

02-22-2000

FORM PTO-1595
1-31-92



U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

EET

1-19-00

101273959

PD-990119

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

1. Name of conveying party(ies):
Parthasarathy Ramanujam, Stephen A. Robinson and Philip H. Law

Additional Name(s) of conveying party(ies) attached?
Yes no

2. Name and address of receiving party(ies):
Name: HUGHES ELECTRONICS CORPORATION

Internal Address: Bldg. 001, M/S A109
PO Box 956
200 N. Sepulveda Blvd.
El Segundo, CA 90245-0956



3. Nature of Conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other

Execution Date: January 5, 2000 and January 18, 2000

Street Address: 200 N. Sepulveda Blvd.
P.O. Box 956
El Segundo, California 90245

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

4. Application number(s) or patent number(s): PD-990119

If this document is being filed together with a new application, the execution date of the application is: January 5, 2000 and January 18, 2000.

A. Patent Application No.(s)	B. Patent No.(s)
09/488205	

Additional numbers attached? yes no

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

Name: HUGHES ELECTRONICS CORPORATION
Internal Address: Corporate Patents & Licensing
Bldg. 001, M/S A109
PO Box 956
El Segundo, CA 90245-0956

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

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

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)

02/18/2000 JSHABAZZ 00000155 500383 09488205
01 FC:581 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
Name of Person Signing

Signature

January 19, 2000
Date

Total number of pages comprising cover sheet: [4]

ASSIGNMENT

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) **ANTENNA CLUSTER CONFIGURATION FOR WIDE-ANGLE COVERAGE** 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;

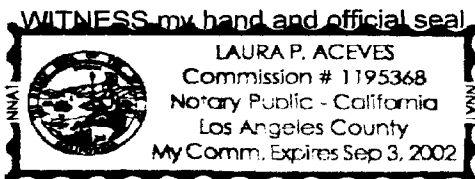
NOW, THEREFORE, in consideration of the obligations voluntarily assumed by me and set forth in an invention agreement between me and my employer, effective the date as stated below next to my name, and other good and valuable consideration, receipt of which is hereby acknowledged, I do hereby sell, assign 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 Parthasarathy Ramanujam	INVENTOR'S SIGNATURE <i>Parthasarathy Ramanujam</i>	DATE 1/5/00
RESIDENCE (CITY AND STATE) Redondo Beach, California 90278		INVENTION AGREEMENT DATE July 26, 1989
FULL NAME OF SOLE OR JOINT INVENTOR Stephen A. Robinson	INVENTOR'S SIGNATURE <i>Stephen A. Robinson</i>	DATE 1/18/00
RESIDENCE (CITY AND STATE) North Hills, California 91343		INVENTION AGREEMENT DATE September, 1968
FULL NAME OF SOLE OR JOINT INVENTOR Philip H. Law	INVENTOR'S SIGNATURE <i>Philip H. Law</i>	DATE 1/5/00
RESIDENCE (CITY AND STATE) Encino, California 91436		INVENTION AGREEMENT DATE April 17, 1995

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS:

On January 5, 2000 before me, LAURA P. ACEVES
a Notary Public in and for said State, personally appeared 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.

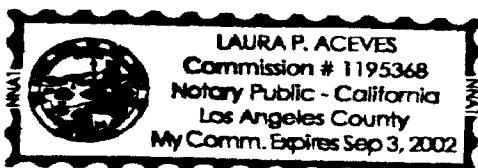


Laura P. Aceves
Notary Public

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS:

On January 5, 2000 before me, LAURA P. ACEVES
a Notary Public in and for said State, personally appeared PARTHASARATHY RAMANUJAM
 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.



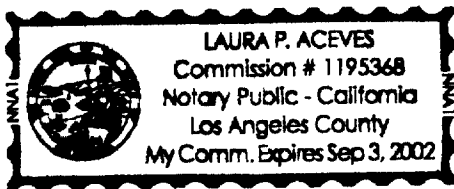
Laura P. Aceves
Notary Public

CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

STATE OF CALIFORNIA)
)
COUNTY OF LOS ANGELES)

On January 18, 2000, before me, Laura P. Aceves, Notary Public, personally appeared Stephen A. Robinson

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.

Laura P. Aceves
(SIGNATURE OF NOTARY)

**OPTIONAL SECTION
CAPACITY CLAIMED BY SIGNER**

Though statute does not require the Notary to fill in the data below, doing so may prove invaluable to persons relying on the document.

- INDIVIDUAL
- CORPORATE OFFICERS

- TITLE(S)
- PARTNER(S) LIMITED
 - GENERAL

- ATTORNEY-IN-FACT
- TRUSTEE(S)
- GUARDIAN/CONSERVATOR
- OTHER: _____

SIGNER IS REPRESENTING:
(NAME OF PERSON(S) OR ENTITY(IES))

- one
- two
- three

OPTIONAL SECTION

THIS CERTIFICATE MUST BE ATTACHED TO THE DOCUMENT DESCRIBED AT RIGHT:

TITLE OR TYPE OF DOCUMENT Assignment for PD-990119

NUMBER OF PAGES 3

DATE OF DOCUMENT _____

Though the data requested here is not required by law, it could prevent fraudulent reattachment of this form.

SIGNER(S) OTHER THAN NAMED ABOVE one
two
three