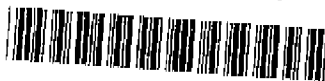


FORM PTO-1595
Rev. 6-93
OMB-0851-0011



12-29-2004



102913119

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

SHEET

To the Patent and Trademark Office, Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

<p>1. Name of conveying party(ies):</p> <p>Raja Banerjee Bahman Bazaresh Tony S. El-Kik Kannan Rajamani</p> <p>Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger</p> <p><input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name</p> <p><input type="checkbox"/> Other _____</p> <p>Execution Date: _____</p>	<p>2. Name and address of receiving party(ies):</p> <p>Name: <u>Aqera Systems Inc.</u></p> <p>Internal Address: _____</p> <p>Street Address: <u>1110 American Parkway NE</u></p> <p>City: <u>Allentown</u> State: <u>PA</u> Zip: <u>18109</u></p> <p>Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>4. Application number(s) or patent number(s):</p> <p>If this document is being filed together with a new application, the execution date of the application is _____.</p> <p>A. Patent Application No.(s) B. Patent No. (s)</p> <p>09/607,619 Filed on 06/30/00</p> <p>Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	
<p>5. Name and address of party to whom correspondence concerning document should be mailed:</p> <p>Name: <u>Steve Mendelsohn</u></p> <p>Internal Address: <u>Mendelsohn & Associates, P.C.</u></p> <p>Street Address: <u>1515 Market Street</u></p> <p><u>Suite 715</u></p> <p>City: <u>Philadelphia</u> State: <u>PA</u> Zip: <u>19102</u></p>	<p>6. Total number of applications and patents involved: <u>1</u></p> <p>7. Total fee (37 CFR 3.41) \$ <u>\$40.00</u></p> <p><input checked="" type="checkbox"/> Enclosed</p> <p><input type="checkbox"/> Authorized to be charged to deposit account</p> <p>8. Deposit account number: _____</p> <p>(Attach duplicate copy of this page if paying by deposit account)</p>

12/23/2004 SDENBOB2 00000005 09607619

DO NOT USE THIS SPACE

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40.00 0P

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.

Kevin M. Drucker [Signature] 12/20/04

Name of Person Signing Signature Date

Total number of pages including cover sheet, attachments, and document: 13

Mail documents to be recorded with required cover sheet information to:
Director of the Patent and Trademark Office, Mail Stop Assignment Recordation Services
P.O. Box 1450, Alexandria, VA 22313-1450

Form PTO-1595

(Rev. 6-93)

OMB No. 0657-0011 (exp. 4/94)



12-20-2000



101556887

U.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):

Raja Banerjee, Bahman Barazesh,
Tony S. El-Kik and Kannan Rajamani

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

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment ☐ Merger
☐ Security Agreement ☐ Change of Name
☐ Other

Execution Date: 11/28/00; 11/28/00; 07/10/00; and
11/28/00

2. Name and Address of receiving party(ies)

Name: Lucent Technologies Inc.

Internal Address: _____

Street Address: 600 Mountain AvenueP.O. Box 636City: Murray Hill State: NJ ZIP: 07974-0636

Additional name(s) & address(es) attached?

☐ Yes ☒ No

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)

09/607,619

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

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

Name: Steve MendelsohnInternal Address: Mendelsohn & Associates, P.C.Street Address: 1515 Market StreetSuite 715City: Philadelphia State: PA ZIP: 19102

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:

12-2325

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

12/20/2000 NYHA11 00000210 102325 09607619

DO NOT USE THIS SPACE

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405

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.

Name of Person Signing Ian M. HughesSignature Chuck HughesDate December 1, 2000Total number of pages including cover sheet, attachments, and document: 11Banerjee 6-8-10-5 Mail documents to be recorded with required cover sheet information to:
990.0271 Commissioner of Patents & Trademarks, Box Assignments

Washington, D.C. 20231

Send All Correspondence To Customer No.: 22186

PATENT
REEL: 016486 FRAME: 0152

Customer No.: 22186

Attorney Docket No.: Banerjca 6-8-10-5

ASSIGNMENT AND AGREEMENT

For value received, I, as a below-named inventor:

Raja Banerjee of Edison in the County of Middlesex and State of New Jersey,
Bahman Barazesh of Marlboro in the County of Monmouth and State of New Jersey,
Tony S. El-Kik of Allentown in the County of Lehigh and State of Pennsylvania,
Kannan Rajamani of Edison in the County of Middlesex and State of New Jersey,

hereby sell, assign, and transfer to Lucent Technologies Inc., a corporation of the State of Delaware, having an office at 600 Mountain Avenue, Murray Hill, New Jersey 07974-0636, U.S.A., and its successors, assigns, and legal representatives, the entire right, title, and interest, for the United States of America, in and to certain inventions related to **Transmission Rate Compensation For A Digital Multi-Tone Transceiver** described in an application for Letters Patent of the United States, identified using the same Attorney Docket No., and all the rights and privileges in said application and under any and all Letters Patent that may be granted in the United States for said inventions; and I also concurrently hereby sell, assign, and transfer to Lucent Technologies Inc. the entire right, title, and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

I authorize Lucent Technologies Inc. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from me, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of Lucent Technologies Inc. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

I request that any and all patents for said inventions be issued to Lucent Technologies Inc. in the United States and in all countries foreign to the United States, or to such nominees as Lucent Technologies Inc. may designate.

I agree that, when requested, I shall, without charge to Lucent Technologies Inc. but at its expense, sign all papers, and do all acts which may be necessary, desirable, or convenient in connection with said applications, patents, or other forms of protection.

11/28/00 TUE 16:13 FAX

10/13/2000 14:14 2155578477

MENDELSON & ASSOCS

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Customer No.: 22186

-2-

Attorney Docket No.: Banerjee 6-8-10-5


Raja Banerjee

Date: 11/28/2000

United States of America)

State of New Jersey) ss.:

County of Monmouth)

On this 28th day of November, 2000, before me personally came Raja Banerjee, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.


Notary Public

LINDA K. KRICHMAN
Notary Public of New Jersey, USA
Registered in Monmouth County
My Commission Expires October 28, 2004

11/28/00 TUE 10:13 FAX

10/13/2000 14:14 2155578477

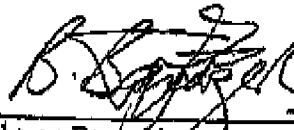
MENDELSON & ASSOC

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PAGE 04/11

Customer No.: 22186

-3-

Attorney Docket No.: Raneria 6-8-10-5


Bahman Barazesh

Date: 11/28/2000

United States of America)

State of New Jersey) ss.:

County of Monmouth

On this 28th day of November, 2000, before me personally came Bahman Barazesh, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.


Notary Public

LINDA K. KRICHMAN
Notary Public of New Jersey, USA
Registered in Monmouth County
My Commission Expires October 25, 2004

Customer No.: 22186

-4- Attorney Docket No.: Banerjee 6-8-10-5


Tony S. El-Kik

Date: 7-10-2000

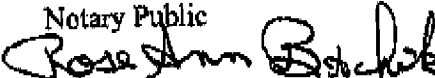
United States of America)

State of Pennsylvania) ss.:

County of Lehigh)

On this 10th day of July, 2000, before me personally came Tony S. El-Kik, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public



Notarial Seal
Rose Ann Bachik, Notary Public
Allentown, Lehigh County
My Commission Expires Nov. 3, 2003
Member, Pennsylvania Association of Notaries



07/06/2005 09:09 AGERE IP LAW → 912155578477

NO.132 017

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MENDELSON & ASSOCS

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Customer No.: 22186

-5- Attorney Docket No.: Benetia 6-8-10-5

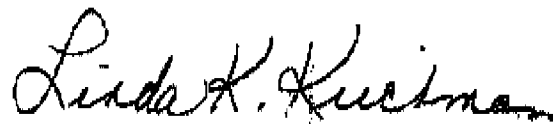
Kannan Rajamani

Date: 11/28/2000

United States of America)

State of New Jersey) ss: 590-25-7740County of Monmouth)

On this 28th day of November, 2000, before me personally came Kannan Rajamani, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.



Notary Public

LINDA K. RICHMAN
Notary Public of New Jersey, USA
Registered in Monmouth County
My Commission Expires October 28, 2004

Lucent Technologies Inc.
600 Mountain Avenue (Room 3C-512)
P. O. Box 636
Murray Hill, New Jersey 07974-0636

890.0271

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NO.132 003

12/16/2004 10:58 AGERE IP LAW → 912155578477

NO.869 006

EXECUTION COPY

PATENT ASSIGNMENT

by and between

LUCENT TECHNOLOGIES INC.

and

AGERE SYSTEMS GUARDIAN CORP.

Dated as of January 30, 2001

PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT (this "Assignment"), effective as of January 30, 2001 (the "Effective Date"), is by and between Lucent Technologies Inc., a Delaware corporation, with offices at 600 Mountain Avenue, Murray Hill, New Jersey 07974, United States of America, ("ASSIGNOR") and Agere Systems Guardian Corp., a Delaware corporation, with offices at 555 Union Boulevard, Allentown, PA 18109, United States of America ("Agere Systems Guardian").

RECITALS

A. WHEREAS, the Board of Directors of ASSIGNOR has determined that it is in the best interests of ASSIGNOR and its stockholders to separate ASSIGNOR's existing businesses into two independent businesses;

B. WHEREAS, ASSIGNOR presently owns or controls certain patents, patent applications, and invention submissions listed in the attached Appendices A and B (hereinafter "TRANSFERRED PATENTS") and;

C. WHEREAS, in furtherance of the foregoing separation, ASSIGNOR desires to transfer, assign, convey, deliver and vest all of its interests and rights in TRANSFERRED PATENTS for all countries, jurisdictions and political entities of the world, to and in Agere Systems Guardian;

NOW, THEREFORE, in consideration of the premises and for other good and valid consideration, the receipt and sufficiency of which are hereby acknowledged, the parties, intending to be legally bound, agree as follows:

ASSIGNOR, subject to existing rights and licenses of third parties, does hereby assign, convey, transfer and deliver, and agrees to assign, convey, transfer and deliver to Agere Systems Guardian, its successors, assigns and legal representatives or nominees, ASSIGNOR's entire right, title and interest, for all countries, jurisdictions and political entities of the world, along with the right to sue for past infringement, to all TRANSFERRED PATENTS listed on Appendices A and B, and corresponding counterpart foreign patents and patent applications, with respect to which, and to the extent to which, ASSIGNOR now has or hereafter acquires the right to so assign, convey, transfer and deliver. Agere Systems Guardian recognizes that ASSIGNOR holds only bare legal title to the TRANSFERRED PATENTS listed in Appendix A (which lists the United States Patents and patent applications previously exclusively licensed to Lucent Technologies Microelectronics Guardian Corp.).

ASSIGNOR and ASSIGNEE recognize that the patents listed in Appendices A and B may inadvertently include patents that are owned by various subsidiaries of ASSIGNOR, including Agere, Inc., Ortel Corporation, Optimay Corporation, Herrmann Technology, Inc., and Enable Semiconductor, Inc. Ownership of such patents shall not be affected by this Patent

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NO.132 005

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NO.869 008

Assignment, and ASSIGNEE agrees that any such patents shall be deemed deleted from Appendices A and B.

ASSIGNOR agrees that, upon request it will, at any time without charge to Agere Systems Guardian, but at Agere Systems Guardian's expense, furnish all necessary documentation relating to or supporting chain of title, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for vesting title to TRANSFERRED PATENTS in Agere Systems Guardian, its successors, assigns and legal representatives or nominees; including but not limited to any acts which may be necessary, desirable or convenient for claiming said rights and for securing and maintaining patents for said inventions in any and all countries and for vesting title thereto in Agere Systems Guardian and its respective successors, assigns and legal representatives or nominees.

/2005 11:49 2155578477

MENDELSON AND ASSOC

PAGE 15/19

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NO. 132 006

12/16/2004 10:58 AGERE IP LAW → 912155578477

NO. 669 009

Execution Copy

IN WITNESS WHEREOF, the parties have caused this **PATENT ASSIGNMENT** to be executed by their duly authorized representatives as of the Effective Date.

LUCENT TECHNOLOGIES INC.

By: 

Daniel P. McCurdy
President, Intellectual Property Business

AGERE SYSTEMS GUARDIAN CORP.

By: 

Fred M. Romano
President

07/06/2005 09:09 AGERE IP LAW → 912155578477

NO.132 007

12/16/2004 10:59 AGERE IP LAW → 912155578477

NO.869 010

Execution Copy

ACKNOWLEDGMENTS

STATE OF NEW JERSEY)

35:

COUNTY OF SOMERSET)

I CERTIFY that on January 30, 2001, Daniel P. McCurdy personally came before me and this person acknowledged under oath, to my satisfaction that:

- a.) this person signed, sealed and delivered the attached Patent Assignment as President - Intellectual Property Business of Lucent Technologies Inc.; and
- b.) this Patent Assignment was signed and made by Lucent Technologies Inc. as its voluntary act and deed by virtue of authority from its Board of Directors.



Name TAMARA ANNE HANNA
 Notary Public Notary Public of New Jersey
 My Commission Expires Registered in Hunterdon County
 (Notarial Seal) My Commission Expires March 25, 2003

STATE OF FLORIDA)

36:

COUNTY OF ORANGE)

I CERTIFY that on January 31, 2001, Fred M. Romano personally came before me and this person acknowledged under oath, to my satisfaction that:

- a.) this person signed, sealed and delivered the attached Patent Assignment as Vice President of Agere Systems Guardian Corp.; and
- b.) this Patent Assignment was signed and made by Agere Systems Guardian Corp. as its voluntary act and deed by virtue of authority from its Board of Directors.



Name
 Notary Public
 My Commission Expires:
 (Notarial Seal)



APPENDIX B (continued)
Transferred Patents

Case Name	Filing Date	Issue Date	Patent No.	Serial No.
Balakrishnan 1-7	1/29/1999			09/240005
Baranjan 4-3-4-1	6/11/1998		09/066425	
Baranjan 6-6-10-8	6/30/2000			09/807819
Baranjan 1-14	4/30/1998		09/068733	
Baranjan 2-2-20	1/10/2000			09/488089
Barik 1-30-73-38-1	8/31/1998			09/588514
Barik 2-73	2/28/2000			09/614489
Barik 2-62-4-21-83-15-43-7	11/23/1998			09/447228
Baru 10	6/29/2000		09/878400	
Baru 11-14	8/26/2000		09/229393	
Baru 9-1	11/30/1998			09/461044
Bas 10	4/23/1999			09/288573
Bas 12-23-34-13-21	8/6/1999			09/391739
Bas 13-23	8/9/1999			09/363032
Bas 14-3	4/6/2000			09/543908
Bas 2-12-1-8	12/30/1998		09/770536	
Bas 3	11/24/1997		09/878849	
Bas 7	12/11/1998			09/204002
Bas 9-1-13	5/5/1999			09/305722
Barakat 1-1	9/5/1997		09/824807	
Barakat 2-2	2/3/2000			09/498509
Barasch 1-1	8/8/1997		09/605818	
Barasch 4-10-3-1	5/22/1999			09/337887
Barasch 5-12-4-2	8/23/1999			09/338894
Barasch 6-13-5-3	8/23/1999			09/338134
Barbe 1-3-2-14-12	2/9/1999			09/370422
Barber 18-14-8-1	8/30/1998			09/388748
Barber 11-15-30	9/18/2000			09/871818
Barber 12-2	2/4/2000			09/498472
Barber 13-5-4	2/4/2000			09/497593
Barber 14-6-5-5	2/4/2000			09/497593
Barber 15-7	12/17/1998			09/483483
Barber 16-18-48	11/1/1999			09/432040
Barber 17-53	11/1/1999			09/431772
Barber 18-3	2/11/2000			09/593225
Barber 19-3-2-19-57	5/23/2000			09/78907
Barber 20-17-1-2-58	9/28/2000			
Barber 22-3-21	8/26/2000		09/889544	
Barber 23-18-22	10/31/2000		09/702713	
Barber 7-10-2	7/18/1999			09/354711
Barber 8-26-11-1	8/12/1998		09/152188	
Barber 9-1-25-12	8/12/1998		09/152188	
Barwell 1-1	8/2/1999			09/383488
Baron 3-32-30-3	9/11/2000		09/630870	
Barovavatra 3-10	3/2/1998		09/017174	
Basak 2-2-1	12/16/1998			09/481609
Basdog 12-1-1	11/17/1998			09/441751
Basen 1-4-3-3-1	5/18/1998			
Basen 2-6-4-5-3-1	8/14/1998		09/030787	
Basen 3-5-6-3-2	10/18/1998		09/182744	
Basen 4-7-6-7-4-3	12/4/1998			09/174638
Basen 5-8-8-10-4	3/23/1999			09/205488
Basen 5-10-8-11-5	3/22/1999			09/274134
Basen 7-11-10-12-8	3/22/1999			09/274128
Beaudouville 1	3/8/1998		09/146324	
Beumauer 14-10	7/24/1999		09/122982	
Beutling 1-1-1-1-1-1	2/11/2000			09/802268
Beutling 1-1-1-1-1-1	10/29/1998			09/430788
Beyer 1	2/24/1998		09/030069	
Beyer 2	6/8/1998	7/4/2000	6054442	

Delaware

PAGE 1

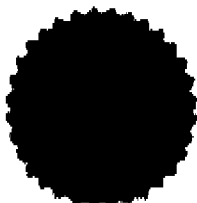
The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF OWNERSHIP, WHICH MERGES:

"AGERE SYSTEMS GUARDIAN CORP.", A DELAWARE CORPORATION, WITH AND INTO "AGERE SYSTEMS INC." UNDER THE NAME OF "AGERE SYSTEMS INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-NINTH DAY OF AUGUST, A.D. 2002, AT 9 O'CLOCK A.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF OWNERSHIP IS THE THIRTY-FIRST DAY OF AUGUST, A.D. 2002.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



Harriet Smith Windsor
Harriet Smith Windsor, Secretary of State

3268412 8100M

AUTHENTICATION: 1958517

020545223

DATE: 08-29-02

PATENT
REEL: 016486 FRAME: 0164

STATE OF DELAWARE
SECRETARY OF STATE
DIVISION OF CORPORATIONS
FILED 09:09 AM 12/22/2004
020545222 - 3358412

CERTIFICATE OF OWNERSHIP AND MERGER**OF****Agere Systems Guardian Corp.**
(a Delaware corporation)**INTO****Agere Systems Inc.**
(a Delaware corporation)**UNDER SECTION 253 OF THE GENERAL
CORPORATION LAW OF THE STATE OF DELAWARE**

Agere Systems Inc., a corporation organized and existing under the laws of Delaware ("Corporation"), DOES HEREBY CERTIFY:

FIRST: The Corporation is the owner of all of the outstanding shares of common stock of Agere Systems Guardian Corp., which is also a business corporation of the State of Delaware.

SECOND: On August 22, 2002 the Subsidiary Governance Committee of the Board of Directors of the Corporation adopted the following resolution to merge Agere Systems Guardian Corp. into the Corporation:

RESOLVED that Agere Systems Guardian Corp., a Delaware corporation, shall be merged with and into Agere Systems Inc., a Delaware corporation, with Agere Systems Inc. being the surviving corporation, and Agere Systems Inc. shall thereupon assume all of the obligations of Agere Systems Guardian Corp."

THIRD: That the merger authorized hereby shall become effective as of 8:00 a.m. Eastern Standard Time on August 31, 2002.

Executed on August 22, 2002

AGERE SYSTEMS INC.

By Paul Berno
Paul Berno, Vice President