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ASSIGNMENT

Attorney Reference No.: 4910.00013 Serial No.: 09/706,120

Inventors: Daniel J. Marchok; Richard C. Younce; Charles W.K. Gritton; Ravi Chandran

Date of Execution

of Application: November 17, 2000; November 22, 2000; November 29, 2000 Filing Date: 11/03/00

and November 17, 2000

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

TELLABS OPERATIONS, INC., a corporation of the state of Delaware

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

SYNCHRONIZATION OF VOICE BOUNDARIES AND THEIR USE BY ECHO CANCELLERS IN A VOICE PROCESSING SYSTEM

and identified as:

Attorney Reference No. 4910.00013

in the offices of Banner & Witcoff, Ltd. and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignees, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignees, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignees, its successors and assigns, to the full end of the term for

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PATENT REEL: 011688 FRAME: 0974

undersigned if this assignment had not been made. State of County of The foregoing instrument was acknowledged before me this _____ 1 7 to day of **NOTARY PUBLIC** EFRETAKI CONMIA MY COMMISSION EXCL NOW 22 2007 WITNESS my hand and seal this _ 33 day of Nov Richard C. Younce State of County of The foregoing instrument was acknowledged before me this _____ day of november , 2000 by Richard C. Younce **NOTARY PUBLIC** "OFFICIAL SEAL"
DEBRA A. MAIR
Notary Public, State of Illinois
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which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the

| WITNESS my hand and see the second day of Notary Public Commonwealth of Virginia My Commission Expires Mar. 24, 2002 | Charles W.K. Gritton | |
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| State of County of Low County | | |
| The foregoing instrument was acknowledged before a low by Charle Starts | . / | |
| WITNESS my hand and seal this 17th day of Nov. | Ravi Chandran | |
| State of Indeara County of Elekhart | 0 | |
| The foregoing instrument was acknowledged before me this 17th day of Movember, 2000 by Lavie Chandran | | |
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RECORDED: 03/16/2001