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FORM PTO-1595	ORM PTO-1595 11-15-2004		U.S. DEPARTMENT OF COMMERCE	
1-31-92 Fatent and Trademark Office				
1. Name of conveying party(ies,.	10288079	2. Name and address of receiving party(ie	s): Pm =	
Mark M. Mulbrook Robert A. Newgard		Rockwell Collins, Inc. 400 Collins Road NE M/S 124-323 Cedar Rapids, IA 52498	10/982968	
Additional name(s) of conveying party(ies) attached?		— — —		
YES X NO		L YES X NO		
3. Nature of conveyance:AssignmentChange of Name	☐ Merger ☐ Other	☐ Security Ag	greement	
Execution Date: November 5, 2004 and November 5, 2004				
4. Application number(s) or pater			,	
Serial Nº	Filed: November	5, 2004 Express Mail Label Nº: EV 515 4		
A. Patent Application No.(s)		B. Patent No.(s)		
Additio	nal numbers attach	ned: YES X NO		
5. Name and address of party to whom		6. Total number of applications and patents		
correspondence concerning document should be		involved: ONE		
mailed:				
Customer No. 26383		7. Total fee (37 CFR 3.41)	\$ 40.00	
Rockwell Collins, Inc.				
Kyle Eppele 400 Collins Road, NE M/S 124-323 Cedar Rapids, IA 52498		The Commissioner is hereby authorized to charge the recordation fee to deposit account 19-4882. (Attach duplicate copy of this page If paying by deposit account).		
DO NOT USE THIS SPACE				
9. Statement and signature.				
To the best of my knowledge and copy is a true copy of the original		ng information is true and correct and any att	ached	
Shall W hourt	> _	DATE: Novembe	er 5, 2004	
		Total number of pages including cover sho		

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PATENT

REEL: 015970 FRAME: 0759

ASSIGNMENT OF INVENTION

WHEREAS, Mark M. Mulbrook,	of Marian, County of 61000, and State of Iowa
hereinafter sometimes referred to as "said in	ventor", has invented certain new and useful improvements in
FREQUENCY S	SAMPLING PHASE DETECTOR
which invention or inventions (hereinafter ref	ferred to as "inventions") have been disclosed to and filed, under
Docket No. 04CR158/KE, in the patent files	of the inventor's employer, ROCKWELL COLLINS, INC., and
which invention is covered by a patent appli	cation, executed and filed concurrently herewith.
It is now agreed that, for good and v	aluable 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 COL	LINS, 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 b	e held and enjoyed by the said ROCKWELL COLLINS, INC.,
for its own use and for the use of its success	sors and assigns, to the full end of the term for which Letters
Patent on same will be granted, as fully and e	entirely as the same would have been held by said inventor had
this Assignment and sale not been made.	
FURTHER, said inventor hereby ago	rees to sign all lawful papers necessary or helpful in obtaining
patents, whether U.S. or foreign, on said inv	vention or filing any divisional, continuation, substitution, or
reissue application on said invention.	
Executed at (FOAR KAPIOS.	County of and State of Iowa this
5 day of November, 2004.	
	by . A. M. I
	Mark M. Mulbrook
State of IOWA)	
County of <u>LINN</u>)	
	•
On this 5th day of November	, 2004, before me personally appeared Mark M. Mulbrook
to me known to be the person whose name is	subscribed to the foregoing instrument, and acknowledged to
ne that he executed the same.	
•	
	A James
(Seal)	Motor Bublio Sa 12 Matheus
SHEILA KAE MATHEWS Commission Number 155044	My Commission Expires: 02/15/2005.
MY COMMISSION EXPIRES	Commission Number: 55044

PATENT REEL: 015970 FRAME: 0760

ASSIGNMENT OF INVENTION

WHEREAS, Robert A. Newgard, of Central City, County of _______, and State of Iowa hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in FREQUENCY SAMPLING PHASE DETECTOR which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 04CR158/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. Executed at COAR KAPIDS, County of LINN State of County of On this 5 day of Mouconher, 2004, before me personally appeared Robert A. Newgard to me known to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same.

SHEILA KAE MATHEWS Commission Number 155044

RECORDED: 11/05/2004

My Commission Expires:

Commission Number:

PATENT REEL: 015970 FRAME: 0761