U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

HEET

2. Name and add	iginal documents or copy thered dress of receiving party(ies): S ELECTRONICS CORPORATION Bldg. 001, M/S A109
2. Name and add	Ress of receiving party(ies):
	Bldg. 001, M/S A109
Internal Address:	
	P.O. Box 956 200 N. Sepulveda Blvd. El Segundo, CA 90245-0956
Street Address:	Bldg. 001, M.S. A109 200 N. Sepulveda Blvd. El Segundo, California 90245
Additional name(s)	& address(es) attached? ☐ yes ☒ no
he execution date of B. Patent No.(s):	f the application is: May 28, 1998
? ☐ yes 🗵	no
	of applications and patents involved: [1] CFR 3.41): \$40.00
☐ Enclose	ed zed to be charged to deposit account
	50-0383
(Attached duplicate	copy of this page if paying by deposit account)
HIS SPACE	
	Additional name(s) the execution date of B. Patent No.(s): 7. Jess E. C. Total number of S. Total fee (37) Enclose E. Authoriz 8. Deposit according to the control of t

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

Total number of pages comprising cover sheet: [1]

OMB No. 0651-0011 (exp. 4/94)

FORM PTO-1595

1-31-92

HUGHES

ASSIGNMENT

Page 1 of 2 PD-970253

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) METHODS FOR ACCURATELY INSERTING SATELLITE CONSTELLATIONS INTO COMMON ORBIT PLANES 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
CHRISTOPHER A. CROOM		
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
2109 CLARK LANE, APT. B, REDONDO E	BEACH, CALIFORNIA 90278	JUNE 19, 1995
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE)S
WILLIAM A. SNYDER	a illiam a make	MAY 28, 1998
RESIDENCE (CITY AND STATE)		NVENTION AGREEMENT DATE
5819 HILL TOP ROAD, CALABASAS, CAI	LIFORNIA 91302	DECEMBER 2, 1991
	V	
STATE OFCALIFORNIA))	
COUNTY OF LOS ANGELES) 33.	
On MAY 28, 1998 befor	e me, T. MONTGOMERY	1
a Notary Public in and for said State, pers WILLIAM A. SNYDER*******	onally appeared	************
personally known to me or \(\mathbb{X} \) proved to name(s) is/are subscribed to the within same in his/her/their authorized capacity person(s), or the entity upon behalf of which	instrument and acknowledged to me that /(ies), and that by his/her/their signatur	at he/she/they executed the re(s) on the instrument the
WITNESS my hand and official seal	Notary Poblie	Toutamory
T MONTGOMERY Commission # 1074098 Notary Public — California Los Angeles County My Comm. Expires Oct 1, 1999		f

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE
	11.6.6. Cin		6/3/48
CHRISTOPHER A. CROOM	Malo con		1 (
RESIDENCE (CITY AND STATE)		INVENTIO	ON AGREEMENT DATE
2109 CLARK LANE, APT. B, REDONDO E	BEACH, CALIFORNIA 90278	JUNE 19	9, 1995
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE
WILLIAM A. SNYDER			
RESIDENCE (CITY AND STATE)		INVENTIO	ON AGREEMENT DATE
5819 HILL TOP ROAD, CALABASAS, CALIFORNIA 91302		DECEMBER 2, 1991	
STATE OF	e me, Ss: e me, Selle Silver Delay onally appeared Silver Delay o me on the basis of satisfactory evidence instrument and acknowledged to me the sellent of the sellent	at he/she/ re(s) on t	they executed the
person(s), or the entity upon behalf of which	th the person(s) acted, executed the instr	ument.	
WITNESS my hand and official seal. RENE 3. BARRA Commission = 150737 Notary Public - Californi Los Angeles County	Notary Public	D wez	S. Harn
My Comm. Expires Aug 9, 2	∞; •		