





MRPG-17-99

FORM PTO-1595 (Rev. 6/93)	<b>06-21-1999</b>  <b>101071711</b>	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office  Attorney's Docket No. <u>032478-002</u>			
To the Honorable Commissioner of Patents and Trademarks, please record the attached original documents or copy thereof.					
1. Name of conveying party(ies):  Debajyoti Pal, Sujai Chari, Christopher Hansen and Chung-Li Lu  Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  3. Nature of conveyance:  <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name  Other: _____  Execution Date: <u>June 15, 1999; May 17, 1999; May 16, 1999</u>	2. Name and address of receiving party(ies):  Name: <u>Excess Bandwidth Corporation</u>  Address: <u>2475 Augustine Drive, Suite 103</u> <u>Santa Clara, California 95054</u>  Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> 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: _____  <table style="width: 100%;"> <tr> <td style="width: 50%;">           A. Patent Application No.(s)             09/281,903         </td> <td style="width: 50%;">           B. Patent No.(s)         </td> </tr> </table> Additional numbers attached? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No			A. Patent Application No.(s)  09/281,903	B. Patent No.(s)	
A. Patent Application No.(s)  09/281,903	B. Patent No.(s)				
5. Name and address of party to whom correspondence concerning document should be mailed:  Name: Michael J. Ure  Address: BURNS, DOANE, SWECKER & MATHIS, L.L.P.  P.O. Box 1404  Alexandria, Virginia 22313-1404	6. Total number of applications and patents involved: <u>1</u>  7. Total fee (37 CFR 3.41): <u>\$ 40.00</u> <input checked="" type="checkbox"/> Enclosed <input checked="" type="checkbox"/> Authorized to be charged to deposit account, if necessary  8. Deposit account number:  <u>02-4800</u>				
DO NOT USE THIS SPACE					
9. Statement and signature. <i>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.</i>  <table style="width: 100%;"> <tr> <td style="width: 33%;"> <u>Michael J. Ure, Reg. No. 33,089</u>            Name of Person Signing         </td> <td style="width: 33%; text-align: center;">             Signature         </td> <td style="width: 33%; text-align: right;"> <u>June 16, 1999</u>            Date         </td> </tr> </table> Total number of pages including cover sheet, attachments, and document: <u>3</u>			<u>Michael J. Ure, Reg. No. 33,089</u> Name of Person Signing	 Signature	<u>June 16, 1999</u> Date
<u>Michael J. Ure, Reg. No. 33,089</u> Name of Person Signing	 Signature	<u>June 16, 1999</u> Date			

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

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# ASSIGNMENT

## (JOINT)

THIS ASSIGNMENT, by DEBAJYOTI PAL, SUJAI CHARI, CHRISTOPHER HANSEN, and CHUNG-LI LU, residing at 212 RABBIT COURT, FREMONT, CALIFORNIA 94539; 10 AVOCET DRIVE, #204, REDWOOD CITY, CALIFORNIA 94065; 1035 ASTER AVENUE, #2136, SUNNYVALE, CALIFORNIA 94086 and 970 CORTE MADERA, #311, SUNNYVALE, CALIFORNIA 94086 (hereinafter referred to as "the Assignors"), respectively, witnesseth:

WHEREAS, the Assignors have invented certain new and useful improvements in DIGITALLY-TUNABLE ECHO-CANCELLING ANALOG FRONT END FOR WIRELINE COMMUNICATIONS DEVICES, ☐ which is a provisional application to be filed herewith; ☐ which is a non-provisional application having an oath or declaration executed on even date herewith prior to filing of application; ☒ bearing Application No. 09/281,903, and filed on MARCH 31, 1999; and

WHEREAS, EXCESS BANDWIDTH CORPORATION, a corporation duly organized under and pursuant to the laws of THE STATE OF CALIFORNIA and having its principal place of business at 2475 AUGUSTINE DRIVE, SUITE 103, SANTA CLARA, CALIFORNIA 95054 (hereinafter referred to as "the Assignee"), is desirous of acquiring the entire right, title, and interest in and to said inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications, including provisional applications for Letters Patent of the United States or other countries claiming priority to said application, and in and to any Letters Patent or Patents, United States or foreign, to be obtained therefor and thereon.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignors have sold, assigned, transferred, and set over, and by these presents do sell, assign, transfer, and set over, unto the Assignee, its successors, legal representatives, and assigns the entire right, title, and interest in and to the above-mentioned inventions, the right to file applications on said inventions and the entire right, title and interest in and to any applications for Letters Patent of the United States or other countries claiming priority to said application, and any and all Letters Patent or Patents of the United States of America and all foreign countries that may be granted therefor and thereon, and in and to any and all applications claiming priority to said applications, divisions, continuations, and continuations-in-part of said applications, and reissues and extensions of said Letters Patent or Patents, and all rights under the International Convention for the Protection of Industrial Property, the same to be held and enjoyed by the Assignee, for its own use and behalf and the use and behalf of its successors, legal representatives, and assigns, to the full end of the term or terms for which Letters Patent or Patents may be granted as fully and entirely as the same would have been held and enjoyed by the Assignors had this sale and assignment not been made;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns, that, at the time of execution and delivery of these presents, the Assignors are the sole and lawful owners of the entire right, title, and interest in and to the inventions set forth in said applications and said applications, including provisional applications, above-mentioned, and that the same are unencumbered, and that the Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth;

AND for the same consideration, the Assignors hereby covenant and agree to and with the Assignee, its successors, legal representatives, and assigns that the Assignors will, whenever counsel of the Assignee, or the counsel of its successors, legal representatives, and assigns, shall advise that any proceeding in connection with said inventions or said applications for Letters Patent or Patents, or any proceeding in connection with Letters Patent or Patents for said inventions in any country, including interference proceedings, is lawful and desirable, or that any application claiming priority to said application, division, continuation, or continuation-in-part of any applications for Letters Patent or Patents, or any reissue or extension of any Letters Patent or Patents to be obtained thereon, is lawful and desirable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement, and defense of Letters Patent or Patents for said inventions, without charge to the Assignee, its successors, legal representatives, and assigns, but at the cost and expense of the Assignee, its successors, legal representatives, and assigns;

AND the Assignors hereby request the Commissioner of Patents to issue any and all said Letters Patent of the United States to the Assignee as the Assignee of said inventions, the Letters Patent to be issued for the sole use and behalf of the Assignee, its successors, legal representatives, and assigns.

Date <u>6/15/99</u>	Signature of Assignor	<u>Dehajyoti Pal</u> Dehajyoti Pal
Date <u>5/17/99</u>	Signature of Assignor	<u>Sujal Chari</u> Sujal Chari
Date <u>5/18/99</u>	Signature of Assignor	<u>Christopher Hansen</u> Christopher Hansen
Date <u>5/17/99</u>	Signature of Assignor	<u>Chung-Li Lu</u> Chung-Li Lu
Date _____	Signature of Assignor	_____
Date _____	Signature of Assignor	_____
Date _____	Signature of Assignor	_____
Date _____	Signature of Assignor	_____