502306603 04/11/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| Makoto TERUI | 04/02/2013 |
| Daiki KOMATSU | 04/02/2013 |
| Masatoshi KUNIEDA | 04/02/2013 |
| Takashi KARIYA | 04/02/2013 |

RECEIVING PARTY DATA

| Name: | IBIDEN CO., LTD. |
|-----------------|---------------------|
| Street Address: | 1, Kandacho 2-chome |
| City: | Ogaki-shi, Gifu |
| State/Country: | JAPAN |
| Postal Code: | 503-8604 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13853227 |

CORRESPONDENCE DATA

Fax Number: 7034132220

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

Phone: (703) 413-3000

Email: mkassaye@oblon.com
Correspondent Name: Oblon, Spivak, et al.
Address Line 1: 1940 Duke Street

Address Line 4: Alexandria, VIRGINIA 22314

| ATTORNEY DOCKET NUMBER: | 413570US53 |
|-------------------------|------------------|
| NAME OF SUBMITTER: | Mesfin Kassaye |
| Signature: | /Mesfin Kassaye/ |
| | PATENT |

REEL: 030192 FRAME: 0892

OP \$40,00 13853227

| Date: | 04/11/2013 |
|--|--|
| | This document serves as an Oath/Declaration (37 CFR 1.63). |
| Total Attachments: 4 source=413570US53 ASSIGNMENT#page1.tif source=413570US53 ASSIGNMENT#page2.tif source=413570US53 ASSIGNMENT#page3.tif source=413570US53 ASSIGNMENT#page4.tif | |

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

| Title of Invention | WIRING BOARD AND METHOD FOR MANUFACTURING THE SAME |
|---|--|
| As the below name | d inventor, I hereby declare that: |
| This declaration [| The attached application, or |
| is directed to: | United States application or PCT international application number 13/853,227 filed on March 29, 2013. |
| The above-identifie | ed application was made or authorized to be made by me. |
| I believe that I am t | the original inventor or an original joint inventor of a claimed invention in the application. |
| 8604, Japan, is de | DEN CO., LTD. d to as "ASSIGNEE") having places of business at: 1, Kandacho 2-chome, Ogaki-shi, Gifu 503- esirous of acquiring the entire right, title and interest in and to said invention and in and to any may be granted therefore in the United States and its territorial possessions and in any and all |
| NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. | |
| any and all foreigr assignee of my ent (his) successors an | ize and request the Patent Office Officials in the United States and its territorial possessions and a countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the ire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its d assigns, to the full end of the term for which said Letters Patent may be granted, as fully and e would have been held by me had this Assignment and sale not been made. |
| Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries. | |
| | vieldge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 ment of not more than five (5) years, or both |
| LEGAL NAME O | F INVENTOR |
| Inventor: Makoto | TERUI Date: 2/4/20/3 |
| Signature: | nakoto Zerui |

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P. ATTORNEYS AT LAW 1940 DUKE STREET

ALEXANDRIA, VIRGINIA 22314

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

| Title of Invention | WIRING BOARD AND METHOD FOR MANUFACTURING THE SAME |
|---|---|
| As the below named | d inventor, I hereby declare that: |
| This declaration | The attached application, or |
| is directed to: | United States application or PCT international application number 13/853,227 filed on March 29, 2013. |
| The above-identifie | d application was made or authorized to be made by me. |
| I believe that I am t | he original inventor or an original joint inventor of a claimed invention in the application. |
| WHEREAS, IBIDEN CO., LTD. (hereinafter referred to as "ASSIGNEE") having places of business at: 1. Kandacho 2-chome. Ogaki-shi, Gifu 503-8604, Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries; | |
| NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. | |
| any and all foreign assignee of my enti (his) successors and | ze and request the Patent Office Officials in the United States and its territorial possessions and countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the ire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its d assigns, to the full end of the term for which said Letters Patent may be granted, as fully and a would have been held by me had this Assignment and sale not been made. |
| Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries. | |
| by fine or imprison | rledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 ment of not more than five (5) years, or both. |
| LEGAL NAME OF | ^ |
| Inventor: Daiki K | COMATSU Date: 2/4 /2.13 |
| Signature: | iki komotsu |

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET

ALEXANDRIA, VIRGINIA 22314

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

| Title of Invention | WIRING BOARD AND METHOD FOR MANUFACTURING THE SAME |
|---|---|
| As the below name | d inventor, I hereby declare that: |
| This declaration | The attached application, or |
| is directed to: | United States application or PCT international application number 13/853,227 filed on March 29, 2013. |
| The above-identific | ed application was made or authorized to be made by me. |
| I believe that I am | the original inventor or an original joint inventor of a claimed invention in the application. |
| WHEREAS, IBIDEN CO., LTD. (hereinafter referred to as "ASSIGNEE") having places of business at: 1, Kandacho 2-chome, Ogaki-shi, Gifu 503-8604, Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries; | |
| NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. | |
| I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made. | |
| Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries. | |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. | |
| LEGAL NAME O | F INVENTOR |
| Inventor: Masato | shi KUNIEDA Date: 2/4/20/3 |
| Signature: Ma | rsa toshi Kunjeda |

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT FOR SINGLE ASSIGNEE

| Invention | WIKING BOARD AND METHOD FOR MANUFACTURING THE SAME |
|---|---|
| As the below name | d inventor, I hereby declare that: |
| This declaration | The attached application, or |
| is directed to: | United States application or PCT international application number 13/853,227 filed on March 29, 2013. |
| The above-identifie | d application was made or authorized to be made by me. |
| I believe that I am t | he original inventor or an original joint inventor of a claimed invention in the application. |
| WHEREAS, IBIDEN CO., LTD. (hereinafter referred to as "ASSIGNEE") having places of business at: 1, Kandacho 2-chome, Ogaki-shi, Gifu 503-8604, Japan., is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries; | |
| NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof. | |
| I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made. | |
| Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries. | |
| I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. | |
| LEGAL NAME O | , , , , , , , , , , , , , , , , , , , |
| Inventor: Takash | i KARIYA Date: 2/4/2013 |
| Signature: | Takach. Kaniva |

 ${\bf OBLON, SPIVAK, McCLELLAND, MAIER \& NEUSTADT, L.L.P.}$

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

REEL: 030192 FRAME: 0897

RECORDED: 04/11/2013