

Rev 05/03

RECORDATION FORM COVER SHEET
PATENTS ONLYU.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies)

Philip A. Bolt
Timothy G. Wild
Gregor R. Dean
Paul Clark
Peter N. Strong
Richard A. Carter
Antony C. Holmes
Colin H.V. Spier
Nigel J.R. KingAdditional name(s) of conveying party(ies)
Attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies)

Name: Piping Hot Networks Limited

Internal Address:

Street Address: Unit A1, Linhay Business Park,
Eastern Road

City: Ashburton, Devon State: Zip: TQ13 7UP

Country: United Kingdom

Additional name(s) & address(es) attached? ☐ Yes
☒ No

3. Nature of conveyance:

- ☒
- Corrective Document (correcting
-
- title of invention)
-
- (Reel/Frame: 016370/0397)
-
- ☐
- Merger
-
- ☐
- Security Agreement
- ☐
- Change
-
- of Name

Execution Date: 6/10/05; 6/9/05; 6/6/05;
6/9/05; 6/6/05; 6/9/05; 6/6/05; 6/6/05;
6/6/05 respectively

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)
11/116,115

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No5. Name and address of party to whom
correspondence concerning document should
be faxed:Victor B. Lebovici
Weingarten, Schurgin,
Gagnebin & Lebovici LLP
Ten Post Office Square
Boston, Massachusetts 02109
Tel: (617) 542-2290
Fax: (617) 451-0313

6. Total number of applications and patents

Involved [1]

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

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number: 23-0804

(Attach duplicate copy of this page if paying by
deposit account)

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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.Attorney Name: Victor B. Lebovici
Registration No. 30,864

Signature:



Date: 10-18-05

Total number of pages including cover sheet, attachments, and document: [12]

Docket No.: ORTHO-005XX

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REV 05/03

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Nigel J.R. King

Additional name(s) of conveying party(ies)

Attached? ☐ Yes ☒ No

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Name: Piping Hot Networks Limited

Internal Address:

Street Address: Unit A1, Linhay Business Park,
Eastern Road

City: Ashburton, Devon State: Zip: TQ13 7UP

Country: United Kingdom

Additional name(s) & address(es) attached? ☐ Yes
☒ No

3. Nature of conveyance:

☒ Assignment ☐ Merger☐ Security Agreement ☐ Change
of Name☐ Other:Execution Date: 6/10/05; 6/9/05; 6/6/05;
6/9/05; 6/6/05; 6/9/05; 6/6/05; 6/6/05;
6/6/05 respectively

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Attorney Name: Victor B. Lebovici

Registration No. 30,864

Signature:

Date: 6-21-05

Total number of pages including cover sheet, attachments, and documents: [12]

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U.S. DEPARTMENT OF COMMERCE
Patent and Trademark OfficeRECORDATION FORM COVER SHEET
PATENTS ONLY

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1. Name of conveying party(ies) Philip A. Bolt Timothy G. Wild Gregory R. Dean Paul Clark Peter H. Strong Richard A. Carter Anthony C. Holmes Colin M.V. Spier Nigel J.R. King Additional name(s) of conveying party(ies) Attached? ☐ Yes ☒ No	2. Name and address of receiving party(ies) Name: Piping Hot Networks Limited Internal Address: Street Address: Unit A1, Linhay Business Park, Eastern Road City: Ashburton, Devon State: zip: TQ13 7UP Country: United Kingdom Additional name(s) & address(es) attached? ☐ Yes ☒ No
3. Nature of conveyance: ☒ Corrective Document (correcting title of invention) (Reel/Frame: 016370/0397) ☐ Merger ☐ Security Agreement ☐ Change of Name Execution Date: 5/10/05; 5/9/05; 5/6/05; 5/5/05; 5/6/05; 5/3/05; 5/6/05; 5/6/05; 5/6/05 respectively	

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

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11/116,115

B. Patent No. (s)

Additional numbers attached? ☐ Yes ☒ No

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Fax: (617) 451-0313

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Attorney Name: Victor B. Lebovici
Registration No. 30,864

Signature: 

Date: 8-17-05

Total number of pages including cover sheet, attachments, and document: [12]

Docket No.: ORTHO-005XX

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ORTHO-005XX

ASSIGNMENT

In consideration of One Dollar and other good and valuable consideration, the receipt of which is hereby acknowledged, we,

Philip A. Bolt, residing at Redway House, Coombe Shute, Stoke Gabriel, Devon TQ96RG United Kingdom,

Timothy G. Wild, residing at 3 Church Park Close, Diptford, Totnes, Devon TQ97PH United Kingdom,

Gregor R. Dean residing at 5 Townsend Avenue, Seaton, Devon EX122AZ United Kingdom

Paul Clark residing at 180 Roselands Drive, Paignton, Devon TQ47RW United Kingdom

Peter N. Strong residing at Laurels, East St., Ipplepen, Newton Abbot, Devon TQ125SU United Kingdom

Richard A. Carter residing at, 5 Alta Vista Road, Paignton TQ46DB United Kingdom

Antony C. Holmes residing at 14 Castle Road, Torquay, Devon TQ13BG United Kingdom

Colin H.V. Spier residing at Mizpah, 13 Tappers Close, Topsham, Exeter, Devon EX3 0DG United Kingdom, and

Nigel J.R. King residing at Culverwood, Rattery, South Brent, Devon TQ109LF United Kingdom,

hereby sell and assign to PIPING HOT NETWORKS LIMITED, a United Kingdom corporation, having a principal place of business at Unit A1, Linhay Business Park, Eastern Road, Ashburton, Devon, United Kingdom TQ13 7UP, its successors and assigns, the entire right, title and interest, including the right to claim priority under the International Convention, throughout the United States, its territories and all foreign countries in and to our invention in

~~INTELLIGENT SPECTRUM MANAGEMENT IN A MULTIPLE INPUT MULTIPLE OUTPUT (MIMO) WIRELESS COMMUNICATIONS SYSTEM~~

INTELLIGENT ADAPTIVE MODULATION IN A MULTIPLE INPUT
MULTIPLE OUTPUT (MIMO) WIRELESS COMMUNICATIONS SYSTEM

162
8-17-05

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PAGE 006/016

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ORTHO-005XX

and the application for United States Letters Patent therefor filed on April 27, 2005, Application No. 11/116,115, and such patents as may issue thereon and all divisions, reissues and continuations and continuations-in-part thereof.

And we hereby covenant that we have full right to make such assignment, and agree for ourselves and our executors and administrators that we will, at the expense of said PIPING HOT NETWORKS LIMITED, execute all applications for patents in foreign countries, execute all divisional, continuing, reissue and re-examination applications, make all rightful oaths, sign all lawful papers, testify in any proceeding in which said invention or any application or patent directed thereto may be involved, and generally do everything possible to aid said PIPING HOT NETWORKS LIMITED, its successors and assigns, to obtain and enforce proper patent protection for said invention in the United States, its territories and all foreign countries.

And we hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent on said invention or resulting therefrom to PIPING HOT NETWORKS LIMITED, its successors and assigns.

. RightFax

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ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our
seals.

PARDate: 10/6/05

Philip A. Bolt

M. Stevens

Witness (Signature)

Date: 10/6/05J.M. STEVENSON

Witness (Please Print Name)

RightFax

10/14/05 6:26

PAGE 008/016

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ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our
seals.



Timothy G. Wild

Date: 9/6/05



Witness (Signature)

Date: 9/6/05

J. M. STEVENSON

Witness (Please Print Name)

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10/14/05 6:26

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ORTEO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our
seals.

Gregor Dean
Gregor R. Dean

Date: 6th June 2005

J.M. Stevenson
Witness (Signature)

Date: 6/6/05

J.M. STEVENSON
Witness (Please Print Name)

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ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.


Paul Clark

Date: 9/6/05


Witness (Signature)

Date: 9/6/05

J. M. STEVENSON
Witness (Please Print Name)

10/14/05 8:26

PAGE 011/018

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IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.



Peter N. Strong

Date: 6 JUNE 2005



Witness (Signature)

Date: 6/6/05

J.M. STEVENSON

Witness (Please Print Name)

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ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our
seals.



Richard A. Carter

Date: 09-06-05

Witness (Signature)

Date: 9/6/05J.M. STEVENSON

Witness (Please Print Name)

10/14/05 6:26

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IN WITNESS WHEREOF, we have hereunto set our hands and affixed our
seals.



Antony C. Holmes

Date: 6/6/2005.



Witness (Signature)

Date: 6/6/05

J. M. STEDENSON

Witness (Please Print Name)

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IN WITNESS WHEREOF, we have hereunto set our hands and affixed our
seals.



Colin H.V. Spier

Date: 6 June 2005

Witness (Signature)

Date: 6/6/05J.M. STEVENSON

Witness (Please Print Name)

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IN WITNESS WHEREOF, we have hereunto set our hands and affixed our
seals.


Nigel J.R. King

Date: 6 June 2005


Witness (Signature)

Date: 6/6/05

J.M. STEVENSON
Witness (Please Print Name)

319166

ORTHO-005XX

A S S I G N M E N T

In consideration of One Dollar and other good and valuable consideration, the receipt of which is hereby acknowledged, we,

Philip A. Bolt, residing at Redway House, Coombe Shute, Stoke Gabriel, Devon TQ96RG United Kingdom,

Timothy G. Wild, residing at 3 Church Park Close, Diptford, Totnes, Devon TQ97PH United Kingdom,

Gregor R. Dean residing at 5 Townsend Avenue, Seaton, Devon EX122AZ United Kingdom

Paul Clark residing at 180 Roselands Drive, Paignton, Devon TQ47RW United Kingdom

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Nigel J.R. King residing at Culverwood, Rattery, South Brent, Devon TQ109LF United Kingdom,

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and the application for United States Letters Patent therefor filed on April 27, 2005, Application No. 11/116,115, and such patents as may issue thereon and all divisions, reissues and continuations and continuations-in-part thereof.

And we hereby covenant that we have full right to make such assignment, and agree for ourselves and our executors and administrators that we will, at the expense of said PIPING HOT NETWORKS LIMITED, execute all applications for patents in foreign countries, execute all divisional, continuing, reissue and re-examination applications, make all rightful oaths, sign all lawful papers, testify in any proceeding in which said invention or any application or patent directed thereto may be involved, and generally do everything possible to aid said PIPING HOT NETWORKS LIMITED, its successors and assigns, to obtain and enforce proper patent protection for said invention in the United States, its territories and all foreign countries.

And we hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue all Letters Patent on said invention or resulting therefrom to PIPING HOT NETWORKS LIMITED, its successors and assigns.

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.

PAR Bolt

Philip A. Bolt

Date: 10/6/05M Stevens

Witness (Signature)

Date: 10/6/05J.M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.



Timothy G. Wild

Date: 9/6/05



Witness (Signature)

Date: 9/6/05

J. M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.

Gregor Dean
Gregor R. Dean

Date: 6th June 2005

J.M. Stevenson
Witness (Signature)

Date: 6/6/05

J.M. STEVENSON
Witness (Please Print Name)

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.


Paul Clark

Date: 9/6/05


Witness (Signature)

Date: 9/6/05

J. M. STEVENSON
Witness (Please Print Name)

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.



Peter N. Strong

Date: 6 JUNE 2005



Witness (Signature)

Date: 6/6/05

J. M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.



Richard A. Carter

Date: 09-06-05



Witness (Signature)

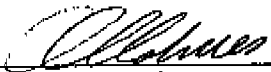
Date: 9/6/05

J.M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.


Antony C. Holmes

Date: 6/6/2005.


Witness (Signature)

Date: 6/6/05

J.M. STEVENSON
Witness (Please Print Name)

ORTHO-005XX

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Colin H.V. Spier

Date: 6 June 2005



Witness (Signature)

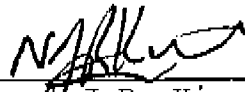
Date: 6/6/05

J.M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.



Nigel J.R. King

Date: 6 June 2005.



Witness (Signature)

Date: 6/6/05

J.M. STEVENSON

Witness (Please Print Name)

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PARA

Philip A. Bolt

Date:

10/6/05M. Stevenson

Witness (Signature)

Date:

10/6/05J.M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

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Timothy G. Wild

Date: 9/6/05



Witness (Signature)

Date: 9/6/05

J. M. STEVENSON

Witness (Please Print Name)

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Gregor R. Dean
Gregor R. Dean

Date: 6th June 2005

J.M. Stevenson
Witness (Signature)

Date: 6/6/05

J.M. STEVENSON
Witness (Please Print Name)

ORTHO-005XX

IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals.

P. Clark
Paul Clark

Date: 9/6/05

J. M. Stevenson
Witness (Signature)

Date: 9/6/05

J. M. STEVENSON
Witness (Please Print Name)

ORTHO-005XX

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Peter N. Strong

Date: 6 JUNE 2005



Witness (Signature)

Date: 6/6/05

J.M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

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Richard A. Carter

Date: 09-06-05



Witness (Signature)

Date: 9/6/05

J.M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

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Antony C. Holmes

Date: 6/6/2005.



Witness (Signature)

Date: 6/6/05

J. M. STEVENSON

Witness (Please Print Name)

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Colin H.V. Spier

Date: 6 June 2005



Witness (Signature)

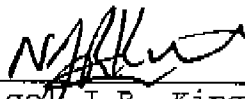
Date: 6/6/05

J.M. STEVENSON

Witness (Please Print Name)

ORTHO-005XX

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Nigel J.R. King

Date: 6 June 2005.



Witness (Signature)

Date: 6/6/05

J.M. STEVENSON

Witness (Please Print Name)

319166