

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

01-17-2001

\$ D

PATENT

Attorney Docket No. 200052

12.29.00

RI



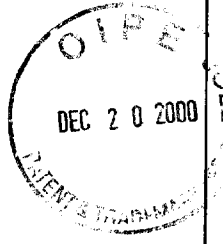
101585216

TO: The Commissioner of Patents and Trademark

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
- License  Change of Name
- Merger  Other:

3. Conveying Party(ies):

Mark if additional names of conveying parties attached.

Name Khalid Karimullah  
 Name Jian Song  
 Name Lin-Nan Lee  
 Name Stanley E. Kay

Execution Date: 9/18/2000 (m/d/yyyy)  
 Execution Date: 9/18/2000 (m/d/yyyy)  
 Execution Date: 9/18/2000 (m/d/yyyy)  
 Execution Date: 9/18/2000 (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):

Mark if additional numbers attached.

Either enter the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

09/664,695

If this document is being filed together with a new Patent Application, enter the date that the patent application was executed by the first named inventor.

(m/d/yyyy)

7. Patent Cooperation Treaty (PCT) Numbers:

|   |     |     |     |
|---|-----|-----|-----|
| Enter PCT application number(s)                                 | PCT | PCT | PCT |
| <u>only</u> if a U.S. Application Number has not been assigned. | PCT | PCT | PCT |

8. Number of Properties:

Enter the total number of properties involved: 1.

9. Fee Transmittal:

Fee amount for listed properties (37 CFR 3.41): \$ 40.00

Method of Payment:  Enclosed  Deposit Account Deposit Account No. 50-0383  
 Authorization to charge additional fees:  Yes  No

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.

Craig L. Plastrik, Reg. No. 41,254

12/19/00

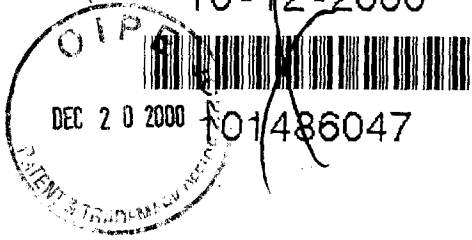
Name of Person Signing

Signature

Date

Total number of pages comprising cover sheet: 1

10-12-2000



UNITED STATES PATENT AND TRADEMARK OFFICE  
APPLICATION TRANSMITTAL LETTER FOR  
PROVISIONAL PATENT APPLICATION  
Under 37 C.F.R. 1.53(b)



Certification under 37 CFR 1.10 (if applicable)

EJ398429673US  
EXPRESS MAIL mailing number

September 19, 2000  
Date of Deposit

I hereby certify that this application is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Ginger Fogle  
(Type or printed name of person mailing application)

Ginger Fogle  
(Signature of person mailing application)

Assistant Commissioner for Patents  
Washington, D.C. 20231

9-19-00

Sir:

Transmitted herewith for filing is the patent application including eight (8) sheets of drawings, Assignment, recordation Cover Letter and Declaration of inventors:

Khalid Karimullah  
Jia Song  
Lin-Nan Lee  
Stanley E. Kay

9-19-00  
MRD

For: Time-Offset Distribution to Ensure Constant Power

The filing fee for this application is calculated below:

|                           | CLAIMS AS FILED |              |     | RATE     |                  |
|---------------------------|-----------------|--------------|-----|----------|------------------|
|                           | NUMBER FILED    | NUMBER EXTRA |     |          |                  |
| Basic Fee                 |                 |              |     |          | \$ 690.00        |
| Total Claims              | 26              | -20 =        | 6 x | \$ 18.00 | \$ 108.00        |
| Independent Claims        | 3               | - 3 =        | 0 x | \$ 78.00 | \$ 0             |
| Multiple Dependent Claims |                 |              | +   | \$260.00 | \$ 0             |
| <b>TOTAL FILING FEE :</b> |                 |              |     |          | <u>\$ 798.00</u> |

Please charge Deposit Account No. 50-0383 of Hughes Electronics Corporation, El Segundo, California, in the amount of \$798.00. The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment, to that account.

09/29/2000 AGRAY1 00000048 500383 09664695 )  
03-FC:581 40.00 CH

The Commissioner is further hereby authorized to charge to said above Deposit Account No. 50-0383, pursuant to 37 CFR 1.25(b), any fees whatsoever which may properly become due or payable, as set forth in 37 CFR 1.16 to 1.17 inclusive, for the entire pendency of this application without specific additional authorization.

Please associate this application with the Hughes Electronics Corporation Customer Number 020991.

This form is submitted in triplicate.

HUGHES ELECTRONICS CORPORATION



John T. Whelan  
Reg. No.: 32,448

HUGHES ELECTRONICS CORPORATION  
Patent Docket Administration  
Bldg. 001, M/S A109  
PO Box 956  
El Segundo, CA 90245-0956  
Telephone: (301) 601-7252  
Date: September 19, 2000

**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) **Circulatory Polarized Reflectary Using 2-Bit Phase Shifter Having Initial Phase Perturbation** 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.

IN WITNESS WHEREOF, I have executed this instrument.

|  |  |                          |
|--|--|--------------------------|
| FULL NAME OF SOLE OR JOINT INVENTOR<br>Khalid Karimullah | INVENTOR'S SIGNATURE<br><i>Khalid Karimullah</i> | DATE<br>9/18/00          |
| RESIDENCE (CITY AND STATE)<br>Olney, Maryland            |  | INVENTION AGREEMENT DATE |
| FULL NAME OF SOLE OR JOINT INVENTOR<br>Jian Song         | INVENTOR'S SIGNATURE<br><i>Jian Song</i>         | DATE<br>9/18/00          |
| RESIDENCE (CITY AND STATE)<br>Germantown, Maryland       |  | INVENTION AGREEMENT DATE |
| FULL NAME OF SOLE OR JOINT INVENTOR<br>Lin-Nan Lee       | INVENTOR'S SIGNATURE<br><i>Lin-Nan Lee</i>       | DATE<br>9/18/2000        |
| RESIDENCE (CITY AND STATE)<br>Potomac, Maryland          |  | INVENTION AGREEMENT DATE |
| FULL NAME OF SOLE OR JOINT INVENTOR<br>Stanley E. Kay    | INVENTOR'S SIGNATURE<br><i>Stanley E. Kay</i>    | DATE<br>9/18/2000        |
| RESIDENCE (CITY AND STATE)<br>Rockville, Maryland        |  | INVENTION AGREEMENT DATE |

STATE OF Maryland )  
COUNTY OF Montgomery ) SS:

On September 18, 2000 before me, Linda D. Harris  
a Notary Public in and for said State, personally appeared  
Khalid Karimullah, Jian Song, Lin-Nan Lee, Stanley E. Kay

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 Linda D. Harris

LINDA D. HARRIS  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires August 1, 2001