

09-20-2002



Form PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002) Tab settings

102227692

U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office Attorney Docket No. Pilipetskii 4-1 Div.

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies): Andrej B. Puc Alexei N. Pilipetskii Additional name(s) of conveying party(ies) attached? Yes No

7-25-02

2. Name and address of receiving party(ies) Name: Tyco Submarine Systems Ltd. Internal Address: Street Address: 340 Mount Kemble Avenue City: Morristown State: NJ Zip: 07960 Additional name(s) & address(es) attached? Yes No

PTO 10/205134 07/25/02

3. Nature of conveyance: [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other Execution Date: March 1, 1999

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: 3/1/99 A. Patent Application No.(s) B. Patent No.(s) Additional numbers attached? Yes No

10/205134

5. Name and address of party to whom correspondence concerning document should be mailed: Name: John P. Maldjian, Esq. Internal Address: Tyco Telecommunications (US) Inc. Street Address: 250 Industrial Way West City: Eatontown State: NJ Zip: 07724

6. Total number of applications and patents involved: 1 7. Total fee (37 CFR 3.41): \$ 40.00 [] Enclosed [X] Authorized to be charged to deposit account 8. Deposit account number: 50-0309 (Attach duplicate copy of this page if paying by deposit account)

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 any attached copy is a true copy of the original document. John P. Maldjian, Reg. No. 41,967 Name of Person Signing Signature Date July 25, 2002

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

Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231

PATENT REEL: 013297 FRAME: 0348

ASSIGNMENT AND AGREEMENT

For value received, we, Andrej B. Puc of 6 Prospect Avenue, Atlantic Highlands, New Jersey 07716 and Alexei N. Pilipetskii of 16 Raleigh Pass, Colts Neck, New Jersey 07722, hereby sell, assign, and transfer to Tyco Submarine Systems Ltd., a corporation of the State of Delaware, having an office at 340 Mount Kemble Avenue, Morristown, New Jersey 07960, U.S.A., and its successors, assigns, and legal representatives, the entire right, title, and interest in and to certain inventions related to **METHOD AND APPARATUS FOR IMPROVING SPECTRAL EFFICIENCY IN FIBER-OPTIC COMMUNICATION SYSTEM** described in an application for Letters Patent of the United States, executed by us of even date herewith, 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 we also concurrently hereby sell, assign, and transfer to Tyco Submarine Systems Ltd. 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.

We authorize Tyco Submarine Systems Ltd. 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 us, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

We 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 Tyco Submarine Systems Ltd. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

We request that any and all patents for said inventions be issued to Tyco Submarine Systems Ltd. in the United States and in all countries foreign to the United States, or to such nominees as Tyco Submarine Systems Ltd. may designate. We agree that, when requested, we shall without charge to Tyco Submarine Systems Ltd. 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.

Andrej B. PUC
Andrej B. PUC

Date: 3/1/99

United States of America)

State of New Jersey) ss.:

County of Monmouth)

On this 1st day of March 1999, before me personally came Stephen A. Bandrowski to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of same.

Christine L. Salmon
Notary Public: my commission expires 10/22/2003

Alexei N. Pilipetski
Alexei N. PILIPETSKII

Date: 3/1/99

United States of America)

State of New Jersey) ss.:

County of Monmouth)

On this 1st day of March 1999, before me personally came Holt A. Murray to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of same.

Christine L. Salmon
Notary Public: My commission expires 10/22/2003