

03-29-1999



100995298

Med 2-4-99

Tab settings

To the Honorable Commissioner of Patents and Trademarks

1 original documents or copy thereof.

receiving party(ies):

1. Name of conveying party(ies):

Charles W. Chandler

Ann L. Peebles

Name: TRW Inc.

Internal Address: Law Department

Building E2, Room 6072

Street Address: One Space Park

City: Redondo Beach State: CA ZIP: 90278

Additional name(s) & address(es) attached? Yes No

Additional name(s) of conveying party(ies) attached? Yes No

3. Nature of conveyance:

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

Execution Date: January 22, 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: _____

A. Patent Application No.(s)

09/232,448

B. Patent No.(s)

Additional numbers attached? Yes No

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

Name: Patent Counsel

Internal Address: TRW Inc.

Law Department

Building E2, Room 6072

Street Address: One Space Park

City: Redondo Beach State: CA ZIP: 90278

6. Total number of applications and patents involved:

7. Total fee (37 CFR 3.41) \$ 40.00

- Enclosed
- Authorized to be charged to deposit account

8. Deposit account number:

20-1515

(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.

Michael S. Yatsko, Reg. No. 28,135

Name of Person Signing

Michael S. Yatsko
Signature

March 1, 1999

Date

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

03/10/1999 MTEKLENI 00000123 201515 09232446

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

01 FC:581

40.00 CH

ASSIGNMENT

For valuable consideration, the adequacy and receipt of which are hereby acknowledged, we Charles W. Chandler and Ann L. Peebles respectively, of San Gabriel, California and Santa Monica, 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 " A COMPACT FRONT-FED DUAL REFLECTOR ANTENNA SYSTEM FOR PROVIDING ADJACENT, HIGH GAIN ANTENNA BEAMS" which has been invented by us, as described in the application for United States Patent which we executed respectively, on 1/22/99, and 1/22/99, 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.

1/22, 1999

Inventor: Charles W. Chandler
Charles W. Chandler

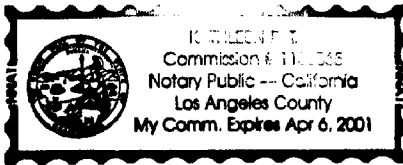
1/22, 1999

Inventor: Ann L. Peebles
Ann L. Peebles

STATE OF CALIFORNIA)
) ss
COUNTY OF LOS ANGELES)

On Jan. 22, 1999 before me, Kathleen R. Tait
personally appeared Charles W. Chandler
personally known to me -or- X 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 the 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.



Kathleen R. Tait
Notary Public

(SEAL)

STATE OF CALIFORNIA)
) ss
COUNTY OF LOS ANGELES)

On Jan. 22, 1999 before me, Kathleen R. Tait
personally appeared Ann L. Peebles
personally known to me -or- X 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 the 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.



Kathleen R. Tait
Notary Public

(SEAL)