PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Youichiro NAKAHARA	02/10/2010
Naoto IKEGAWA	02/10/2010
Kyohei UEMURA	02/10/2010
Yoshiyuki UCHINONO	02/10/2010

RECEIVING PARTY DATA

Name:	Panasonic Electric Works Co., Ltd.	
Street Address:	1048, Oaza-Kadoma, Kadoma-shi,	
City:	Osaka	
State/Country:	JAPAN	
Postal Code:	571-8686	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12741105

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: P38358

NAME OF SUBMITTER: Daniel B. Moon

Total Attachments: 3

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> PATENT REEL: 024324 FRAME: 0571

ASSIGNMENT

WHEREAS, (1) Youichiro NAKAHARA, a citizen of Japan, whose post office address is c/o Panasonic Electric Works Co., Ltd., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, Japan (2) Naoto IKEGAWA, a citizen of Japan, whose post office address is c/o Panasonic Electric Works Co., Ltd., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, Japan (3) Kyohei UEMURA, a citizen of Japan, whose post office address is c/o Panasonic Electric Works Co., Ltd., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, Japan (4) Yoshiyuki UCHINONO, a citizen of Japan, whose post office address is c/o Panasonic Electric Works Co., Ltd., 1048, Oaza-Kadoma, Kadoma-shi, Osaka, Japan, hereinafter referred to as the ASSIGNORS, have invented a certain improvement relating to

CIRCUIT BOARD AND METHOD OF MANUFACTURING THE SAME

for which they have jointly executed, on the same date as this assignment, an application for Letters Patent of the United States to be filed in the United States Patent and Trademark Office.

If this Assignment is filed after the filing date of the above-identified application, the undersigned hereby authorize and request any one of the attorneys of record in this application including Neil F. Greenblum, Reg. No. 28,394, Bruce H. Bernstein, Reg. No. 29,027, Arnold Turk, Reg. No. 33,094, James L. Rowland, Reg. No. 32,674, Stephen M. Roylance, Reg. No. 31,296, Leslie J. Paperner, Reg. No. 33,329, William Pieprz, Reg. No. 33,630, Robert W. Mueller, Reg. No. 35,043 and William E. Lyddane, Reg. No. 41,568, of the firm Greenblum & Bernstein, P.L.C., whose address is 1950 Roland Clarke Place, Reston, Virginia 20191, to insert here in parenthesis (Application No._PCT/JP2008/070030 filed November 4, 2008) the filing date and application number of said application when known.

AND WHEREAS, Panasonic Electric Works Co., Ltd., a corporation organized and existing under the laws of Japan, whose post-office address is 1048, Oaza-Kadoma, Kadoma-shi, Osaka, Japan, hereinafter known as the ASSIGNEE, is desirous of acquiring the entire right, title and interest for the United States in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, and prolongations thereof.

NOW, THIS WITNESSETH that for and in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt whereof is hereby acknowledged, said ASSIGNORS hereby assign, sell and transfer to said ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, for the United States including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, said ASSIGNEE and its assigns and legal representatives to have, hold, exercise and enjoy the said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues and prolongations thereof, with all the rights, powers, privileges, and

PATENT REEL: 024324 FRAME: 0572 advantages in any ways arising from or pertaining thereto, for and during the term or terms of any and all such Letters Patent when granted, including any and all renewals, reissues, and prolongations thereof, for the use and benefit of said ASSIGNEE and its assigns and legal representatives in as ample and beneficial a manner to all intents and purposes as the said ASSIGNORS might or could have held and enjoyed the same, if this assignment had not been made.

AND said ASSIGNORS hereby agree to execute all papers necessary to file applications in the United States for said invention and to assign the same to said ASSIGNEE, or any assignee acquiring title to said invention, and to execute any other papers that may be needed in connection with filing said application and securing Letters Patent thereon.

AND said ASSIGNORS authorize and request the Commissioner of Patents to issue Letters Patent on said application, and on any and all divisions and continuations thereof, to said ASSIGNEE, its assigns and legal representatives, in accordance herewith.

IN TESTIMONY WHEREOF, this assignment is executed by said ASSIGNORS, on the respective date indicated below.

Jouichoro Nakahara
(Name) Youichiro NAKAHARA

(Date)

Nato Ikeferio

(Name) Naoto IKEGAWA

February 10, 2010

February 10, 2010 (Date)

Name) Kyohei UEMURA

February 10, 2010

(Date)

PATENT REEL: 024324 FRAME: 0573 Joshiyuki Uchinma

(Name) Yoshiyuki UCHINONC

February 10, 2010

(Date)

PATENT REEL: 024324 FRAME: 0574

RECORDED: 05/03/2010