504667620 12/01/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
JAMES B. WEST	11/20/2017	
JEREMIAH DAMIEN WOLF	11/21/2017	
MATILDA GABRIELA LIVADARU	11/28/2017	
THEODORE JAY HOFFMANN	11/27/2017	

RECEIVING PARTY DATA

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

Property Type	Number	
Application Number:	15825711	

CORRESPONDENCE DATA

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Correspondent Name: ROCKWELL COLLINS, INC. INTELLECTUAL PROPERTY

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Address Line 2: M/S 124-323

Address Line 4: CEDAR RAPIDS, IOWA 52498

ATTORNEY DOCKET NUMBER:	047141-1302
NAME OF SUBMITTER:	PAUL M. H. PUA
SIGNATURE:	/Paul M. H. Pua/
DATE SIGNED:	12/01/2017
	·

Total Attachments: 6

PATENT REEL: 044276 FRAME: 0707

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PATENT REEL: 044276 FRAME: 0708

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

WAVELENGTH SCALED APERTURE (WSA) ANTENNA ARRAYS

as set forth in	this United States Patent Application			
check one	[] executed concurrently herewith, [] executed on	Filed	11/29/2017	

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.

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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 20_day of Volenhold, 2017

The rest of JAMES B. WEST

State of Joseph County of Jan

On 20th November of Verore me,

Here insert Name and Title of the Officer (Notary Public)

personally appeared <u>JAMES B. WEST</u>
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/their executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTX OF PERJURY was the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

Signature of Notary Public

CARYN RENEE' ROWE
Commission Number 803820
My Commission Expires
March 29, 2020

Place Notary Seal Above

Executed this at day of Nov , 2017.

JEREMIAN DAMIEN WOLF

State of County Of County

On Myanga 21, 2017, before me,

Here insert Name and Title of the Officer (Notary Public)

personally appeared <u>JEREMIAH DAMIEN WOLF</u>
Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/their executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I could'y trader PENALTY OF PERJURY that the foregoing paragraph is true and correct.

WITNESS my hand and official scale

Signature Of Notary Public

Susan E. Cairy
Commission Number 739156
My Commission Expires
February, 15, 2018

Place Notary Seal Above

Atty. Dkt. No. 17CR223 (047141-1302)

Executed this 25 day of 1/2/20/2/20//

MATILDA GABRIELA LIVADARU

On <u>18 NW 2017</u>

, before me,

Here in the marke of the Officer (Notary Public)

personally appeared <u>MATILDA GABRIELA LIVADARU</u> Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/their executed the same in his/her/their authorized capacity(ics), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY that the foregoing paragraph is true and correct.

WITNESS my hand until official seal.

Signature

Signature of Notary Public

STATE OF

CARYN RENEE' ROWE
Commission Number 803520
My Commission Expires
March 28, 2020

Place Notary Seal Above

Executed this 27 day of Nou 2017.

THEODORE JAY HOFFMANN

State of ____ County of_

before me,

personally appeared THEODORE JAY HOFFMANN

Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/their executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY that the foregoing paragraph is true and correct.

WITNESS my hand and afficial seal

Signature

Signature of Notary Public

CARYN RENEE' ROWE Commission Number 803520 My Commission Expires Merch 29, 2020

Place Notary Scal Above

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RECORDED: 12/01/2017