

6-26-02

\$0



07-03-2002



102143248

PATENT

Attorney Docket No. SON5180.20A

Applicant: CHEUNG AUYEUNG
 Serial No.: 10/112,623
 Filed: MARCH 29, 2002
 Title: METHOD OF ESTIMATING BACKWARD MOTION VECTORS WITHIN A VIDEO SEQUENCE
 Group:
 Examiner:

6-24-02

ASSIGNMENT (DOCUMENT) COVER LETTER

PATENT OR PATENT APPLICATION

1. NAMES OF PARTY(IES) MAKING TRANSFER

Name 1: CHEUNG AUYEUNG

2. IDENTITY OF PARTY(IES) TO WHOM TRANSFER IS MADE

This transfer is being made to:

Name: SONY CORPORATION
 Address: 7-35 KITASHINAGAWA 6-CHROME
 SHINAGAWA-KU, TOKYO,
 JAPAN

Name: SONY ELECTRONICS INC.
 Address: 1 SONY DRIVE
 PARK RIDGE, NJ 07656

3. INTENTION OF DOCUMENT

A brief description of what the accompanying document intends to accomplish is that it is an:

- Assignment
- License
- Security Interest
- Other

07/02/2002 TDIAZ: 00000154 10112623
 01 FC:581 40.00 EP

4. **IDENTIFICATION OF PATENT OR APPLICATION**

Particulars of the patent or application to which the accompanying document applies are:

Inventor(s):

CHEUNG AUYEUNG

For (title):

METHOD OF ESTIMATING BACKWARD MOTION VECTORS WITHIN A VIDEO SEQUENCE

- (a) U.S. patent application filed herewith.
- (b) U.S. patent application serial no. 10/112,623 filed on MARCH 29, 2002.
- (c) U.S. patent no. _____ issued _____.

5. **NAME AND ADDRESS TO WHICH CORRESPONDENCE SHOULD BE MAILED**

Please address all correspondence and return the recorded document to:

John P. O'Banion
O'BANION & RITCHEY LLP
400 Capitol Mall, Suite 1550
Sacramento, CA 95814

6. **NUMBER OF APPLICATIONS OR PATENTS IDENTIFIED AND TOTAL FEE DUE**

The number of applications or patents identified herein is: 1

Total Fee Due \$ 40.00

7. **DATE DOCUMENT WAS EXECUTED**

The accompanying document was executed on MAY 10, 2002.

8. **FEE PAYMENT**

Fee payment is provided for as follows:

New Application transmittal (Item 18 - INCLUDED IN FILING FEE)

FWC Transmittal (Item VIII)

Transmittal of Filing under 37 CFR 1.60(b) (Item 11)

Attached is a check in the sum of \$40.00

Charge Account No. 07-1137 if any additional fee is due.

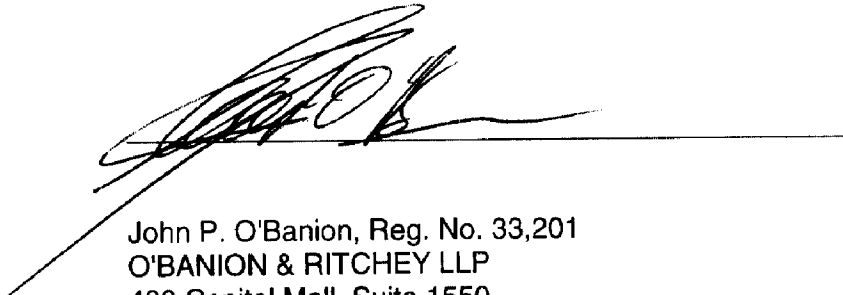
Charge Account No. _____ in the sum of _____ A duplicate of this transmittal is attached.

9. **STATEMENT OF AUTHENTICITY**

The undersigned certifies that, to the best of his or her knowledge and belief, the information contained in this cover sheet is true and correct, and any copy of the document submitted for recording is a true copy of the original document.

10. **SIGNATURE**

Dated: JUNE 21, 2002.



John P. O'Banion, Reg. No. 33,201
O'BANION & RITCHEY LLP
400 Capitol Mall, Suite 1550
Sacramento, CA 95814
(916) 498-1010

Attorney Docket No.: SON5180.20A

ASSIGNMENT

W-HEREAS, I, as a below named inventor, residing at the address stated next to my name, am a sole inventor (if only one name is listed below) or a joint inventor (if plural names are listed below) of certain new and useful improvements in the invention entitled: **METHOD OF ESTIMATING BACKWARD MOTION VECTORS WITHIN A VIDEO SEQUENCE** which is found in:

U.S. patent application serial no. 10/112,623, filed on MARCH 29, 2002;

AND WHEREAS, Sony Corporation, a Japanese corporation with offices at 7-35 Kitashinagawa 6-Chrome, Shinagawa-Ku, Tokyo, Japan; and Sony Electronics Inc., a corporation of the State of Delaware, having a place of business at 1 Sony Drive, Park Ridge, NJ 07656; (hereinafter referenced as ASSIGNEES) is desirous of acquiring all interest in, to and under said invention, said application disclosing the invention and in, to and under any Letters Patent or similar legal protection which may be granted therefor in the United States and in any and all foreign countries;

NOW THEREFORE, in consideration of the sum of One Dollar (\$1.00), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I, as a sole or joint inventor as indicated below, by these presents do hereby assign, sell and transfer unto said ASSIGNEES, its successors, assigns, and legal representatives, the entire right, title and interest in the said invention, said application, including any divisions and continuations thereof, and in and to any and all priority rights and/or convention rights under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreements to which the United States of America adheres, and to any other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto, and I hereby authorize and request the Commissioner of Patents to issue the said United States Letters Patent to said ASSIGNEES, as the assignees of the whole right, title and interest thereto;

And I further agree to execute all necessary or desirable and lawful future documents, including assignments in favor of ASSIGNEES or its designee, as ASSIGNEES or its successors, assigns and legal representatives may from time-to-time present to me and without further remuneration, in order to perfect title in said invention, modifications, and improvements in said invention, applications and Letters Patent of the United States and countries foreign thereto;

And I further agree to properly execute and deliver and without further remuneration, such necessary or desirable and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and or, for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the ASSIGNEES thereof shall hereafter require and prepare at its own expense;

And I further agree that ASSIGNEES will, upon its request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent and legal equivalents in foreign countries as may be known and accessible to me and will testify as to the same in any interference or litigation related thereto;

And I hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale;

This assignment executed on the date indicated below.

Name of first inventor: CHEUNG AUYEUNG
Address: 107 SOUTH MAY AVENUE, #122
SUNNYVALE, CA 94086

Date of this Assignment: March 29, 2002

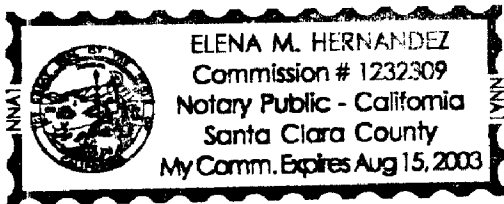
Cheung Auyung 5/10/2002
Signature

STATE OF California

COUNTY OF Santa Clara SS.

On this 10 day of May, in the year of 02, before me, the undersigned notary public, personally appeared the above-named assignors, ~~known to me~~, (or proved to me on the basis of satisfactory evidence), to be the person whose name is subscribed to the within instrument, and acknowledged execution of this instrument.

Elena Hernandez Notary Public
Notary Public



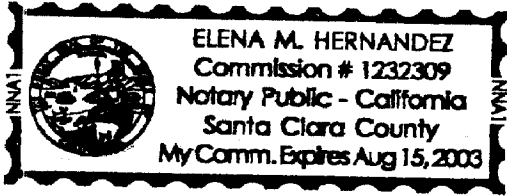
CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California }
County of Santa Clara } ss.

On May 10, 2002, before me, Elena Hernandez, Notary Public
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Mr. Cheung Chung
Name(s) of Signer(s)

- personally known to me
- 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.

Elena Hernandez, Notary Public
Signature of Notary Public

Place Notary Seal Above

OPTIONAL

Though the information below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent removal and reattachment of this form to another document.

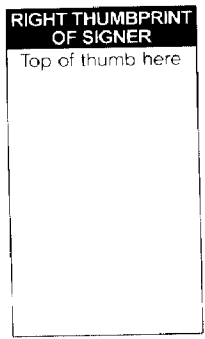
Description of Attached Document

Title or Type of Document: Assignment, Deed # SOP 4723
Document Date: — Number of Pages: 2

Signer(s) Other Than Named Above: _____

Capacity(ies) Claimed by Signer

- Signer's Name: _____
- Individual
- Corporate Officer — Title(s): _____
- Partner — Limited General
- Attorney in Fact
- Trustee
- Guardian or Conservator
- Other: _____



Signer Is Representing: _____

CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)

Applicant(s): **CHEUNG AU YEUNG**

Docket No.

SON5180.20A

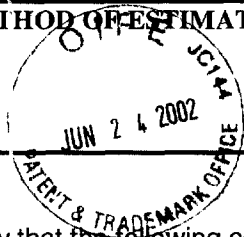
Serial No.
10/112,623

Filing Date
MARCH 29, 2002

Examiner

Group Art Unit

Invention: **METHOD OF ESTIMATING BACKWARD MOTION VECTORS WITHIN A VIDEO SEQUENCE**



I hereby certify that the following correspondence:

Assignment Cover Letter and Assignment (Page 1 thru 6)

(Identify type of correspondence)

is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231 on

June 24, 2002

(Date)

Jerry V. King

(Typed or Printed Name of Person Mailing Correspondence)

(Signature of Person Mailing Correspondence)

EL508300424US

("Express Mail" Mailing Label Number)

Note: Each paper must have its own certificate of mailing.