4-25-08

U.S. PTO 12/150139 04/25/2008

	05-05-2	2002		
FORM PTO-1595 1-31-92			U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office	
Docket No. 08CR157/KE 1035004		406		
1. Name of conveying party	(ies):	2. Name and	address of receiving party(ies):	
	Jonathan P. Doane James B. West	Rockwell Collin 400 Collins Roc M/S 124-323 Cedar Rapids,	id NE	
Additional name(s) of conveying party(les) attached?		Additional name(s) and Address(es) attached:?		
☐ YES ☑ NO		☐ YES ☑ NO		
3. Nature of conveyance:				
	☐ Merger		☐ Security Agreement	
☐ Change of Name	Other			
Execution Date: April 23, 2008	8; April 23, 2008; April 23, 2	008; April 23, 200	08; April 23, 2008	
4. Application number(s) or p	oatent number(s):			
Serial Nº	Filed: April 23, 2008	Express Mail La	bel Nº: EM 165527805 US	
If this document is being filed toget	her with a new application, the	execution date of	the application is: April 23, 2008.	
A. Patent Application No.(s)		B. Patent No.(s)		
Ac	dditional numbers attach	ed: 🗆 YES	X NO	
5. Name and address of par	ty to whom	6. Total number	er of applications and patents	
correspondence concerning document should be		involved: <b>ONE</b>		
mailed:				
Customer No. 26383		7. Total fee (37	CFR 3.41) \$ <b>40.00</b>	
Rockwell Collins, Inc.				
Kyle Eppele 400 Collins Road, NE M/S 124-323 Cedar Rapids, IA 52498		the recordation (Attach duplicate copy of	ssioner is hereby authorized to charge in fee to deposit account 19-4882.  of this page if paying by deposit account).	
	DO NOT USE		9 <mark>5/82/2000 DBYRHE 000000</mark> 32 194882 1215013 81 FC:6021 40.00 Da	
			11 FC:8021 40.00 DA	
9. Statement and signature.				
To the best of my knowledge copy is a true copy of the orig		j information is ti	rue and correct and any attached	

PATENT: April 25, 2008

REEL: 020902 FRAME: 0674

WHEREAS, Jeremiah D. Wolf, of Cedar Rapids, IA, County of \_\_\_\_ LINN hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in RECONFIGURABLE RADIO FREQUENCY (RF) SURFACE WITH OPTICAL BIAS FOR

# RF ANTENNA AND RF CIRCUIT APPLICATIONS

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 08CR157/KE, 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.

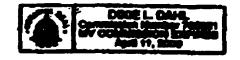
It is now agreed that, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the said inventor has sold, assigned and transferred and by these presents does sell, assign and transfer unto ROCKWELL COLLINS, INC., the entire right, title and interest in and 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.

E	cecuted at	on Rong	25, County of	LINN	and State of
Jour	this _	<b>23</b> day of _	APRIL	, 20	
				Joanis	P. Hall
State of County of	LINN	_ }		JEREMIAH D. WO	DLF

On this 23 day of APRIL , 2008, before me personally appeared JEREMIAH D. WOLF to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(Seal)



My Commission Expires: APRIL

Commission Number: \_\_

PATENT

REEL: 020902 FRAME: 0675

WHEREAS, Nathan P. Lower, of North Libe	rty, IA, County of	Lina	, and State of lowa,
hereinafter sometimes referred to as "said inventor",	has invented certain	new and us	seful improvements in
RECONFIGURABLE RADIO FREQUENCY	(RF) SURFACE W	TH OPTIC	AL BIAS FOR
RF ANTENNA AND RF	CIRCUIT APPLICA	TIONS	
which invention or inventions (hereinafter referred to	as "inventions") hav	e been disclo	osed to and filed, under
Docket No. 08CR157/KE, in the patent files of the in	ventor's employer, R	OCKWELL	COLLINS, INC., and
which invention is covered by a patent application,	executed and filed co	ncurrently !	herewith.
It is now agreed that, for good and valuable	consideration, the re	ceipt and su	fficiency of which are
hereby acknowledged, the said inventor has sold, as	signed and transferre	ed and by th	ese presents does sell,
assign and transfer unto ROCKWELL COLLINS.	INC., the entire righ	t, title and	interest in and to said
invention in and to said application, for the territor	y of the United Stat	es of Amer	ica and for all foreign
countries; said invention and application to be held a	nd enjoyed by the sa	d ROCKW	ELL COLLINS, INC.,
for its own use and for the use of its successors and	l assigns, to the full	end of the t	term for which Letters
Patent on same will be granted, as fully and entirely	as the same would ha	ıve been hel	d by said inventor had
this Assignment and sale not been made.		•	
FURTHER, said inventor hereby agrees to s	sign all lawful paper:	necessary	or helpful in obtaining
patents, whether U.S. or foreign, on said invention	or filing any division	nal, continu	nation, substitution, or
reissue application on said invention.			
Executed at Codac Repids , Count	y of Linn		and State of
Towa , this 23 day of April	, 20 <u>0₹</u> .		
	The	Town	
	NATHAN P. E		
State of $\frac{Lowa}{Lowa}$ )	MATIDAN 1. C	O W EAR	
County of			
On this 23 day of APRIL	. 20 08 . hefore me i	nersonally a	nneared NATHAN P
LOWER to me known to be the person whose n			
acknowledged to me that he executed the same.			,02.902.2
(Seal)	Dire 2	. Dal	<u> </u>
DOUE L DAME	Notary Public:		
Commission Property Commission	My Commission No	n Expires: <u>/</u> imber:	102681
April A si marin			· · — — —

PATENT REEL: 020902 FRAME: 0676

ASSIGNMENT OF INVENTION
WHEREAS, Lee M. Paulsen, of Cedar Rapids, IA, County of Lina and State of Iowa,
hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in
RECONFIGURABLE RADIO FREQUENCY (RF) SURFACE WITH OPTICAL BIAS FOR
RF ANTENNA AND RF CIRCUIT APPLICATIONS
which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under
Docket No. 08CR157/KE, 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

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.

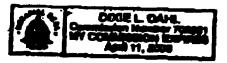
Patent on same will be granted, as fully and entirely as the same would have been held by said inventor had

State of County of

this Assignment and sale not been made.

On this 23 day of APRIL 2008, before me personally appeared LEE M. PAULSEN to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(Seal)



My Commission Expires: APRIL 11, 2009

Commission Number: 702681

PATENT REEL: 020902 FRAME: 0677

WHEREAS, Jonathan P. Doane, of Cedar Rapids, IA, County of him, and State of Iowa, hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in RECONFIGURABLE RADIO FREQUENCY (RF) SURFACE WITH OPTICAL BIAS FOR RF ANTENNA AND RF CIRCUIT APPLICATIONS which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 08CR157/KE, 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 ROCK WELL 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 \_\_\_\_\_\_ and State of \_\_\_\_\_\_ this \_\_\_\_\_ day of \_\_\_\_\_\_ 2008. State of County of On this 23 day of APRIL , 2008, before me personally appeared JONATHAN P. DOANE to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same. (Seal) My Commission Expires: APR Commission Number:

> PATENT REEL: 020902 FRAME: 0678

WHEREAS, James B. West, of Cedar Rapids, IA, County of \_\_\_\_\_, and State of Iowa, hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in RECONFIGURABLE RADIO FREQUENCY (RF) SURFACE WITH OPTICAL BIAS FOR

# RF ANTENNA AND RF CIRCUIT APPLICATIONS

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 08CR157/KE, 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.

On this <u>23</u> day of <u>APRIL</u>, 20<u>08</u>, before me personally appeared JAMES B. WEST to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

(Seal)

DOOR L DAVE

RECORDED: 04/25/2008

Disco L. Dake

My Commission Expires: APRIL 11, 2009

Commission Number:

**PATENT** 

REEL: 020902 FRAME: 0679