FORM PTO-18950 | P | Rev. 03/01



U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

ΞET

10.1201

PD-970590A

	FD-970590A		
To the Honora Commissioner of Patents and Trademarks. Please r	ecord the attached original documents or copy thereof.		
Name of conve ying party(ies):	Name and address of receiving party(ies):		
DAVID C. CHENG	Name: HUGHES ELECTRONICS CORPORATION		
Additional Name(s) of conveying party(ies) attached? yes □ no ⊠	Internal Address: Bldg. 001, M/S A109 PO Box 956 200 N. Sepulveda Blvd. El Segundo, CA 90245-0956		
3. Nature of Conveyance:	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): 09/841,110			
If this document is being filed together with a new application, the execution date of the application is:			
A. Patent Application No.(s)	B. Patent No.(s)		
Additional numbers attached? □ yes ⊠ no			
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: [1]		
Name: HUGHES ELECTRONICS CORPORATION	7. Total fee (37 CFR 3.41): \$40.00		
Internal Address: Bldg. 001, M/S A109	□ Enclosed		
PO Box 956	Authorized to be charged to deposit account		
200 N. Sepulveda Blvd.			
El Segundo, CA 90245-0956	8. Deposit account number:		
PLEASE ASSOCIATE THIS APPLICATION WITH 50-0383			
CUSTOMER NO. 020991.	(Attached duplicate copy of this page if paying by deposit account)		
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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.			
VIJAYALAKSHMI D. DURAISWAMY Name of Person Signing REG. NO. 31,505 Total number of pages including cover sheet, attachments, and documents: [3]			

OMB No. 0651-0027 (exp. 5/31/2002)

ASSIGNMENT



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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) POSITION "LOCATION OF MULTIPLE TRANSPONDING PLATFORMS AND USERS USING TWO-WAY RANGING AS A CALIBRATION REFERENCE FOR GPS", 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 April 24, 2001 as Serial No. 09/841,110; 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-inpart, 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.

13650 CO (7/98)

PATENT REEL: 012268 FRAME: 0800 IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE	
DONALD C. D. CHANG		-	
RESIDENCE (CITY AND STATE) 2350 Moberly Court, Thousand Oaks, Cal	lifornia 01360	INVENTION AGREEMENT DATE September 11, 1978	
2550 Moberly Court, Thousand Oaks, Car	HIOTHA 91300	September 11, 1976	
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE	
KAR W. YUNG			
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE	
4738 Narrot Street, Torrance, California 9	0503	December 3, 1979	
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE	
DAVID C. CHENG	1 VIU	19/27/01	
RESIDENCE (CITY AND STATE)	· /	INVENTION AGREEMENT DATE	
/ September 9, 1996 130 Dartmouth Street, #521, Boston, Massachusetts 02116			
130 Dartifloutif Otieet, #321, Dostoff, Massachusetts 02110			
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE	
MING U. CHANG			
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE	
28815 Indian Valley Road, Rancho Palos	Verdes, California 90275	November 3, 1977	
FULL NAME OF SOLE OR JOINT INVENTOR FRANK A. HAGEN	INVENTOR'S SIGNATURE	DATE	
TRANKA, HAGEN			
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE	
2309 Via Rivera, Palos Verdes Estates, C	California 90274	March 1, 1978	
	- Marie - Mari		
STATE OF MASSACUUSETTS			
COUNTY OF MIDDLESEY) SS:			
On sept 27, 2001 before me, JAMES GUADAGNO			
a Notary Public in and for said State, personally appeared			
DAVID C. CHENE			
e personally known to me or o proved to me on the basis of satisfactory evidence to be the person(s) who			
name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same			

WITNESS my hand and official seal.

entity upon behalf of which the person(s) acted, executed the instrument.

Notary Public

his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the

My commission ex**bravio EMMs**MOTARY PUBLIC

My commission ex**bravio EMMs**

REEL: 012268 FRAME: 0801

13650 CO (7/98)

RECORDED: 10/15/2001