

Customer No. 20991

PD-970104

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06-12-1998



100736242

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

ET

U.S. P.O.
09/092511

06/05/98

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

1. Name of conveying party(ies):

Sudhakar K. Rao
Parthasarathy Ramanujam
Robert E. Vaughan
Philip H. Law**URO**
6-05-982. Name and address of receiving party(ies):
Name: HUGHES ELECTRONICS CORPORATIONInternal Address: Bldg. 001, M/S A109
P.O. Box 956
200 N. Sepulveda Blvd.
El Segundo, CA 90245-0956

Additional Name(s) of conveying party(ies) attached?

yes ☐no ☒

3. Nature of Conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ OtherStreet Address: Bldg. 001, M.S. A109
200 N. Sepulveda Blvd.
El Segundo, California 90245

Execution Date: May 20, 1998 and June 1, 1998

Additional name(s) & address(es) attached? ☐ yes ☒ no

4. Application number(s) or patent number(s):

09/092511

If this document is being filed together with a new application, the execution date of the application is: May 20, 1998 and June 1, 1998.

A. Patent Application No.(s):

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 Records Administration
Address: Hughes Electronics Corporation
Bldg. 001, M/S A109
P.O. Box 956
200 N. Sepulveda Blvd.
El Segundo, CA 90245-0956

6. Total number of applications and patents involved: [1]

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

☐ Enclosed☒ Authorized to be charged to deposit account

8. Deposit account number:

50-0383

(Attached duplicate copy of this page if paying by deposit account)

06/12/1998 DNGUYEN 00000073 500383 09092511

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40.00 CH

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.*TERJE GUDMESTAD
Registration No. 32,232

Signature

Date

Total number of pages comprising cover sheet: [1]

ASSIGNMENTPage 1 of 2
PD-970104

WHEREAS, I, as below named sole inventor (if only one name is listed below) or joint inventor (if plural names are listed below) of the city and state as stated below next to my name, have invented a(an) **RECONFIGURABLE MULTIPLE BEAM SATELLITE PHASED ARRAY ANTENNA** for which application for Letters Patent of the United States has been executed by me on this day, or (if the following is completed) filed on _____ as Serial No. _____; and

WHEREAS, **HUGHES ELECTRONICS CORPORATION**, (hereinafter referred to as **HUGHES**), a Delaware Corporation, having its principal place of business in El Segundo, California, is desirous of acquiring the entire and exclusive right, title and interest in, to and under said invention, said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world;

NOW, THEREFORE, in consideration of the obligations voluntarily assumed by me and set forth in an invention agreement between me and my employer, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign and transfer to HUGHES, its successors, assigns or other legal representatives, the entire and exclusive right, title and interest in and to said invention invented by me, to said application and any and all applications which are continuations, continuations-in-part, divisions or substitutes of said application and any and all Letters Patent that may be granted therefor in the United States and throughout the world on any of said applications and to any and all reexaminations, reissues, renewals or extensions of said Letters Patent in the United States and throughout the world for the full term or terms for which said Letters patent may be granted in the United States and throughout the world; authorize and request The Commissioner of Patents and Trademarks of the United States and all foreign countries to issue all such Letters Patent to said HUGHES, its successors, assigns or other legal representatives; covenant that no assignment, sale, agreement, transfer or encumbrance has been, or will be, made or entered into which would conflict with this assignment, sale and transfer; and agree to communicate to HUGHES, its successors, assigns or other legal representatives, upon request and at no cost or expense to me, any facts known by me respecting said invention, do all lawful acts, including the execution and delivery of all papers and proper oaths and giving of testimony that is deemed necessary or desirable by HUGHES, its successors, assigns or other legal representatives with regard to said invention for protecting, obtaining, maintaining and enforcing any and all of said letters Patent in the United States and throughout the world for said invention and for perfecting, affirming, recording and maintaining the title of HUGHES, its successors, assigns or other legal representatives, and generally cooperate to the fullest extent in all matters pertaining to said invention, and any and all of said Letters Patent and the title thereto in HUGHES, its successors, assigns or other legal representatives.

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
SUDHAKAR K. RAO	<i>Sudhakar K. Rao</i>	05/20/98
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
20326 MANSEL AVENUE, TORRANCE, CALIFORNIA 90503		AUGUST 26, 1996

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
PARTHASARATHY RAMANUJAM	<i>Parthasarathy Ramanujam</i>	05/20/98
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
2601 FISK LANE, REDONDO BEACH, CALIFORNIA 90278		JULY 26, 1989

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
ROBERT E. VAUGHAN	<i>Robert E. Vaughan</i>	6/01/98
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
1659 5 TH STREET, MANHATTAN BEACH, CALIFORNIA 90266		JUNE 10, 1996

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
PHILIP H. LAW	<i>Philip H. Law</i>	May 98
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
23029 COVELLO STREET, WEST HILLS, CALIFORNIA 91307		APRIL 17, 1995

17092 Escalon Drive, Encino CA 91436

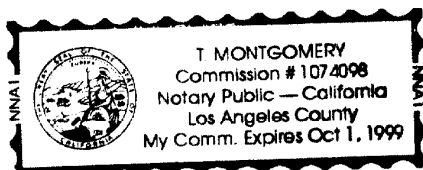
STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS:

On MAY 20, 1998 before me, T. MONTGOMERY

a Notary Public in and for said State, personally appeared
SUDHAKAR K. RAO, PARTHASARATHY RAMANUJAM and PHILIP H. LAW*****

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

WITNESS my hand and official seal.



Notary Public

T. Montgomery

ASSIGNMENT

ADDENDUM

PD-970104

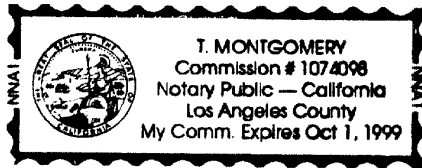
STATE OF California)
COUNTY OF Los Angeles)

SS:

On June 1, 1998, before me, T. MONTGOMERY,
a Notary Public in and for said State, personally appeared ROBERT E. VAUGHAN*****

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

WITNESS my hand and official seal.



Notary Public

T. Montgomery

STATE OF _____)
COUNTY OF _____)

SS:

On _____, before me, _____,
a Notary Public in and for said State, personally appeared _____

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

WITNESS my hand and official seal.

Notary Public

PATENT

RECORDED: 06/05/1998

REEL: 9228 FRAME: 0212