503190088 02/23/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3236706

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

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| DANIEL M. ROTTER | 11/27/2012 |
| PAUL CHIH-YUNG CHANG | 11/27/2012 |
| BRAD A. COXON | 11/27/2012 |
| PAUL E. NELSON | 11/27/2012 |
| KIMBERLEE MADDEN | 11/27/2012 |
| HENRY MACIAS | 11/27/2012 |
| JENNIFER SUE NOEL | 11/27/2012 |
| EUGENE H. JEPPESEN | 11/27/2012 |
| KURTIS S. WILLDEN | 11/26/2012 |
| ARVID J. BERG | 11/27/2012 |
| RICHARD V. PHILLIPS | 11/27/2012 |
| STEPHEN LEE METSCHAN | 11/26/2012 |
| STEPHEN K. KIRCHMEIER | 11/26/2012 |
| JOSEPH D. ANDERSON | 11/26/2012 |
| SCOTT A. BONER | 11/27/2012 |

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: | 14604549 |

CORRESPONDENCE DATA

Fax Number: (503)224-7329

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 5032247529

Email: boeing@dascenzoiplaw.com

Correspondent Name: DASCENZO INTELLECTUAL PROPERTY LAW, P.C.

Address Line 1: 1000 SW BROADWAY, SUITE 1555

Address Line 4: PORTLAND, OREGON 97205

| ATTORNEY DOCKET NUMBER: | BNG 320A |
|-------------------------|-------------------|
| NAME OF SUBMITTER: | LARRY E. BAILEY |
| SIGNATURE: | /Larry E. Bailey/ |
| DATE SIGNED: | 02/23/2015 |

Total Attachments: 4

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| RECORDATION FORM COVER SHEET PATENTS ONLY | | | |
|---|--|--|--|
| To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below. | | | |
| 1. Name of conveying party(ies) | 2. Name and address of receiving party(ies) | | |
| | Name: _THE BOEING COMPANY | | |
| Daniel M. Rotter, Paul Chih-Yung Chang, Brad A. Coxon, Paul E. Nelson, | Internal Address: | | |
| Additional name(s) of conveying party(ies) attached? X Yes No | | | |
| 3. Nature of conveyance/Execution Date(s): | Street Address: 100 North Riverside Plaza | | |
| Execution Date(s) <u>11/27/12; 11/27/12; 11/27/12; 11/27/12;</u> | | | |
| X Assignment Merger | | | |
| Security Agreement Change of Name | City: CHICAGO | | |
| ☐ Joint Research Agreement | State: ILLINOIS | | |
| Government Interest Assignment | | | |
| Executive Order 9424, Confirmatory License | Country: USA Zip: 60606-2016 | | |
| Other | Additional name(s) & address(es) attached? Yes X No | | |
| Additional numbers at | rached? Yes XNo | | |
| 5. Name and address to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: | | |
| Name: LARRY E. BAILEY, JR. | 7. Total fee (37 CFR 1.21(h) & 3.41) \$0 | | |
| Internal Address: DASCENZO INTELLECTUAL PROPERTY | | | |
| LAW, P.C. | Authorized to be charged to deposit account | | |
| Street Address: 1000 SW BROADWAY, SUITE 1555 | Enclosed | | |
| | None required (government interest not affecting title) | | |
| City: PORTLAND | 8. Payment Information | | |
| State: OREGON Zip: 97205 | | | |
| Phone Number: 503-224-7529 | Damagit Apparent Numbers | | |
| Fax Number: <u>503-224-7329</u> | Deposit Account Number | | |
| Email Address: larry@dascenzoiplaw.com | Authorized User Name | | |
| 9. Signature: Zang E | January 23, 2015 | | |
| Signature | Ďate | | |
| LARRY E. BAILEY, JR. Name of Person Signing | Total number of pages including cover sheet, attachments, and documents: | | |

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Recordation Form Cover Sheet (cont.)

| 1. Names of Conveying Parties (cont.) | 3. Dates of Execution (cont.) |
|---------------------------------------|-------------------------------|
| | |
| Kimberlee Madden | 11/27/2012 |
| Henry Macias | 11/27/2012 |
| Jennifer Sue Noel | 11/27/2012 |
| Eugene H. Jeppesen | 11/27/2012 |
| Kurtis S. Willden | 11/26/2012 |
| Arvid J. Berg | 11/27/2012 |
| Richard V. Phillips | 11/27/2012 |
| Stephen Lee Metschan | 11/26/2012 |
| Stephen K. Kirchmeier | 11/26/2012 |
| Joseph D. Anderson | 11/26/2012 |
| Scott A. Boner | 11/27/2012 |

ASSIGNMENT Docket No.: BNG 320

WHEREAS, The Boeing Company, a corporation organized and existing under the laws of the State of Delaware, USA, having a place of business at 100 N. Riverside Plaza, Chicago, Illinois 60606-2016, with a mailing address of P.O. Box 2515, Mail Code: 110-SD54, Seal Beach, CA 90740, USA (hereinafter called "the Assignee"), is desirous of acquiring the entire right, title and interest in and to the Invention 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 of which is hereby acknowledged. Assignors have assigned, sold and transferred, and do assign, sell and transfer to the Assignee, its successors and assigns, the entire right, title and interest in and to the Invention 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 Invention 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 of the U.S. 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 Invention, which title Assignors warrant to the Assignee. Assignors further agree that Assignors will, without demanding any further consideration therefor, at the 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 Invention, and for maintaining and perfecting the Assignee's right to the Invention and LETTERS PATENT particularly in cases of interference conflict, opposition and litigation.

IN TESTIMONY WHEREOF, I/We have signed this Assignment on the date specified below.

| 1) D W Hast | Merlon | | 11-27-12 |
|---------------------------------|----------------------|--|----------------------|
| DANIEL M. ROTTER | Ulzz/zorz Date | PAUL CHIH-YUNG CHANG | Date |
| BRAD A. COXON | 1/27/2012 Date | PAUL E. NELSON | NoV 27 2012 Date |
| MMUUU Madle KIMBERLEE MADDEN | 11/27/2012 Date | HENRY MACIAS | 11/27/2012 Date |
| Jenninger sue noel | 11/27/2012 Date | Eugene J Jeggeun EUGENE H. JEPPESEN | 11/27/2012 Date |
| KURTIS S. WILLDEN | 11/26/2012 Date | ARVID J. BERG | 11/27/12 Date |
| RICHARD V. PHILLIPS | 11 27 7012 Date | It Mai STEPHEN LEE METSCHAN | 11/26/2012 Date |
| Stephen K. KIRCHMEIER | - 11/24/2012 Date | JOSEPH D. ANDERSON | n 11/26/2012 Date |
| Sutt OB | 11/27/2012 | | |

PATENT REEL: 035005 FRAME: 0541

RECORDED: 02/23/2015