

Substitute 08-07-1998

Attorney Docket No.: 06269/013001

ION FORM COVER SHEET  
PATENTS ONLY



Assistant ( 100789786

of the attached original document.

7-28-98

1. Name of conveying party(ies):

Gopal Harikumar  
Daniel Marchok

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

Tellabs Operations, Inc.  
4951 Indiana Avenue  
MS-16  
Lisle, Illinois 60532

Additional name(s) attached?  Yes  No

Additional names/addresses attached?  Yes  No

3. Nature of conveyance:

- Assignment
- Merger
- Security Agreement
- Change of Name
- Other:

Execution Date: July 13, 1998

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

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

A. Patent Application No.(s):

09/054,468

B. Patent No.(s):

Additional numbers attached?  Yes  No

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

Carl B. Wischhusen  
Fish & Richardson P.C.  
601 Thirteenth Street, N.W.  
Washington, DC 20005

6. Total number of applications/patents involved: 1

7. Total fee (37 CFR 3.41): \$40

- Enclosed
- Authorized to charge deposit account

8. Deposit account number: 06-1050

If the fee above is being charged to deposit account, a duplicate copy of this cover sheet is attached. Please apply any additional charges, or any credits, to our Deposit Account No. 06-1050.

DO NOT USE THIS SPACE

9. Statement and signature: *To the best of my knowledge and belief, the foregoing information is true and correct and the attached is the original document.*

Carl B. Wischhusen

Name of Person Signing

Signature

July 28, 1998

Date

Total number of pages including cover sheet, attachments, and document: 3

08/03/1998 LSNEED  
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ASSIGNMENT

For valuable consideration, we, Gopal Harikumar, of South Bend, IN; and Daniel Marchok of Buchanan, MI ; hereby assign to Tellabs Operations, Inc., a Delaware corporation having a place of business at 4951 Indiana Avenue, MS-16, Lisle, Illinois 60532, and its successors and assigns (collectively hereinafter called "the Assignee"), the entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent signed by us, entitled SPECTRALLY CONSTRAINED IMPULSE SHORTENING FILTER FOR A DISCRETE MULTI-TONE RECEIVER, filed April 3, 1998, and assigned U.S. Serial Number 09/054,468, and we authorize and request the attorneys appointed in said application to hereafter complete this assignment by inserting above the filing date and serial number of said application when known; this assignment including said application, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, and design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

IN WITNESS WHEREOF, I hereto set my hand and seal at South Bend this 13<sup>th</sup> day of July, 1998  
Gopal Harikumar L.S.  
Gopal Harikumar

STATE OF Indiana  
COUNTY OF St. Joseph

Before me this 13<sup>th</sup> day of July, 1998, personally appeared Gopal Harikumar known to me to be the person whose name is subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

[Signature]  
Notary Public

[Notary's Seal Here]

My Commission Expires:  
PATENT  
Notary Public  
St. Joseph County, IN  
REEL: 9363 FRAME 0262  
My Commission Expires 8-3-99

IN WITNESS WHEREOF, I hereto set my hand and seal at 1st Source Bank  
this 13th day of July, 1998

Daniel Marchok L.S.  
Daniel Marchok

STATE OF Indiana

COUNTY OF St. Joseph

Before me this 13th day of July, 1998, personally appeared

Daniel Marchok known to me to be the person whose name is  
subscribed to the foregoing Assignment, and acknowledged that he/she executed the same as  
his/her free act and deed for the purposes therein contained.

[Signature]  
Notary Public

My Commission Expires:

[Notary's Seal Here]

Notary Public for the State of Indiana  
My Commission Expires on [Date]