

# RECORDATION FORM COVER SHEET PATENTS ONLY

Atty Ref/Docket No.: 884.H19US1

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Siavash M. Alamouti, Alexander Alexandrovich  
Maltsev, Vadim Sergeyevich Sergeyev, Alexander  
Alexandrovich Maltsev, Nikolay Vasilevich Chistyakov

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

[ ] Yes [X] No

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

Name: Intel Corporation

Street Address: 2200 Mission College Blvd.

City: Santa Clara State: CA Zip: 95052Country: United States of AmericaAdditional name(s) & address(es) attached? [ ] Yes  
[X] No

3. Nature of conveyance:

[X] Assignment [ ] Merger

[ ] Security Agreement [ ] Change of Name

[ ] Other

Execution Date: October 22, 2008, February 3, 2009,  
October 24, 2008, February 3, 2009, February 3, 2009

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

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

A. Patent Application No.(s)

B. Patent No.(s)

Serial No. 12/301,693, filed April 24, 2009

Additional numbers attached? [ ] Yes [X] No

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

Name: Gregory J. Gorrie

Address:

Schwegman, Lundberg & Woessner, P.A.  
P.O. Box 2938  
Minneapolis, MN 55402--0938

6. Total number of applications and patents involved: 17. Total fee (37 CFR 3.41): \$ 40.00

[ ] Enclosed

[X] Authorized to be charged to deposit account  
19-0743

8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743

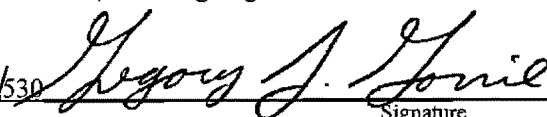
## DO NOT USE THIS SPACE

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.

Gregory J. Gorrie/Reg. No. 36530

Name of Person Signing



Signature

April 30, 2012

Date

Total number of pages including cover sheet: 12

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks  
Mail Stop Assignment Recordation Services  
P.O. Box 1450  
Alexandria, VA 22313-1450

PATENT

REEL: 028139 FRAME: 0116

700484988

CH \$40.00 190743 12301693

### ASSIGNMENT

WHEREAS, We, Siavash M. Alamouti, residing at 796 NE Brennan Lane, Hillsboro, OR 97124, and Alexander Alexandrovich Maltsev, residing at Verhne-Pecherskaya Str., 1-7, Nizhny Novgorod 603163, Russian Federation, and Vadim Sergeyevich Sergeyev, residing at Vaneyeva Str., 19/28, Nizhny, Novgorod 603105, Russian Federation, and Alexander Alexandrovich Maltsev, Jr., residing at Verhne-Pecherskaya Str., 1-7, Nizhny Novgorod 603163, Russian Federation, and Nikolay Vasilevich Chistyakov, residing at 41 Apt., Ivlieva Str. 32/2, Nizhny Novgorod 603122, Russian Federation, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States entitled MILLIMETER-WAVE CHIP-LENS ARRAY ANTENNA SYSTEMS FOR WIRELESS NETWORKS;

WHEREAS, We hereby authorize and request our attorneys, as listed on the Combined Declaration and Power of Attorney, at Schwegman, Lundberg & Woessner, P.A., located at 121 South Eighth Street, Suite 1600, Minneapolis, MN 55402, to insert here in parentheses (Ser. No. 12/301,693 ; Filing Date: April 24, 2009 ) the filing date and application number of said application when known.

AND WHEREAS, Intel Corporation, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 2200 Mission College Blvd., Santa Clara, CA 95052 (hereinafter "Assignee"), is desirous of acquiring the entire right, priority right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore, we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

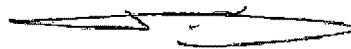
Docket No: 884.H19US1

Title: MILLIMETER-WAVE CHIP-LENS ARRAY ANTENNA SYSTEMS FOR WIRELESS NETWORKS

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IN TESTIMONY WHEREOF, I have hereunto set my hand this 22 day of  
October, 2008.



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Siavash M. Alamouti

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of  
\_\_\_\_\_, 2008.

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Alexander Alexandrovich Maltsev

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of  
\_\_\_\_\_, 2008.

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Vadim Sergeyevich Sergeyev

Docket No: 884.H19US1

Title: MILLIMETER-WAVE CHIP-LENS ARRAY ANTENNA SYSTEMS FOR WIRELESS NETWORKS

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IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of  
\_\_\_\_\_, 2008.

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Alexander Alexandrovich Maltsev, Jr.

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of  
\_\_\_\_\_, 2008.

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Nikolay Vasilevich Chistyakov

## ASSIGNMENT

WHEREAS, We, Siavash M. Alamouti, residing at 796 NE Brennan Lane, Hillsboro, OR 97124, and Alexander Alexandrovich Maltsev, residing at Verhne-Pecherskaya Str., 1-7, Nizhny Novgorod 603163, Russian Federation, and Vadim Sergeyevich Sergeyev, residing at Vaneyeva Str., 19/28, Nizhny, Novgorod 603105, Russian Federation, and Alexander Alexandrovich Maltsev, Jr., residing at Verhne-Pecherskaya Str., 1-7, Nizhny Novgorod 603163, Russian Federation, and Nikolay Vasilevich Chistyakov, residing at 41 Apt., Ivlieva Str. 32/2, Nizhny Novgorod 603122, Russian Federation, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States entitled MILLIMETER-WAVE CHIP-LENS ARRAY ANTENNA SYSTEMS FOR WIRELESS NETWORKS;

WHEREAS, We hereby authorize and request our attorneys, as listed on the Combined Declaration and Power of Attorney, at Schwegman, Lundberg & Woessner, P.A., located at 121 South Eighth Street, Suite 1600, Minneapolis, MN 55402, to insert here in parentheses (Ser. No. 12/301,693 ; Filing Date: April 24, 2009 ) the filing date and application number of said application when known.

AND WHEREAS, Intel Corporation, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 2200 Mission College Blvd., Santa Clara, CA 95052 (hereinafter "Assignee"), is desirous of acquiring the entire right, priority right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

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Title: MILLIMETER-WAVE CHIP-LENS ARRAY ANTENNA SYSTEMS FOR WIRELESS NETWORKS

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NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore, we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

Docket No: 884.H19US1

Title: MILLIMETER-WAVE CHIP-LENS ARRAY ANTENNA SYSTEMS FOR WIRELESS NETWORKS

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IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of  
\_\_\_\_\_, 2008.

\_\_\_\_\_  
Siavash M. Alamouti

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of  
\_\_\_\_\_, 2008.

\_\_\_\_\_  
Alexander Alexandrovich Maltsev

IN TESTIMONY WHEREOF, I have hereunto set my hand this 29 day of  
2008, 2008.

  
\_\_\_\_\_  
Vadim Sergeyevich Sergeyev



Docket No: 884.H19US1

Title: MILLIMETER-WAVE CHIP-LENS ARRAY ANTENNA SYSTEMS FOR WIRELESS NETWORKS

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IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of

\_\_\_\_\_, 2008.

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Alexander Alexandrovich Maltsev, Jr.

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_ day of

\_\_\_\_\_, 2008.

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Nikolay Vasilevich Chistyakov

03-Feb-2009 15:31 Intel Corporation 2445

10/12

## ASSIGNMENT

WHEREAS, We, Siavash M. Alamouti, residing at 796 NE Brennan Lane, Hillsboro, OR 97124, and Alexander Alexandrovich Maltsev, residing at Verhne-Pecherskaya Str., 1-7, Nizhny Novgorod, 603163, Russian Federation, and Vadim Sergeyevich Sergeyev, residing at Vaneveva Str., 19/28, Nizhny, Novgorod 603105, Russian Federation, and Alexander Alexandrovich Maltsev, Jr., residing at Verhne-Pecherskaya Str., 1-7, Nizhny Novgorod, 603163, Russian Federation, and Nikolay Vasilevich Chistyakov, residing at 41 Apt., Ivlieva Str, 32/2, Nizhny Novgorod, 603122, Russian Federation, made certain new and useful inventions and improvements for which we filed an application for Letters Patent of the United States on November 20, 2008, which application was assigned U.S. patent application serial number 12/301,693, and is entitled MILLIMETER-WAVE CHIP-LENS ARRAY ANTENNA SYSTEMS FOR WIRELESS NETWORKS:

AND WHEREAS, Intel Corporation, a corporation organized and existing under and by virtue of the laws of the State of Delaware, and having an office and place of business at 2200 Mission College Blvd., Santa Clara, CA 95052 (hereinafter "Assignee"), is desirous of acquiring the entire right, priority right, title and interest in and to said inventions, improvements and application and in and to the Letters Patent to be obtained therefor;

NOW, THEREFORE, to all whom it may concern, be it known that for good and valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto said Assignee, its successors or assigns, the entire right, title and interest for all countries in and to all inventions and improvements disclosed in the aforesaid application, and in and to the said application, all divisions, continuations, continuations-in-part, or renewals thereof, all Letters Patent which may be granted there from, and all reissues or extensions of such patents, and in and to any and all applications which have been or shall be filed in any foreign countries for Letters Patent on the said inventions and improvements, including an assignment of all rights under the provisions of the International Convention, and all Letters Patent of foreign countries which may be granted there from; and we do hereby authorize and request the Commissioner of Patents and Trademarks to issue any and all United States Letters Patent for the aforesaid inventions and improvements to the said Assignee as the assignee of the entire right, title and interest in and to the same, for the use of the said Assignee, its successors and assigns.

03-Feb-2009 15:31 Intel Corporation 2445

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AND, for the consideration aforesaid, we do hereby agree that we and our executors and legal representatives will make, execute and deliver any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said Assignee, its successors and representatives all facts known to us relating to said improvements and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable more effectually to secure to and vest in said Assignee, its successors or assigns the entire right, title and interest in and to the said improvements, inventions, applications, Letters Patent, rights, titles, benefits, privileges and advantages hereby sold, assigned and conveyed, or intended so to be.

AND, furthermore, we covenant and agree with said Assignee, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us and that full right to convey the same as herein expressed is possessed by us.

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
Siavash M. Alamouti

IN TESTIMONY WHEREOF, I have hereunto set my hand this 3 day of February, 2009.

\_\_\_\_\_  
Alexander A. Maltsev

IN TESTIMONY WHEREOF, I have hereunto set my hand this \_\_\_\_\_ day of \_\_\_\_\_, 2009.

\_\_\_\_\_  
Vadim S. Sergeyev

IN TESTIMONY WHEREOF, I have hereunto set my hand this 3 day of February, 2009.

\_\_\_\_\_  
Alexander A. Maltsev, Jr.

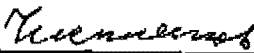
03-Feb-2009 15:31 Intel Corporation 2445

12/12

Docket No: 884.H19US1  
Serial Number: 12/301,693  
Filing Date: November 20, 2008  
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IN TESTIMONY WHEREOF, I have hereunto set my hand this 3 day of February, 2009.

  
\_\_\_\_\_  
Nikolay V. Chistyakov