

12-07-2006

FORM PTO-1595

S. DEPARTMENT OF COMMERCE

1-31-92

Patent and Trademark Office



103345399

12-1-06

Docket No. 06CR112/KE

1. Name of conveying party(ies):

Richard A. Freeman
Robert A. Newgard
David A. Gribble
Manas K. Roy

Additional name(s) of conveying party(ies) attached?

YES NO

2. Name and address of receiving party(ies):

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

Additional name(s) and Address(es) attached:?

YES NO

112955 U.S. PTO
11/607610



120106

3. Nature of conveyance:

Assignment Merger Security Agreement
 Change of Name Other _____

Execution Date: December 1, 2006, December 1, 2006, December 1, 2006 and December 1, 2006

4. Application number(s) or patent number(s):

Serial N^o Filed: December 1, 2006 Express Mail Label N^o: EV 958 457 615 US

If this document is being filed together with a new application, the execution date of the application is: December 1, 2006.

A. Patent Application No.(s)

B. Patent No.(s)

Additional numbers attached: YES NO

5. Name and address of party to whom
correspondence concerning document should be
mailed:

Customer No. 26383
Rockwell Collins, Inc.
Kyle Epple
400 Collins Road, NE
M/S 124-323
Cedar Rapids, IA 52498

6. Total number of applications and patents
involved: **ONE**

7. Total fee (37 CFR 3.41) **\$ 40.00**

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).

12/06/2006 DBYRNE 00000167 194882 11607610
01 FC:8021 (40.00 DA)

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached
copy is a true copy of the original document.

Scot M. Ringenberg Reg. N^o 56,989

DATE: December 1, 2006

Total number of pages including cover sheet: **FIVE (5)**

12/05/2006 MWOLDGEI 00000042 11607610
01 FC:1011 300.00 SF

PATENT
REEL: 018660 FRAME: 0286

ASSIGNMENT OF INVENTION

WHEREAS, Richard A. Freeman, of Cedar Rapids, County of LINN, and State of Iowa hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in MEMS-BASED BROADBAND TRANSCEIVER/SENSOR

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 06CRI12/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 CEEDAR RAPIDS, County of LINN and State of IOWA, this 1st day of December, 2006.

[Signature]
Richard A. Freeman

State of IOWA)
County of LINN)

On this 1st day of December, 2006, before me personally appeared Richard A. Freeman 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)



[Signature]
Notary Public: Sheila Kae Mathews
My Commission Expires: 02/15/2008
Commission Number: 155044

ASSIGNMENT OF INVENTION

WHEREAS, Robert A. Newgard, of Central City, County of WINN, and State of Iowa hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in MEMS-BASED BROADBAND TRANSCEIVER/SENSOR

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 06CR112/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 Central Rapids, County of WINN and State of Iowa, this 1st day of December, 2006

State of
County of

Iowa)
WINN)

Robert A. Newgard
Robert A. Newgard

On this 1st day of December, 2006, 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
Notary Public: Sheila Kae Mathews
My Commission Expires: 02/15/2008
Commission Number: 155044

ASSIGNMENT OF INVENTION

WHEREAS, David A. Gribble, of Cedar Rapids, County of LINN, and State of Iowa hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in MEMS-BASED BROADBAND TRANSCIEVER/SENSOR

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 06CR112/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 Cedar Rapids, County of LINN and State of Iowa, this 1st day of December, 2006.

David A. Gribble
David A. Gribble

State of Iowa)
County of Linn)

On this 1st day of December, 2006 before me personally appeared David A. Gribble 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)



Sheila Kae Mathews
Notary Public: Sheila Kae Mathews
My Commission Expires: 02/15/2008
Commission Number: 155044

ASSIGNMENT OF INVENTION

WHEREAS, Manas K. Roy, of Cedar Rapids, County of Linn, and State of Iowa hereinafter sometimes referred to as "said inventor", has invented certain new and useful improvements in MEMS-BASED BROADBAND TRANSCEIVER/SENSOR

which invention or inventions (hereinafter referred to as "inventions") have been disclosed to and filed, under Docket No. 06CR112/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 Cedar Rapids, County of Linn and State of Iowa, this 1st day of December, 2006

Manas K. Roy
Manas K. Roy

State of Iowa)
County of Linn)

On this 1st day of December, 2006, before me personally appeared Manas K. Roy 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
Notary Public: Sheila Kae Mathews
My Commission Expires: 02/15/2008
Commission Number: 155 044