U.S.	DEPA	RTMENT	OF	COMMERCE
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Attorney Docket No. 201091

REC 1 <u>020435</u> 79					
TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).					
1. Submission Type New Resubmission (Non-Recordation) Document # Correction of PTO Error Reel Frame Corrective Document Reel Frame	2. Nature of Conveyance: Assignment Security Agreement Change of Name Change of Name Conveyance: Merger Other:				
3. Conveying Party(ies): Name Michael Parr Name Sharath Ananth Name Long Huynh Name Drew Barnett	additional names of conveying parties attached. Execution Date: 1/22/2002 (m/d/yyyy) Execution Date: 1/22/2002 (m/d/yyyy) Execution Date: 1/25/2002 (m/d/yyyy) Execution Date: 3/21/2002 (m/d/yyyy)				
4. Receiving Party: Name: Hughes Electronics Corporation Address: 200 North Sepulveda Blvd. El Segundo, CA 90245-0956 •	5. Correspondent Name and Address: Name: Hughes Electronics Corporation Address: Patent Docketing Administration P.O. Box 956 Bldg. 1, Mail Stop A109 El Segundo, CA 90245-0956 Please associate this document and the attached documents with customer no. 020991.				
6. Application Number(s) or Patent Number(s): Either enter the Patent Application Number or the Patent Number (DO	Mark if additional numbers attached. NOT ENTER BOTH numbers for the same property).				
Patent Application Number(s)	Patent Number(s)				
If this document is being filed together with a <u>new</u> Patent Application, application was executed by the first named inventor.	enter the date that the patent 1/22/2002 (m/d/yyyy)				
7. Patent Cooperation Treaty (PCT) Numbers:					
Enter PCT application number(s) PCT only if a U.S. Application Number has not been assigned. PCT	PCT PCT PCT				
8. Number of Properties: Enter the total num	nber of properties involved: 1.				
9. Fee Transmittal: Fee amount for listed properties (37 CFR 3.41): \$ 40.00 Method of Payment:					
10. 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. Charges to deposit account are authorized as indicated herein. John T. Whelan, Reg. No. 32,448					
Name of Person Signing S	ignature Date Total number of pages comprising cover sheet: 2				

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Additional Name(s) of Conveying Parties:

Name: Execution Date

Fred Harris March 21, 2002



ASSIGNMENT

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Attorney Docket No: PD-201091

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 <u>A FILTER LOOP</u>

STRUCTURE FOR SYNCHRONIZATION IN A MOBILE COMMUNICATION TERMINAL AND A METHOD OF USING THE SAME:

\bowtie	for which application for Letters Patent of the United States ha	as been executed by me on this day; or
	which is embodied in U.S. Patent Application Serial No	_ filed on

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.

ASSIGNMENT Page 2 of 3

Attorney Docket No: PD-201091

IN WITNESS WHEREOF, I have executed this instrument: Full Name of Sole or Joint Inventor: Inventor's Signature: Date: Michael Parr Residence (City and State) INVENTION AGREEMENT DATE Del Mar, CA 4/4/83 Full Name of Joint Inventor: Inventor's Signature: Date: Liceath Arrante Sharath Ananth INVENTION AGREEMENT DATE Residence (City and State) San Diego, CA 6/15/98 Full Name of Joint Inventor: Inventor's Signature: Date: Long Huynh INVENTION AGREEMENT DATE Residence (City and State) San Diego, CA 92111 Full Name of Joint Inventor: Inventor's Signature: Date: 3/21/02 **Drew Barnett** INVENTION AGREEMENT DATE Residence (City and State) La Jolla, CA 92037 SS: before me. ano a Notary Public in and for said State, personally appeared 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. Notary Public JOANN KOPACK Commission # 1189216 Notary Public - California San Diego County before me, a Notary Public in and for said State, personally appeared 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(ips), 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 Notary Public WITNESS my hand and official seal. JOANN KOPACK Commission # 1189216 Notary Public - California San Diego County My Comm. Expires Aug 2, 2002

ASSIGNMENT Page 3 of 3 Attorney Docket No: PD-201091

STATE OF California)
COUNTY OF Sun Digo) SS:)
	inn Kopael
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 eccuted the same in his/her/their authorized capacity(iss), and that by his/her/their
	San Diego County My Comm. Expires Aug 2, 2002
STATE OF)) SS:
COUNTY OF)
On before me,	.,
a Notary Public in and for said State, personally appeared personally known to me or proved to me on the basis of within instrument and acknowledged to me that he/she/they exignature(s) on the instrument the person(s), or the entity upon	satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the secuted the same in his/her/their authorized capacity(ies), and that by his/her/their
WITNESS my hand and official seal.	Notary Public
STATE OF)) SS:
COUNTY OF) 33.
Onbefore me,	
a Notary Public in and for said State, personally appeared personally known to me or proved to me on the basis of within instrument and acknowledged to me that he/she/they ex signature(s) on the instrument the person(s), or the entity upon	f satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the xecuted the same in his/her/their authorized capacity(ies), and that by his/her/their behalf of which the person(s) acted, executed the instrument.
WITNESS my hand and official seal.	Notary Public



ASSIGNMENT

Page 1 of 2

Attorney Docket No: PD-201091

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 <u>A FILTER LOOP</u>

STRUCTURE FOR SYNCHRONIZATION IN A MOBILE COMMUNICATION TERMINAL AND A METHOD OF USING THE SAME:

	s Patent of the United States ha	as been executed by me on this day; or
which is embodied in U.S. Pat	ent Application Serial No	_ filed on

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.

ASSIGNMENT Page 2 of 2 Attorney Docket No: PD-201091

IN WITNESS WHEREOF, I have executed this instrument:

RECORDED: 03/26/2002

Full Name of Sole or Joint Inventor:	Inventor's Signature:	Date:
fred harris	Kredge stre	21- MALCH 2002
Residence (City and State)		INVENTION AGREEMENT DATE
Lemon Grove, CA		
Full Name of Joint Inventor:	Inventor's Signature:	Date:
Residence (City and State)		INVENTION AGREEMENT DATE
Full Name of Joint Inventor:	Inventor's Signature:	Date:
Residence (City and State)		INVENTION AGREEMENT DATE
Full Name of Joint Inventor:	Inventor's Signature:	Date:
Residence (City and State)		INVENTION AGREEMENT DATE
STATE OF) SS:	
Onbefore me,		
a Notary Public in and for said State, personally ap ☐ personally known to me or ☐ proved to me on within instrument and acknowledged to me that he signature(s) on the instrument the person(s), or the WITNESS my hand and official seal.	the basis of satisfactory evidence to be the s/she/they executed the same in his/her/thei	r authorized capacity(ies), and that by his/her/th
STATE OF)) } SS:	
COUNTY OF		
On before me,		
a Notary Public in and for said State, personally ap ☐ personally known to me or ☐ proved to me or within instrument and acknowledged to me that he signature(s) on the instrument the person(s), or the	opeared	person(s) whose name(s) is/are subscribed to t r authorized capacity(ies), and that by his/her/th
WITNESS my hand and official seal.	Notary Public	