

# PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| <b>SUBMISSION TYPE:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                | NEW ASSIGNMENT               |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------|------------------------------|------------------------|----------------------------|--------------|-------------|-----------------------|------------|---------------------|------------|----------------|------------|
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                           | ASSIGNMENT                   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                              |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Purushotham Kamath</td> <td>10/02/2008</td> </tr> <tr> <td>James S. Cho</td> <td>10/03/2008</td> </tr> <tr> <td>Prem Kumar</td> <td>10/03/2008</td> </tr> <tr> <td>Matthew Smith</td> <td>10/09/2008</td> </tr> <tr> <td>Haixiang Liang</td> <td>10/03/2008</td> </tr> </tbody> </table> |                              | Name          | Execution Date               | Purushotham Kamath     | 10/02/2008                 | James S. Cho | 10/03/2008  | Prem Kumar            | 10/03/2008 | Matthew Smith       | 10/09/2008 | Haixiang Liang | 10/03/2008 |
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Execution Date               |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| Purushotham Kamath                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 10/02/2008                   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| James S. Cho                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 10/03/2008                   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| Prem Kumar                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 10/03/2008                   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| Matthew Smith                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 10/09/2008                   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| Haixiang Liang                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 10/03/2008                   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                              |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;"><b>Name:</b></td> <td>Atheros Communications, Inc.</td> </tr> <tr> <td><b>Street Address:</b></td> <td>5480 Great America Parkway</td> </tr> <tr> <td><b>City:</b></td> <td>Santa Clara</td> </tr> <tr> <td><b>State/Country:</b></td> <td>CALIFORNIA</td> </tr> <tr> <td><b>Postal Code:</b></td> <td>95054-3644</td> </tr> </table>                                                  |                              | <b>Name:</b>  | Atheros Communications, Inc. | <b>Street Address:</b> | 5480 Great America Parkway | <b>City:</b> | Santa Clara | <b>State/Country:</b> | CALIFORNIA | <b>Postal Code:</b> | 95054-3644 |                |            |
| <b>Name:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Atheros Communications, Inc. |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>Street Address:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 5480 Great America Parkway   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>City:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Santa Clara                  |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>State/Country:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | CALIFORNIA                   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>Postal Code:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 95054-3644                   |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                              |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Property Type</th> <th style="width: 70%;">Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12248852</td> </tr> </tbody> </table>                                                                                                                                                                                                                      |                              | Property Type | Number                       | Application Number:    | 12248852                   |              |             |                       |            |                     |            |                |            |
| Property Type                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Number                       |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| Application Number:                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 12248852                     |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                              |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <p>Fax Number: (510)742-7419</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 510-742-7417</p> <p>Email: gsmith@gsslawgroup.com</p> <p>Correspondent Name: Gregory Scott Smith</p> <p>Address Line 1: 3900 Newark Mall Road, Suite 317</p> <p>Address Line 4: Newark, CALIFORNIA 94560</p>                                                                                                                                    |                              |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 508-003U                     |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Gregory Scott Smith          |               |                              |                        |                            |              |             |                       |            |                     |            |                |            |

OP \$40.00 12248852

**500673622**

**PATENT  
REEL: 021670 FRAME: 0416**

Total Attachments: 2

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RECORDATION FORM COVER SHEET  
**PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)**

Purushotham Kamath  
James S. Cho  
Prem Kumar  
Matthew Smith  
Haixiang Liang

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

**3. Nature of conveyance/Execution Date(s):**

Execution Date(s) 10/02/08, 10/03/08, 10/03/08,  
10/09/08, 10/03/08

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other \_\_\_\_\_

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

Name: Atheros Communications, Inc.

Internal Address: \_\_\_\_\_

Street Address: 5480 Great America Parkway

City: Santa Clara

State: CA

Country: \_\_\_\_\_ Zip: 95054-3644

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

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

A. Patent Application No.(s) 12/248,852

☐ This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

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

Name: GREGORY SCOTT SMITH

GSS LAW GROUP

Internal Address: \_\_\_\_\_

Street Address: 3900 Newpark Mall Road, Suite 317

City: Newark

State: CA Zip: 94560

Phone Number: (510) 742-7417

Fax Number: (510) 742-7419

Email Address: gsmith@gsslawgroup.com

**6. Total number of applications and patents involved: 1**

**7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00**

- ☐ Authorized to be charged to deposit account  
☒ Enclosed  
☐ None required (government interest not affecting title)

**8. Payment Information**

Deposit Account Number 502276

Authorized User Name \_\_\_\_\_

**9. Signature:** \_\_\_\_\_

Signature

October 9, 2008

Date

GREGORY SCOTT SMITH

Name of Person Signing

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

2

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450

**ASSIGNMENT**

For good and valuable consideration, receipt of which is hereby acknowledged, we

|                           |                                                            |
|---------------------------|------------------------------------------------------------|
| <u>Purushotham Kamath</u> | of <u>5480 Great America Parkway Santa Clara, CA 95054</u> |
| <u>James S. Cho</u>       | of <u>5480 Great America Parkway Santa Clara, CA 95054</u> |
| <u>Prem Kumar</u>         | of <u>5480 Great America Parkway Santa Clara, CA 95054</u> |
| <u>Matthew Smith</u>      | of <u>5480 Great America Parkway Santa Clara, CA 95054</u> |
| <u>Haixiang Liang</u>     | of <u>5480 Great America Parkway Santa Clara, CA 95054</u> |

hereby sell, assign and transfer to Atheros Communications, Inc., a Delaware corporation, having a place of business at 5480 Great America Parkway Santa Clara, CA 95054, its successors and assigns, the entire right, title and interest throughout the world in our invention in

**"METHOD AND APPARATUS FOR SYNCHRONIZING AND/OR STARING ACCESS POINTS FOR ADAPTIVE TIME DIVISION MULTIPLEXING ON A MULTI-CHANNEL WIRELINE MEDIUM WITH COLOCATED TRANSCEIVERS"**

for which United States Patent Application Serial No. 12/248,852 was filed on October 09, 2008 and all patent applications and patents of every country for said invention, including divisions, reissues, continuations and extensions thereof, and all rights of priority resulting from the filing of said applications; we authorize the above-named assignee to apply for patents of foreign countries for said invention, and to claim all rights of priority without further authorization from us; we agree to execute all papers useful in connection with said United States and foreign applications, and generally to do everything possible to aid said assignee, their successors, assigns and nominees, at their request and expense, in obtaining and enforcing patents for said invention in all countries; and we request the Commissioner of Patents and Trademarks to issue all patents granted for said invention to the above-named assignee, its successors and assigns.

Executed this 2<sup>ND</sup> day of OCTOBER, 2008.

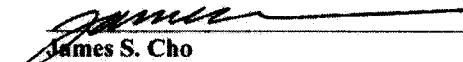
  
Purushotham Kamath

Signature Witness 1:  
(Print name)

  
ROBERT ANTONIO

Signature Witness 2:  
(Print name)

Executed this 3<sup>rd</sup> day of October, 2008.

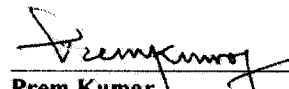
  
James S. Cho

Signature Witness 1:  
(Print name)

  
ROBERT ANTONIO

Signature Witness 2:  
(Print name)

Executed this 3 day of Oct, 2008.

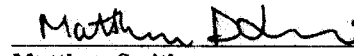
  
Prem Kumar

Signature Witness 1:  
(Print name)

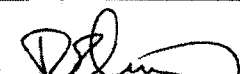
  
ROBERT ANTONIO

Signature Witness 2:  
(Print name)

Executed this 9<sup>th</sup> day of October, 2008.

  
Matthew Smith

Signature Witness 1:  
(Print name)


  
ROBERT ANTONIO

Signature Witness 2:  
(Print name)

Executed this 3<sup>rd</sup> day of October, 2008.

  
Haixiang Liang

Signature Witness 1:  
(Print name)

  
ROBERT ANTONIO

Signature Witness 2:  
(Print name)