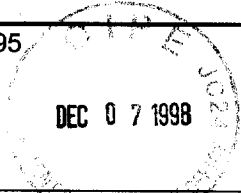


12-15-1998



100922297

PD-970536

To the Honorable Commissioner of Patents and Trademarks. Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
 A., Roger Hammons, Jr.  
 Ernest Yeh

Additional Name(s) of conveying party(ies) attached?  
 yes  no

2. Name and address of receiving party(ies):  
 Name: HUGHES ELECTRONICS CORPORATION

Internal Address: Bldg. 001, M/S A109  
 PO Box 956  
 200 N. Sepulveda Blvd.  
 El Segundo, CA 90245-0956

3. Nature of Conveyance: **19-7-98**

Assignment  Merger  
 Security Agreement  Change of Name  
 Other \_\_\_\_\_

Execution Date: November 24, 1998 and December 4, 1998

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):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s) 09/169,350      B. Patent No.(s) \_\_\_\_\_

Additional numbers attached?  yes  no

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: HUGHES ELECTRONICS CORPORATION  
 Internal Address: Bldg. 001, M/S A109  
 PO Box 956  
 200 N. Sepulveda Blvd.  
 El Segundo, CA 90245-0956

**PLEASE ASSOCIATE THIS APPLICATION WITH CUSTOMER NO. 020991.**

6. Total number of applications and patents involved: [ 1 ]

7. Total fee (37 CFR 3.41): \$40.00

Enclosed  
 Authorized to be charged to deposit account

8. Deposit account number:  
50-0383

(Attached duplicate copy of this page if paying by deposit account)

DO NOT USE THIS SPACE

9. Statement and signature. **40E**

*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.*

John T. Whelan       **32,448**      12-4-98  
 Name of Person Signing      Signature      Date

Total number of pages comprising cover sheet: [ 1 ]

**ASSIGNMENT**

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) Adaptable Overlays for Forward Error Correction Schemes Based on Trellis Codes 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 October 9, 1998 as Serial No. 09/169,350; 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.

ASSIGNMENT  
Page 2 of 2  
PD-970536

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR A. Roger HAMMONS, Jr.	INVENTOR'S SIGNATURE <i>A. R. Hammons Jr.</i>	DATE 12/4/98
RESIDENCE (CITY AND STATE) North Potomac, Maryland		INVENTION AGREEMENT DATE
FULL NAME OF SOLE OR JOINT INVENTOR Ernest YEH	INVENTOR'S SIGNATURE <i>Ernest Yeh</i>	DATE 11/24/98
RESIDENCE (CITY AND STATE) Gaithersburg, Maryland		INVENTION AGREEMENT DATE

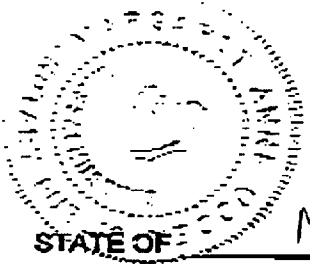
STATE OF Massachusetts )  
COUNTY OF Middlesex )

SS:

On November 24, 1998 before me, ERNEST YEH  
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 Margaret Anne Udden

Margaret Anne Udden  
NOTARY PUBLIC  
My commission exp. Apr. 6, 2001

STATE OF Maryland )  
COUNTY OF Frederick )

SS:

On 12/4/98 before me, Crystal L. Brooks  
a Notary Public in and for said State, personally appeared A. Roger Hammons, Jr.

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 Crystal L. Brooks

