	FORM PTO-1595 (Rev. 9-93)			U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office		
. [OMB No. 0651-0011 (6	exp. 4/94) 05 - 07 - 199	99 SHEI			
		- -) IL	7		
	Customer No.: 020991 101031549 5					
	To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof					
	Name of conveying party(ies):					
	Robert R. Hay	Robert R. Hayes Name: HUGHES ELECTRONIC		S ELECTRONICS CORPORATION		
			Internal Address:			
12	Additional Name(s yes □	e) of conveying party(ies) attached? no 国		P.O. Box 956 El Segundo, California 90245-0956		
.28.5	3. Nature of Conv		Street Address:	Bldg. 001, M.S. A109 200 North Sepulveda Blvd.		
3	☑ Assignmd☐ Security A ☐ Other	Agreement		El Segundo, California 90245-0956		
<i>6</i>	Execution Dates: A		Additional name(s) & address(es) attached? ☐ yes ☑ no			
	4 A - 1: - 4:	where the property of the prop				
\mathcal{N}	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: April 23, 1999.					
W						
2110	A. Paten	at Application No.(s)	B. Patent No.(s)			
18	Additional numbers attached? ☐ yes 区 no					
10		dress of party to whom correspondence cument should be mailed:	6. Total number of applications and patents involved: [1]			
11	Name	Patent Records Administration	7. Total fee (37 C	FR 3.41) <u>\$40.00</u>		
4	⊷Name: Internal Address:	HUGHES ELECTRONICS CORPORATION	☐ Enclosed	ı		
V	intornary tauroos.	Building 001, M/S A109 P.O. Box 956	☑ Authorize	d to be charged to deposit account		
		El Segundo, California 90245-0956	8. Deposit accoun	nt number:		
	Street Address:	200 North Sepulveda Boulevard El Segundo, California 90245-0956		50-0383		
05/	77/1999 JSHABAZZ 00000021 500383 09301637 DO NOT USE THIS SPACE					
01 1	C:581 40.00 9. Statement and					
•						
		of my knowledge and belief, the foregoing inform	nation is true and corre	ect and any attached copy is a true		
	copy of the original document.					
	Taria Cudmosto	nd Pag No 32 232		April 27, 1999		
	reije Gudinesta	Terje Gudmestad, Reg. No. 32,232 Signature April 27, 1999 Date				
			Total number of	pages comprising cover sheet: [3]		

Mail documents to be recorded with required cover sheet information to:

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Washington, D.C. 20231

PATENT REEL: 9926 FRAME: 0787

HUGHES

ASSIGNMENT

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Customer No. 020991
PD-980197

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) A HIGH-POWER TRAVELING WAVE PHOTODETECTOR WITH A UNIQUE COUPLING STRUCTURE 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.

> PATENT REEL: 9926 FRAME: 0788

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE				
Dahart D. Haves	Falut R. Hans		4/23/99				
Robert R. Hayes RESIDENCE (CITY AND STATE)		INVENTION	ON AGREEMENT DATE				
26052 Mulholland Highway, Calabasa	November 14, 1997						
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE				
RESIDENCE (CITY AND STATE)		INVENTIO	ON AGREEMENT DATE				
			1				
		<u></u>					
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE				
RESIDENCE (CITY AND STATE)		INVENTIO	ON AGREEMENT DATE				
		1					
STATE OF							
personally known to me or proved to me on the basis of satisfactory evidence to be the person(\$) 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(iee), 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 sea	al.						
S. L. S. ROSEN Commission # 1134843 Notary Public — California Los Angeles County My Comm. Expires Apr 18, 2001		Public					

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RECORDED: 04/28/1999