FORM PTO-1595 REC((Rev. 6-93) OMB No. 0651-0011 (exp. 4/94)	6-19-2001 U.S. DEPARTMENT OF COMMERCE
Tab settings ⇒ ⇒ ▼ ▼	Patent and Trademark Office
To the Henerable Commissioner of Patents and	d original documents or conv. thereof
1. Name of conveying party(ies):	01753123 address of receiving party(ies):
James E. Leight	TO LIVE
David L. Rollins	ę —
Richard A. Fields	Internal Address: S&EG Law Dept.
Additional name(s) of conveying party(ies) attached?	
3. Nature of conveyance: MRD 6 - 6 - 0)	
Assignment	Street Address: Bldg. E2/6051
☐ Security Agreement ☐ Change of Name	One Space Park
Other	City: Redondo Beach State: CA ZIP: 90278
Execution Date: May 22, 2001	Additional name(s) & address(es) attached?
4. Application number(s) or patent number(s): If this document is being filed together with a new application A. Patent Application No.(s) 09876017	B. Patent No.(s)
Additional numbers at	Tached?
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: PATENT COUNSEL	7. Total fee (37 CFR 3.41)
Internal Address: TRW Inc.	
S&EG Law Dept.	Enclosed
Bldg. E2/6051	Authorized to be charged to deposit account
Street Address: One Space Park	8. Deposit account number:
City Redondo Reach State: CA 710 00278	20-1515
City: Redondo Beach State: CA ZIP: 90278	20-1515 (Attach duplicate copy of this page if paying by deposit account)
	20-1515
9. Statement and signature.	20-1515 (Attach duplicate copy of this page if paying by deposit account)
9. Statement and signature. To the best of my knowledge and belief, the foregoing inforthe original document. Noel F. Heal	20-1515 (Attach duplicate copy of this page if paying by deposit account) T USE THIS SPACE mation is true and correct and any attached copy is a true copy of Vel May 6/5/01
9. Statement and signature. To the best of my knowledge and belief, the foregoing inforthe original document. Noel F. Heal Name of Person Signing	20-1515 (Attach duplicate copy of this page if paying by deposit account) T USE THIS SPACE

(Form PTO--1595--Recordation Form Cover Sheet - page 1 of 3)

ASSIGNMENT

For valuable consideration, the adequacy and receipt of which are hereby acknowledged, we James E. Leight, David L. Rollins, and Richard A. Fields respectively, of San Ramon, California, Woodinville, Washington, and Redondo Beach, California, do hereby sell and assign to TRW Inc., One Space Park, Redondo Beach, California, an Ohio corporation, its successors and assigns, the entire right, title and interest in and to the improvements in RF Combiner Based On Cascaded Optical Phase Modulation which has been invented by us, as described in the application for United Patent which we executed respectively, May 30, 2001, and June 5, 2001 May 22, 2001 and any and all applications for patent and patents therefore in any and all countries, including all divisions, reissues, continuations, and extensions thereof, and the right to claim the priority date of the first filed application in the United States, and authorize and request any official whose duty it is to issue patents, to issue any patent on said improvements or resulting therefrom to said TRW Inc., or its successors or assigns, and agree that on request and without further consideration, but at the expense of TRW Inc., we will communicate to TRW Inc. or its representatives or nominees any facts known to us respecting said improvements and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths, and generally do everything possible to aid TRW Inc., its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

, 2001	Inventor:
	James E. Leight
5/36 , 2001	Inventor: OM 2 /Umo
n.	David L. Rollins
6/5, 2001	Inventor: Richard A. Fields

ASSIGNMENT

For valuable considerat	cion, the adequacy and receipt of			
which are hereby acknowledged,	we James E. Leight, David L.			
Rollins, and Richard A. Fie.	lds respectively, of San Ramon,			
California, Woodinville, Washingt	on, and Redondo Beach, California,			
do hereby sell and assign to Ti	RW Inc., One Space Park, Redondo			
Beach, California, an Ohio corpor	ation, its successors and assigns,			
the entire right, title and inter	rest in and to the improvements in			
	ptical Phase Modulation which has			
	ed in the application for United			
States Patent which we	executed respectively, on			
	and			
and any and all applications for	patent and patents therefore in			
any and all countries, incl	luding all divisions, reissues,			
	ereof, and the right to claim the			
	application in the United States,			
	ficial whose duty it is to issue			
patents, to issue any patent or	n said improvements or resulting			
	s successors or assigns, and agree			
	rther consideration, but at the			
expense of TRW Inc., we will	communicate to TRW Inc. or its			
representatives or nominees any	facts known to us respecting said			
	legal proceeding, sign all lawful			
papers, execute all division	nal, continuing, and reissue			
applications, make all rightful o	aths, and generally do everything			
possible to aid TRW Inc., its successors, assigns and nominees to				
	protection for said invention in			
all countries.				
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5/22/ , 2001	Inventor: Jown E. Leight			
	James E. Keaght			
, 2001	Inventor:			
·	Inventor: David L. Rollins			
, 2001	Inventor:			
	Inventor: Richard A. Fields			

STATE OF CALIFORNIA)	
COUNTY OF CONTRA COSTA)	
on 5/22/01 before me, MICHAIL M BUKEN personally appeared James E. Leight personally known to me -or- very proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.	
WITNESS my hand and official seal. MICHAEL M. BUCKER COMM. # 1220044 NOTARY PUBLIC-CALIFORNIA D COMTRA COSTA COUNTY COMM. EXP. JUNE 15, 2003	
(SEAL)	
STATE OF WASHINGTON))ss COUNTY OF)	
On	
WITNESS my hand and official seal.	
Notary Public (SEAL)	

STATE OF CALIFORNIA)	
COUNTY OF CONTRA COSTA)	
on before personally appeared James E. personally known to me -or- satisfactory evidence to be the person the within instrument and acknowledged the same in his/her authorized capa signature on the instrument the person of which the person acted, executed the	whose name is subscribed to to me that he/she executed city, and that by his/her , or the entity upon behalf
WITNESS	my hand and official seal.
Notary	Public
(SEAL)	
STATE OF WASHINGTON) COUNTY OF SOPHOMISIT)	
On 5.30.01 before me, spersonally appeared David L. Rollins X personally known to me -or- satisfactory evidence to be the person the within instrument and acknowledged the same in his/her authorized capa signature on the instrument the person of which the person acted, executed the	proved to me on the basis of whose name is subscribed to to me that he/she executed acity, and that by his/her a, or the entity upon behalf
WITNES	S my hand and official seal.
(SEAL)	Chullet P. Ress

STATE OF CALIFORNIA

)ss

COUNTY OF LOS ANGELES

on June 5, 200) before me,

Lorna L Schot

personally appeared Richard A. Fields

personally known to me -or- proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.



WITNESS my hand and official seal.

Notary Public

(SEAL)

PATENT
RECORDED: 06/06/2001 REEL: 011892 FRAME: 0856