05-2	5-2001
[D.1	U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office
1. Name of conveying party(ies):	Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies):
Gregory P. Krishmar-Junker Charles W. Chandler	Name: TRW Inc.
	Internal Address: <u>S&EG Law Dept.</u>
Makkalon Em Additional name(s) of conveying party(ies) attached?	
3. Nature of conveyance:	
🙀 Assignment 🔲 Merger	Street Address: Bldg. E2/6051
Security Agreement Change of Name	One Space Park
Other	City: <u>Redondo Beach</u> State: <u>CA</u> ZIP: <u>90278</u>
Execution Date: <u>May 5, 2001</u>	Additional name(s) & address(es) attached? 🔲 Yes 🗵 No
A. Patent Application No.(s)	B. Patent No.(s)
Additional numbers att 5. 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) 5 40.00
Internal Address: TRW Inc.	Enclosed
S&EG Law Dept.	X Authorized to be charged to deposit account
Bldg. E2/6051	
Street Address: One Space Park	8. Deposit account number:
City: Redondo Beach State: CA ZIP: 90278	- <u>20-1515</u>
	(Attach duplicate copy of this page if paying by deposit account) T USE THIS SPACE
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Washing	n PTO1595Recordation Form Cover Sheet - page 1 of 3)
~	ΡΔΤΕΝΤ

PATENT REEL: 011827 FRAME: 0161

ASSIGNMENT

For valuable consideration, the adequacy and receipt of which are hereby acknowledged, we Gregory P. Krishmar-Junker, Charles W. Chandler, and Makkalon (NMI) Em respectively, of Redondo Beach, California, San Gabriel, California, and Venice, 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 **DUAL FREQUENCY SINGLE POLARIZATION FEED** which has been invented by us, as described in the application for United States Patent which we executed respectively, on $\frac{\mu_{15,2001}}{\mu_{101}9,2001}$, and $\frac{\mu_{101}9,2001}{\mu_{101}9,2001}$, 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.

5/5	2001

<u>5/9</u>, 2001 <u>05-09</u>, 2001

Inventor:	Briggy P. Unshma Junker	
Inventor:	Gregory P. Krishmar-Junker	
Inventor:	Charles W. Chandler Manh	>

Makkalon (NMI) Em

PATENT REEL: 011827 FRAME: 0162

STATE OF CALIFORNIA)ss COUNTY OF LOS ANGELES Maux 15, 200 i _____ before me, _____ Michelle Christopher On personally appeared _____ Gregory P. Krishmar-Junker \underline{Y} 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. MICHELLE CHRISTOPHER Coonte at 277362 vhelle Christopher y Public NCAR 📖 c - California 💈 tos Angeles County / Comm. Expires Sep 17, 2004 (SEAL) STATE OF CALIFORNIA)ss COUNTY OF LOS ANGELES On Man 9,200 before me, Michelle Christopher personally appeared <u>Charles W. Chandler</u> personally known to me -or proved to me on the basis of

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.



helle (Instapler Notarv

(SEAL)

PATENT REEL: 011827 FRAME: 0163 STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

On <u>May 9,200</u> before me, <u>Michelle Christopher</u> personally appeared <u>Makkalon (NMI) Em</u>

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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.



Christopher Notary

(SEAL)