

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | | | | | | | |
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| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Raymond Zaroni</td> <td>08/09/2013</td> </tr> <tr> <td>Kim S. Jepsen</td> <td>08/09/2013</td> </tr> <tr> <td>Oliver S. King</td> <td>08/09/2013</td> </tr> <tr> <td>Thomas J. Cullen</td> <td>08/09/2013</td> </tr> </tbody> </table> | | Name | Execution Date | Raymond Zaroni | 08/09/2013 | Kim S. Jepsen | 08/09/2013 | Oliver S. King | 08/09/2013 | Thomas J. Cullen | 08/09/2013 | | |
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| RECEIVING PARTY DATA | | | | | | | | | | | | | |
| <table border="1"> <tr> <td>Name:</td> <td>Rockwell Collins, Inc.</td> </tr> <tr> <td>Street Address:</td> <td>400 Collins Road NE</td> </tr> <tr> <td>Internal Address:</td> <td>M/S 124-323</td> </tr> <tr> <td>City:</td> <td>Cedar Rapids</td> </tr> <tr> <td>State/Country:</td> <td>IOWA</td> </tr> <tr> <td>Postal Code:</td> <td>52498</td> </tr> </table> | | Name: | Rockwell Collins, Inc. | Street Address: | 400 Collins Road NE | Internal Address: | M/S 124-323 | City: | Cedar Rapids | State/Country: | IOWA | Postal Code: | 52498 |
| Name: | Rockwell Collins, Inc. | | | | | | | | | | | | |
| Street Address: | 400 Collins Road NE | | | | | | | | | | | | |
| Internal Address: | M/S 124-323 | | | | | | | | | | | | |
| City: | Cedar Rapids | | | | | | | | | | | | |
| State/Country: | IOWA | | | | | | | | | | | | |
| Postal Code: | 52498 | | | | | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13963876</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 13963876 | | | | | | | | |
| Property Type | Number | | | | | | | | | | | | |
| Application Number: | 13963876 | | | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | | | |
| <p>Fax Number: 3192958777 <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 319-295-1184 Email: skmathew@rockwellcollins.com, csimpson@foley.com 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</p> | | | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | 13CR375 (047141-0926) | | | | | | | | | | | | |
| NAME OF SUBMITTER: | Joseph N. Ziebert | | | | | | | | | | | | |

OP \$40.00 13963876

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|--------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Signature: | /Joseph N. Ziebert/ |
| Date: | 08/12/2013 |
| Total Attachments: 4 source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif | |

ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

Rockwell Collins, Inc.
400 Collins Road NE
M/S 124-323
Cedar Rapids, Iowa 52498

(hereinafter referred to as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions, and all foreign countries in and to this invention relating to

OPTICAL CONVERSION SYSTEM AND METHOD WITH MULTIPLE AMPLITUDE PROCESSING

as set forth in this United States Patent Application

check one ☒ [X] executed concurrently herewith,
 ☐ [] executed on _____,
 ☐ [] Serial No. _____ Filed _____

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention and any other international agreement; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the International Convention or otherwise.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

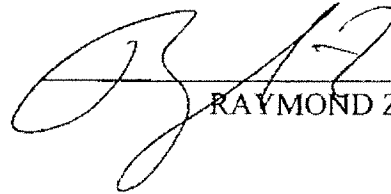
ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, and declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of **Foley & Lardner LLP** the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of **Foley & Lardner LLP** do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

Executed this 9th day of August, 2013

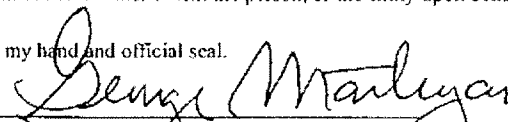

RAYMOND ZANONI

State of MD
County of Howard

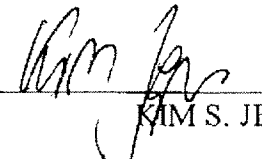
On this 9th day of Aug, 2013, before me, George Martiyan (a notary public in and for said county), personally appeared RAYMOND ZANONI, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature


George Martiyan
Notary Public State of Maryland
My Commission Expires 1/9/2015 My Commission Expires January 9, 2015

Executed this 9th day of August, 2013:

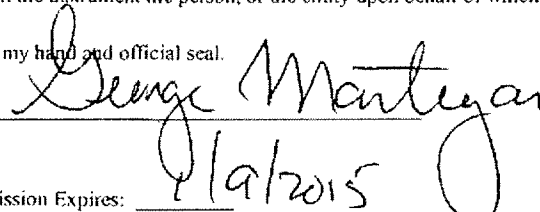

KIM S. JEPSEN

State of MD
County of Howard

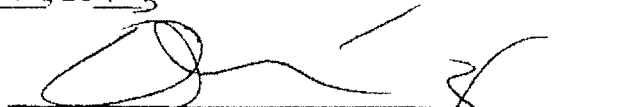
On this 9th day of Aug, 2013, before me, George Martiyan (a notary public in and for said county), personally appeared KIM S. JEPSEN, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature


George Martiyan
Notary Public State of Maryland
My Commission Expires 1/9/2015 My Commission Expires January 9, 2015

Executed this 9 day of AUGUST, 2013


OLIVER S. KING

State of MD

County of Howard

On this 9th day of Aug, 2013, before me, George Martiyan (a notary public in and for said county), personally appeared OLIVER S. KING, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature George Martiyan

My Commission Expires: 1/9/2015
George Martiyan
Notary Public State of Maryland
My Commission Expires January 9, 201

Executed this 9th day of August, 2013


THOMAS J. CULLEN

State of MD

County of Howard

On this 9th day of Aug, 2013, before me, George Martiyan (a notary public in and for said county), personally appeared THOMAS J. CULLEN, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

Signature George Martiyan

My Commission Expires: 1/9/2015
George Martiyan
Notary Public State of Maryland
My Commission Expires January 9, 2015