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Th. 30.0	ADEMARKORE TO	1333030	PD-200083		
To the Honorable Co	ommissioner of Patents and Trademarks. Please r	record the attached or			
Name of conver	ving party(ies):		ress of receiving party(ies)		
	, 3 F 7 ( 7 ).	2. Maine and add	read of reactiviting party(les)		
HAROLD ROSEN, PARTHASARATHY RAMANUJAM YING FERIA		Name: HUGHE	S ELECTRONICS CORPORATION		
		Internal Address:	Bldg. 001, M/S A109		
Additional Name(s)	of conveying party(ies) attached?		PO Box 956		
T	n o 1571		200 N. Sepulveda Blvd.		
yes □	no ⊠		El Segundo, CA 90245-0956		
3. Nature of Conve	eyance	Street Address:	200 N. Sepulveda Blvd		
			P.O. Box 956		
⊠ Assignm	<u> </u>		El Segundo, California 90245		
☐ Security /	Agreement   Change of Name				
□ Other _	10.000				
Execution Date: O	ctober 4, 9, 18, 2000	Additional name(s)	& address(es) attached? 🖂 yes 🗵 🖂		
4. Application num	ber(s) or patent number s):	<u>L</u>			
If this document is	being filed together with a new application, the	e execution date of	the application is:		
		1			
Λ Dotont	Application No. (a)				
A. Patent	Application No.(s)	B. Patent	B. Patent No.(s)		
09/661,98	86	 			
00,001,00	Additior at numbers a	ा attached? □ yes	⊠ no		
5. Name and address of party to whom correspondence		6. Total number o	f applications and patents involved [1]		
concerning doci	ument should be mailed:				
		7. Total fee (37 (	CFR 3.41): \$40.00		
Name:	HUGHES ELECTRONICS CORPORATION				
Internal Address:	Bldg. 001, M/S A109	☐ Enclose	d		
	PO Box 956		ed to be charged to deposit account		
	200 N. Sepulveda Blvd.				
	El Segundo, CA 90245-0956	8. Deposit accou	unt number:		
PLEASE ASSOCIATE THIS APPLICATION WITH			<b>5</b> 0.0202		
CUSTOMER NO. (			50-0383		
		(Attached duplicate of	copy of this page if paying by deposit account		
	DO NOT USE THI	S SPACE			
9. Statement and	signature.				
To the heet of	my knowledge and helief the foreguing information	on in the one and answert	and any affects of the		
	my knowledge and belief, 'he foregoing information iginal document	on is true and correct	and any attached copy is a true		
	<u>.</u>	1			
	1 / n n				
MICHAEL W. SALES November 17, 2000					
Name of Pe	erson Signing Signa	ture	Date		
	_				
		Total number of p	ages comprising cover sheet: [ 1 ]		

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

## ASSIGNMENT



Page 1 of 2 PD-200083

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) **FIXED CELL COMMUNICATION SYSTEM WITH REDUCED INTERFERENCE** or 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 <u>September 14</u> 2000, as Serial No. <u>09/661,986</u>; 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 hroughout 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)

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'3 SIGNATURE	DATE			
HAROLD ROSEN	Harold a Roser	10/4/00			
RESIDENCE (CITY AND STATE)	INVENTION AGREEMENT DATE				
14629 Hilltree Road, Santa Monica, Ca	February 1998				
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE			
YING FERIA	bug Leria	10/9/02			
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE			
306 Anderson Street, Manhattan Beach, California 90266 January 9, 1997					
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE			
PARTHASARTHY RAMANUJAM	Parksouth Renewy	10/18/00			
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE			
2601 Fisk Lane, Redondo Beach, Calif	fornia 90278	July 26, 1989			
FULL NAME OF SOLE OR JOINT INVENTOR	NVENTOR'S SIGNATURE	DATE			
RESIDENCE (CITY AND STATE)	<u> </u>	INVENTION AGREEMENT DATE			
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE			
RESIDENCE (CITY AND STATE)	<u> </u>	INVENTION AGREEMENT DATE			
STATE OFCALIFORNIA	)				
COUNTY OF LOS ANGELES	) SS: )				
On OCTOBER 4, 2000 befor	eme JANET E. SHIBATA				
a Notary Public in and for said State, personally appeared HAROLD ROSEN					
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					
JANET E. SHIBATA Comm. No. 1258646 NOTARY PUBLIC - CALIFORNIA LOS ANGELES COLINTY AND COMM. Exp. March 30, 2004					

13650 CO (7/98)

ASSIGNMENT ADDENDUM TO PAGE 2 PD-200083

STATE OF CALIFORNIA	)
COUNTY OF LOS ANGELES	) SS: )
On OCTOBER 9, 2000 before me, JANE	E. SHIBATA
a Notary Public in and for said State personally appeared YING FERIA	
personally known to me or X proved to me on the basis name(s) is/are subscribed to the within instrument and acknin his/her/their authorized capacity(ies), and that by his/her/the entity upon behalf of which the person(s) acted, execute	nowledged to me that he/she/they executed the same their signature(s) on the instrument the person(s), or
JANET E. SHIBATA Comm. No. 1258646 NOTARY PUBLIC: CALIFORNIA LOS ANGELES COUNTY My Comm Exp. March 30, 2004	Motary Public
STATE OFCALIFORNIA	) ) SS:
COUNTY OF LOS ANGELES	)
On October 18, 2000 before me, JANET E.	SHIBATA
a Notary Public in and for said State, personally appeared PARTHASARATHY RAMANUJAM	
personally known to me or X proved to me on the basis name(s) is/are subscribed to the within instrument and ackr in his/her/their authorized capacity(ies), and that by his/her/the entity upon behalf of which the person(s) acted, execute WITNESS my hand and official seal.  JANET E. SHIBATA  Comm. No. 1259346  NOTARY PUBLIC - CALIFORNIA  LOS ANGELES COLINTY  My Comm. Exp. March 30, 2004	nowledged to me that he/she/they executed the same (their signature(s) on the instrument the person(s), or

13650 CO (7/98)

## ASSIGNMENT



Page 1 of 2 PD-200083

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) FIXED CELL COMMUNICATION SYSTEM WITH REDUCED INTERFERENCE or 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 September 14, 2000, as Serial No. 09/661.986; 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 Leiters 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)

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
HAROLD ROSEN	Hardd a Roser		10/4/00		
RESIDENCE (CITY AND STATE)		INVENTIO	N AGREEMENT DATE		
14629 Hilltree Road, Santa Monica, California 90402			y 1998		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
YING FERIA	Fing deria		10/9/00		
RESIDENCE (CITY AND STATE)	INVENTIO	N AGREEMENT DATE			
306 Anderson Street, Manhattan Beach	January	9, 1997			
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
PARTHASARTHY RAMANUJAM	Parksouth Revery	~	00/81/01		
RESIDENCE (CITY AND STATE)			N AGREEMENT DATE		
2601 Fisk Lane, Redondo Beach, Calif	fornia 90278	July 26, 1989			
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE		DATE		
RESIDENCE (CITY AND STATE)			INVENTION AGREEMENT DATE		
FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	<del></del>	DATE		
RESIDENCE (CITY AND STATE)	<u> </u>	INVENTION AGREEMENT DATE			
		}			
		1			
STATE OFCALIFORNIA	)				
COUNTY OF LOS ANGELES	) SS:				
On OCTOBER 4, 2000 before me JANET E. SHIBATA					
a Notary Public in and for said State. personally appeared HAROLD ROSEN					
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(les , 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.					
the Le XI. A.					
JANET E. SHIBATA  Comm. No. 1350010					
Comm. No. 1258646 O INOTARY PUBLIC CALIFORNIA					
OS ANGELES COUNTY  Advisionm. Exp. March 30, 2004	↑ <del>D</del>				
теля: матен зи, 2004	<b>.</b>				

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**ASSIGNMENT** ADDENDUM TO PAGE 2 PD-200083

STATE OFCALIFORNIA	)
COUNTY OF LOS ANGELES	) SS: )
On OCTOBER 9, 2000 before me, JAN	IET E. SHIBATA
a Notary Public in and for said State, personally appears	ed
personally known to me or X proved to me on the baname(s) is/are subscribed to the within instrument and a in his/her/their authorized capacity(ies), and that by his/the entity upon behalf of which the person(s) acted, executive the content of the person of of	ner/their signature(s) on the instrument the person(s), or
WITNESS my hand and official seal.  JANET E. SHIBATA	$\bigcirc$
Comm. No. 1258646 NOTARY PUBLIC CALIFORNIA LOS ANGELES COUNTY	Notary Public
My Comm. Exp. March 30, 2004	
STATE OFCALIFORNIA	)
COUNTY OF LOS ANGELES	
On October 18, 2000 before me, JANET	E. SHIBATA
a Notary Public in and for said State, personally appear PARTHASARATHY RAMANUJAM	ed
name(s) is/are subscribed to the within instrument and a	asis of satisfactory evidence to be the person(s) whose acknowledged to me that he/she/they executed the same her/their signature(s) on the instrument the person(s) or cuted the instrument.
WITNESS my hand and official seal	
JANET E. SHIBATA  Comm. No. 1258646  NOTARY PUBLIC - CALIF DRNIA D  LOS ANGELES COUNTY	Notary Public
LOS ANGELES COUNTY My Comm. Exp. March 30 2004	

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**PATENT REEL: 011340 FRAME: 0114** 

**RECORDED: 11/20/2000**