Form PTO-1595 April 1, 1999	04-14	-1999   -	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office Attorney Docket No.: Kram 2-3-1
To The Honorable Commissioner Of Patents A	1010	10611	ginal documents or copy thereof.
Name of conveying party(ies):		2. Name and addre	ess of receiving party(ies):
Richard Kram		Name: Tyco Submarine Systems Ltd.  Internal Address:	
Jonathan Liss Peter Theophall			
Additional name(s) of conveying party(ies) attached [] yes [X] no	d?		
[1]10		Street Address: 60 Columbia Turnpike	
		City: Morristown State: New Jersey Zip: 07960	
		Additional nam	nes and addresses attached? [] yes [X] no
3. Nature of Conveyance  [X] Assignment [] Merger [] Security Agreement [] Change of Name [] Other  Execution Date: March 18, 1999			7.00 F. 7.00 F. 7.00 F. 7.00
4. Application number(s) or patent number(s):			
If this document is being filed together with a new and A. Patent Application No.(s)	application, the	B. Patent	
		D. Taten	
<b>N/A</b> Addition	nal numbers atta	ched? [] Yes [X]	
5. Name and address of party to whom correspondence concerning document should be mailed:			applications and patents involved: [1]
Name: B. K. Dinicola			
Internal Address: Rm. 1B-248			
Street Address: 250 Industrial Way West			
City: Eatontown State: NJ ZIP: 07724			
7. Total fee (37 C.F.R. 3.41)	\$ <u>40.00</u>	8. Deposit account this page if paying	number: 50-0309 (Attach duplicate copy of by deposit account)
	DO NOT USE		
9. Statement and signature. To the best of my knowledge and belief, the foregoing ing document. Brian K, Dinicola, Esq. Reg. No. 36,122 Name of Person Signing Total number of pages including coverage.	Sig	nike e	April 1, 1999 Date

do not detach this portion

09285581 Commissioner of Patents and Trademarks
Box Assignments
Washington, D.C. 20231

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

04/13/1999 DNGUYEN 00000077 500309

40.00 CH

01 FC:581

PATENT REEL: 9876 FRAME: 0180

## ASSIGNMENT AND AGREEMENT

For value received, we, Richard Kram, of Tinton Falls, in the County of Monmouth, and the State of New Jersey, Jonathan Liss, of Marlboro in the County of Monmouth, and the State of New Jersey, Peter Theophall, of Eatontown, in the County of Monmouth, and the State of New Jersey, hereby sell, assign and transfer to Tyco Submarine Systems, Ltd., a corporation of the State of Delaware, having an office at 60 Columbia Turnpike, Morristown, New Jersey 07960, 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 METHOD AND APPARATUS FOR AUTOMATICALLY IDENTIFYING SYSTEM FAULTS IN AN OPTICAL COMMUNICATIONS SYSTEM FROM REPEATER LOOP GAIN SIGNATURES, as described in an application for Letters Patent of the United States, executed by me 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.

PATENT REEL: 9876 FRAME: 0181

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.

Date: 3/31/99 United States of America ) State of New Jersey ) ss.: 155-48-4053 County of Monmouth ) On this 31st day of March, 199, before me personally came Richard Kram, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Brin Kell
Notary Public
an attorney in the State of New Tersey

Systems Ltd. but at its expense, desirable or convenient in conne protection.		which may be necessary,
Date: 3/3//55	Jonathan Liss	£
United States of America	)	
State of New Jersey	) ss.: 081-46-3219	
County of Monmouth	)	
On this 31s+ day personally came Jonathan Liss, texecuted the foregoing instrume		l described in and who

Brian HCC Notary Public an attorney in the State of New Jersey

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.

They hall. Date: 3/31/99

Peter Theophall

United States of America )

State of New Jersey ) ss.: 107-34-6926

County of New Jersey )

On this 31st day of March, 1999, before me personally came Peter Theophall, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Notary Public an attorney in the State of New Jerony