PATENT ASSIGNMENT

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Frank F. Ho	05/11/2010
Charles Hyunsang Suh	05/11/2010

RECEIVING PARTY DATA

Name:	The Boeing Company
Street Address:	100 North Riverside Plaza
City:	Chicago
State/Country:	ILLINOIS
Postal Code:	60606-2016

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12781219

CORRESPONDENCE DATA

Fax Number: (937)443-6635

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

Phone: 937-443-6600

Email: ipdocket@thompsonhine.com

Correspondent Name: Victor J. Wasylyna
Address Line 1: P.O. Box 8801

Address Line 2: 2000 Courthouse Plaza NE
Address Line 4: Dayton, OHIO 45401-8801

ATTORNEY DOCKET NUMBER: 10-0045

NAME OF SUBMITTER: Victor J. Wasylyna

Total Attachments: 2

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PATENT

REEL: 024401 FRAME: 0876

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U.S. Ser. No.: 12/781,219
Filing Date: May 17, 2010
Docket No. 10-0045
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ASSIGNMENT

WHEREAS, Frank F. Ho of Yorba Linda, California and Charles Hyunsang Suh of Irvine, California, collectively referred to as the "Assignors," have invented certain new and useful inventions and improvements (the "Inventions") described in the United States patent application entitled SOLAR CELL STRUCTURE INCLUDING A SILICON CARRIER CONTAINING A BY-PASS DIODE (Docket No. 10-0045) for which Assignors are making application for letters patent of the United States, which application has been duly executed by Assignors concurrently herewith;

WHEREAS, The Boeing Company, a corporation organized and existing under the laws of the State of Delaware, United States of America, having a place of business at 100 North Riverside Plaza, Chicago, Illinois 60606-2016 ("Assignee"), is desirous of acquiring the entire right, title and interest in and to the Inventions within the United States of America and its territorial possessions and all foreign countries, and in and to any United States or foreign letters patent that may be granted therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Assignors have assigned, sold and transferred to the Assignee, its successors and assigns, and Assignors do hereby assign, sell and transfer to the Assignee, its successors and assigns, the entire right, title and interest in and to the Inventions within the United States of America and its territorial possessions and all foreign countries, and in and to any letters patent of the United States and foreign countries, including utility models, inventor's certificates and like government grants that may be granted for any and all portions thereof, and in and to the patent application identified above and applications for patent filed for the Inventions in all foreign countries and all provisional, divisional, reissue, continuation, continuation-in-part applications and extensions of any of the applications for patent or letters patent identified herein, including all applications claiming the priority of said applications for patent or letters patent identified herein, and the right to apply for letters patent in foreign countries with full benefit of such priorities as may now or hereafter be granted to Assignors by local laws or by treaty, including any international convention for the protection of industrial property, together with the right to extend the protection of the United States letters patent to the various territorial possessions now owned or which may be hereafter acquired by the United States of America. Assignee will hold all rights for its own use and benefit and for the use and benefit of its successors or assigns to the full end of the term for which the letters patent may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors if this assignment and sale had not been made. Assignors request and authorize the Commissioner for Patents of the United States Patent and Trademark Office, and foreign counterpart officials of foreign patent offices, to issue respective letters patent in the United States and foreign countries when granted, in accordance with this assignment.

Assignors further covenant and agree with the Assignee that Assignors have a full and unencumbered title to the Inventions, which title Assignors warrant to the Assignee. Assignors further agree that Assignors will, without demanding any further consideration therefor, at the

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request and expense of the Assignee, do all lawful and just acts, including the execution and acknowledgment of instruments, that may be or become necessary for obtaining, sustaining, extending, reissuing or reexamining United States and foreign letters patent or the like for the Inventions, and for maintaining and perfecting the Assignee's right to the Inventions and letters patent particularly in cases of interference conflict, opposition and litigation.

Assignors further authorize Victor J. Wasylyna (Registration No. 52,345) of the law firm Thompson Hine LLP, 10 West Second Street, Dayton, Ohio 45402, to insert into this document any additional identification information that may be necessary to record this assignment after we have signed, including the serial number and filing date of the patent application referred to above.

IN TESTIMONY WHEREOF, we have signed this assignment on the date specified below:

Frank F. Ho

Date

Charles Hyunsang Suh

3-11-2016

Date

614025

PATENT REEL: 024401 FRAME: 0878

RECORDED: 05/18/2010