisasue applications and patents as the Assignees may deem necessary.  (2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared conceming any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.  (3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  (4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue o reexamination a grant of a valid United States patent to the Assignee.  (5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and hereby covernatis that he has (they have) not executed, and will not execute, any agreements in conflict herewith.  (5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters	(11)	Identification of Invention	, ,	TEST CHIP			The second secon		And Mark Street	
for which the undersigned has (have) executed an application for patent in the United States of America Signing of Application  (12) on May 125, 204.  Application  (13) Alternative (13) U.S. application Serial Number 14/224,521  (14) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisional or etissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignees may deern necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to ecoperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary to connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue o reexamination a grant of a valid United States patent to the Assignee.  5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) not executed, and will not execute, any agreements in conflic herewith.  6) The undersigned hereby grant(s) the firm of Oliff PLC the power to insert on this assignment any further identification which may be necessary or desirable in order to		Number, or Foreig	n	(Attorney Doc	ket No.	159979	anna ann an a	эрс.нь		
Alternative (13) U.S. application 14/224,521  (13) Alternative (13) U.S. application Serial Number 14/224,521  (14) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignees may deem necessary.  (2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.  (3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  (4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue o reexamination a grant of a valid United States patent to the Assignee.  (5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreements in conflic herewith.  (6) The undersigned hereby grant(s) the firm of Oliff PLC 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.  In witness whereof, executed by the undersigned on the date(s) oppos		<b>+ F</b> · · · · · · · · · · · · · · · · · · ·		for which the u	ndersigned has	(have) exec	uted an applicatio	n for patent in the Un	Ited States of America	
Alternative (15) U.S. application selection for filled applications filled March 25, 2014  1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with the claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.  5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) not executed, and with not executed, and with not executed, and with rot executed by the undersigned on the date(s) opposite the undersigned name(s).  Bate Mar. 25, 20/4 Name of Inventor Warming Orbital Production of this document.  In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).  Date Mar. 25, 20/4 Name of Inventor Chair Production (SEAL)  Date Name of Inventor Chair Production (S	(12)	Signing of	(12)	on L	1ar. 25,	2014		<u> </u>	may a spira daga daga daga da	
filed applications filed March 25, 2014  1) The undersigned agree(s) to execute all papers necessary in connection with any application and any continuing, divisional or reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue o reexamination a grant of a valid United States patent to the Assignee.  5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreements in conflict herewith.  6) The undersigned hereby grant(s) the firm of Oliff PLC 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.  In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).  Date  Mar. 25, 2014  Name of Inventor  Chill T	(13)		(13)	U.S. application	on Serial Numbe	<sub>:r</sub> 1	4/224,521		TAN PERSONAL PROPERTY OF THE P	
reissue applications for the invention, and any patent(s) issuing thereon, and also to execute separate assignments in connection with such applications and patents as the Assignees may deem necessary.  2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning any application or continuation or division thereof, or any patent or reissue application based thereon, for the invention, and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.  3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.  4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain, maintain or confirm by reissue or reexamination a grant of a valid United States patent to the Assignee.  5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application(s) to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreements in conflict herewith.  6) The undersigned hereby grant(s) the firm of Oliff PLC 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.  In witness whereof, executed by the undersigned on the date(s) opposite the undersigned name(s).  Date Mar. 25, 20/4 Name of inventor Warning Olife Place Parking (SEAL)  Date Name of inventor Chira Parking (SEAL)		filed applications		*****						
Date Mar. 25, 2014 Name of Inventor Yumiko Oshika (SEAL)  Date Mar. 25, 2014 Name of Inventor Chie Takashima (SEAL)  Date Mar. 25, 2014 Name of Inventor Chie Takashima (SEAL)  Date Name of Inventor (SEAL)	applicat any app Assigne claims c reexami . States r full right	applications for the filters and patents as the 2. The undersigned dication or continuation in the in every way possible 3. The undersigned or provisions of the Int. 4. The undersigned ination a grant of a varies undersigned resulting from said approved the convey the entire int. 6. The undersigned in the convey the entire int.	nventione Assing	n, and any pat gnees may dee (s) to execute: rision thereof, or otaining evidence (s) to execute: nal Convention ed States paterny authorize(s) a n(s) to the said herein assigne	ent(s) issuing the mocessary. All papers necessary, all papers necessary, and papers necessary, and going for all papers and of for Protection of all affirmative at to the Assigne and request(s) the Assignee, as Ad, and that he heirm of Oliff PLC	sereon, and seary in coneissue appli ward with su tocuments of Industrial Facts which e. The Commiss assignee of the power the power the power insurance in the power insurance is the power insurance in the	also to execute a mection with any in cation based there ch interference. and perform any a property or similar may be necessar inner of Patents to the entire interest, re) not executed, a to insert on this a	separate assignments on tarference which make on, for the invention, act which may be necessary to obtain, maintain to issue any and all Leand hereby covenant and will not execute, assignment any further	s in connection with such ay be declared concerning and to cooperate with the cessary in connection with or confirm by reissue or otters Patents of the United ts that he has (they have) any agreements in conflict or identification which may	
Date Max, 25, 2014 Name of Inventor Chie Prakashima (SEAL)  Date Name of Inventor (SEAL)										
Date Max, 25, 2014 Name of Inventor Chie Prakashima (SEAL)  Date Name of Inventor (SEAL)	Date	• <u>Mar. 25</u>	, 2	014	_ Name of in	ventor	YumiRo	URMRA	(SEAL)	
Date Name of Inventor (SEAL)	Date	. <u>Mar. 2</u>	5, 2	2014	_ Name of In	ventor	Chisator	Yoshimura	(SEAL)	
	Date	Mar, 2	5 , :	2014	Name of In	ventor	Chie n	akashima	(SEAL)	
Date Name of Inventor (SEAL)	Date	9			_ Name of In	ventor		without the committee of the committee o	(SEAL)	
	Date				Name of In	ventor			(SEAL)	

Name of Inventor

PATENT REEL: 032518 FRAME: 0882

RECORDED: 03/25/2014