501918443 05/11/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| Clive J. Littlechild | 04/30/2012 |
| Gregory D. Reynolds | 04/25/2012 |
| Craig E. Harwood | 05/09/2012 |

RECEIVING PARTY DATA

| Name: | Rockwell Collins, Inc. | |
|-------------------|--|--|
| Street Address: | 400 Collins Road NE | |
| Internal Address: | Intellectual Property Dept., M/S 124-323 | |
| City: | Cedar Rapids | |
| State/Country: | IOWA | |
| Postal Code: | 52498 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 29414535 |

CORRESPONDENCE DATA

 Fax Number:
 (319)295-8777

 Phone:
 319-295-8280

Email: dmbarbie@rockwellcollins.com

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

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Mail.

Correspondent Name: ROCKWELL COLLINS, INC. INTELLECTUAL PROP

Address Line 1: 400 COLLINS ROAD NE

Address Line 2: M/S 124-323

Address Line 4: CEDAR RAPIDS, IOWA 52498

| ATTORNEY DOCKET NUMBER: | 12CR311 |
|-------------------------|------------------|
| NAME OF SUBMITTER: | Richard A. Kruse |

Total Attachments: 3

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> PATENT REEL: 028197 FRAME: 0083

\$40.00 294145

ASSIGNMENT OF INVENTION

WHEREAS, Clive J. Littlechild, of Cedar Rapids, County of ______, and State of lowa, hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in

AVIONICS FLIGHT DISPLAY

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 12CR311, in the patent files of the inventor's employer, ROCKWELL COLLINS, INC., and which invention is covered by a patent application, executed and filed concurrently herewith.

It is now agreed that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said inventor has sold, assigned and transferred and by these presents does sell, assign and transfer unto ROCKWELL COLLINS, INC., the entire right, title and interest in and to said invention in and to said application, for the territory of the United States of America and for all foreign countries; said invention and application to be held and enjoyed by the said ROCKWELL COLLINS, INC., for its own use and for the use of its successors and assigns, to the full end of the term for which Letters Patent on same will be granted, as fully and entirely as the same would have been held by said inventor had this Assignment and sale not been made.

FURTHER, said inventor hereby agrees to sign all lawful papers necessary or helpful in obtaining patents, whether U.S. or foreign, on said invention or filing any divisional, continuation, substitution, or reissue application on said invention.

| EXec | nteo st <u>rada a</u> | <u>rayıcş</u> | _, county or <u>&lo</u> lo | and |
|-----------------------|-----------------------|-------------------------------|---|-------|
| State of | <u> </u> | _, this <u>3</u> <u>C</u> day | y of <u>April</u> , 20 <u>12</u> . | |
| | | | Clary List | asal |
| | | | CLIVE J. LITTLECHILD | ` |
| State of County of | |) | | |
| | nis <u> </u> | * * | , 2012, before me persorerson whose name is subscribed to | • • • |

Rand Arm Gouddin-Leroson Commission Alpha 738 (84 Commission Robbins April 24, 2013 Commission Robbins Rand Band

instrument, and acknowledged to me that he executed the same.

Notary Public:

My Commission Expires:

Commission Number:

My Commission N

PATENT REEL: 028197 FRAME: 0084

ASSIGNMENT OF INVENTION

WHEREAS, Gregory D. Reynolds, of Cedar Rapids, County of $\frac{Linn}{Linn}$, and State of lowa, hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in

AVIONICS FLIGHT DISPLAY

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 12CR311, in the patent files of the inventor's employer, ROCKWELL COLLINS, INC., and which invention is covered by a patent application, executed and filed concurrently herewith.

It is now agreed that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said inventor has sold, assigned and transferred and by these presents does sell, assign and transfer unto ROCKWELL COLLINS, INC., the entire right, title and interest in and to said invention in and to said application, for the territory of the United States of America and for all foreign countries; said invention and application to be held and enjoyed by the said ROCKWELL COLLINS, INC., for its own use and for the use of its successors and assigns, to the full end of the term for which Letters Patent on same will be granted, as fully and entirely as the same would have been held by said inventor had this Assignment and sale not been made.

FURTHER, said inventor hereby agrees to sign all lawful papers necessary or helpful in obtaining patents, whether U.S. or foreign, on said invention or filing any divisional, continuation, substitution, or reissue application on said invention.

| Execu | ted at <u>Ollin Co</u> | munity Cresi | <u>L</u> Lagounty of | Linn | and |
|-----------------------|------------------------|---------------------|----------------------|------------------------------|--------------------|
| State of | | _, this 25^{16} d | | | Q 01 |
| | | | , | Y was die V | 16/14 |
| | | | | GREGORÝ D. REYN | ni ne |
| | | | | CHECONI D. NEIM | JEDS |
| State of County of | Iouq Linn |) | | | |
| On thi | is aday of _ | April | , 20, | \mathcal{Q} , before me pe | rsonally appeared |
| Gregory D. Re | eynolds to me kn | own to be the | person whose | name is subscribed | d to the foregoing |
| instrument, a | and acknowledge | d to me that he | executed the | e same. | |
| | (Seal) | SARAH GET | etany Public: | Saral Expires: 34 | Betz |

" Semantssion Number: 772071

PATENT REEL: 028197 FRAME: 0085

ASSIGNMENT OF INVENTION

WHEREAS, Craig E. Harwood, of Cedar Rapids, County of Link, and State of lowa, hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in

AVIONICS FLIGHT DISPLAY

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 12CR311, in the patent files of the inventor's employer, ROCKWELL COLLINS, INC., and which invention is covered by a patent application, executed and filed concurrently herewith.

It is now agreed that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said inventor has sold, assigned and transferred and by these presents does sell, assign and transfer unto ROCKWELL COLLINS, INC., the entire right, title and interest in and to said invention in and to said application, for the territory of the United States of America and for all foreign countries; said invention and application to be held and enjoyed by the said ROCKWELL COLLINS, INC., for its own use and for the use of its successors and assigns, to the full end of the term for which Letters Patent on same will be granted, as fully and entirely as the same would have been held by said inventor had this Assignment and sale not been made.

FURTHER, said inventor hereby agrees to sign all lawful papers necessary or helpful in obtaining patents, whether U.S. or foreign, on said invention or filing any divisional, continuation, substitution, or reissue application on said invention.

| Executed at <u>CBOAS RA</u> | <u> </u> |
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| State of, this, | 27 day of MA4/1, 20/2-1 |
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| | CRAIG V. HARWOOD |
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| energe land | |
| State of 10wa) County of Link | |
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| On this 4th day of Ma | , 20, before me personally appeared |
| | the person whose name is subscribed to the foregoing |
| instrument, and acknowledged to me t | |
| and an an an an and an and an and an and an an and an an and and | and the analogue of the source. |
| | Notary Public: Foliata Harry |
| Lage TRESETTA HANNEN | My Commission Expires: <u>レ-3 - (う</u> |
| COMMISSION NO. 138233 | Commission Number:135555 |
| I " NEEL I MY COMMISSION EXPINES I | |

RECORDED: 05/11/2012

PATENT REEL: 028197 FRAME: 0086