

FORM PTO-1595
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RECORDATION FORM COVER SHEET
PATENTS ONLY

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Patent and Trademark Office

DOCKET: PD-202088

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

1. Name of conveying party(ies): (1) Weizheng W. Wang (2) Tung-Sheng Lin (3) Ernest C. Chen (4) William C. Lindsey	2. Name and address of receiving party(ies): Hughes Electronics Corporation P.O. Box 956 El Segundo, California 90245
Additional name(s) of conveying party(ies) attached? <input checked="" type="checkbox"/> No	Additional name(s) & address(es) attached? <input checked="" type="checkbox"/> No

3. Nature of conveyance:
 Assignment

Execution Date: (1) March 10, 2004, (2) January 26, 2004, (3) March 5, 2004, and (4) January 26, 2004

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)

B. Patent No.(s)

U.S.S.N. 10/691,032, filed October 22,2003

Additional numbers attached?

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

Name: Victor G. Cooper
Address: GATES & COOPER LLP
6701 Center Drive West, Suite 1050
Los Angeles, California 90045

6. Total number of applications and patents involved: One

7. Total fee (37 CFR 3.41): \$40
 Authorized to be charged to Deposit Account No.50-0494 of Gates and Cooper LLP.

8. Please charge any additional fees or credit any overpayments to Deposit Account No. 50-0494.

DO NOT USE THIS SPACE

9. 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.

Victor G. Cooper

Name of Person Signing



Signature

March 22, 2004

Date

Total number of pages including cover sheet, attachments, and document: Six

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Director - U.S. Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

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CFR \$40.00 500494 10691032

HUGHESTM**ASSIGNMENT**Page 1 of 2
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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) UNBLIND EQUALIZER ARCHITECTURE FOR DIGITAL COMMUNICATION SYSTEMS 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 22, 2003 as Serial No. 10/691,032; 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
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IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OF JOINT INVENTOR Weizheng W. Wang	INVENTORS' SIGNATURE <i>[Signature]</i>	DATE 3/10/04
RESIDENCE (CITY AND STATE) Rancho Palos Verdes, California		INVENTION AGREEMENT DATE 3/19/04
FULL NAME OF SOLE OF JOINT INVENTOR Tung-Sheng Lin	INVENTORS' SIGNATURE	DATE
RESIDENCE (CITY AND STATE) Alhambra, California		INVENTION AGREEMENT DATE
FULL NAME OF SOLE OF JOINT INVENTOR Ernest C. Chen	INVENTORS' SIGNATURE	DATE
RESIDENCE (CITY AND STATE) San Pedro, California		INVENTION AGREEMENT DATE
FULL NAME OF SOLE OF JOINT INVENTOR William C. Lindsey	INVENTORS' SIGNATURE	DATE
RESIDENCE (CITY AND STATE) Pasadena, California		INVENTION AGREEMENT DATE

STATE OF CALIFORNIA
COUNTY OF LOS ANGELES

SS:

On MARCH 10, 2004 before me, Ruby Ann Ross-Gilliam
a Notary Public in and for said State, personally appeared
WEIZHENG W. WANG

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 Ruby Ann Ross-Gilliam

ASSIGNMENT
Page 2 of 5
PD-202088

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OF JOINT INVENTOR Weizheng W. Wang	INVENTORS' SIGNATURE	DATE
RESIDENCE (CITY AND STATE) Rancho Palos Verdes, California		INVENTION AGREEMENT DATE
FULL NAME OF SOLE OF JOINT INVENTOR Tung-Sheng Lin	INVENTORS' SIGNATURE <i>[Signature]</i>	DATE 1-26-04
RESIDENCE (CITY AND STATE) Alhambra, California		INVENTION AGREEMENT DATE
FULL NAME OF SOLE OF JOINT INVENTOR Ernest C. Chen	INVENTORS' SIGNATURE	DATE
RESIDENCE (CITY AND STATE) San Pedro, California		INVENTION AGREEMENT DATE
FULL NAME OF SOLE OF JOINT INVENTOR William C. Lindsey	INVENTORS' SIGNATURE	DATE
RESIDENCE (CITY AND STATE) Pasadena, California		INVENTION AGREEMENT DATE

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS:

On JAN 26, 2004 before me, CRAIG HARVEY
a Notary Public in and for said State, personally appeared
TUNG SHENG LIN

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 *[Signature]*

ASSIGNMENT
Page 2 of 2
PD-202088

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OR JOINT INVENTOR Weizheng Wang	INVENTOR'S SIGNATURE	DATE
RESIDENCE (CITY AND STATE) Rancho Palos Verdes, California		INVENTION AGREEMENT DATE

FULL NAME OF SOLE OR JOINT INVENTOR Tung-Sheng Lin	INVENTOR'S SIGNATURE	DATE
RESIDENCE (CITY AND STATE) Alhambra, California		INVENTION AGREEMENT DATE

FULL NAME OF SOLE OR JOINT INVENTOR Ernest C. Chen	INVENTOR'S SIGNATURE <i>Ernest C. Chen</i>	DATE 3/5/04
RESIDENCE (CITY AND STATE) San Pedro, California		INVENTION AGREEMENT DATE August 22, 1978

FULL NAME OF SOLE OR JOINT INVENTOR William C. Lindsey	INVENTOR'S SIGNATURE	DATE
RESIDENCE (CITY AND STATE) Pasadena, California		INVENTION AGREEMENT DATE

FULL NAME OF SOLE OR JOINT INVENTOR	INVENTOR'S SIGNATURE	DATE
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES)

SS:

On MARCH 5 2004 before me, Ruby Ann Ross-Gilliam
a Notary Public in and for said State, personally appeared
ERNEST C. CHEN

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 Ruby Ann Ross-Gilliam

ASSIGNMENT
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PD-202088

IN WITNESS WHEREOF, I have executed this instrument.

FULL NAME OF SOLE OF JOINT INVENTOR	INVENTORS' SIGNATURE	DATE
Weizheng W. Wang		
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
Rancho Palos Verdes, California		
FULL NAME OF SOLE OF JOINT INVENTOR	INVENTORS' SIGNATURE	DATE
Tung-Sheng Lin		
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
Alhambra, California		
FULL NAME OF SOLE OF JOINT INVENTOR	INVENTORS' SIGNATURE	DATE
Ernest C. Chen		
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
San Pedro, California		
FULL NAME OF SOLE OF JOINT INVENTOR	INVENTORS' SIGNATURE	DATE
William C. Lindsey	<i>W.C. Lindsey</i>	1/26/04
RESIDENCE (CITY AND STATE)		INVENTION AGREEMENT DATE
Pasadena, California		

STATE OF California)
COUNTY OF Los Angeles) SS:

On Jan. 26, 2004 before me, Darryl Claudius Brown,
a Notary Public in and for said State, personally appeared

William C. Lindsey

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 Darryl Claudius Brown

