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U.S. DEPARTMENT OF COMMERCE

FEB 22 2000

Patent and Trademark Office



101290888

original documents or copy thereof.

To the Honorable Commissioner of Patents &

1. Name of conveying party(ies):
SHIH-FU CHANG, WILLIAM CHEN, HORACE J.
MENG, HARI SUNDARAM and DI ZHONG

Additional name(s) of conveying party(ies) attached?
 Yes No

2. Name and address of receiving party(ies)

Name: The Trustees of Columbia University
in the City of New York
Address: 116th Street & Broadway

City: New York State: NY Zip: 10027
Additional name(s) and address(es) attached?
 Yes No

3. Nature of conveyance:

Assignment Merger
 Security Agreement Change of Name
 Other _____

Execution Date: 02/04/00, 02/08/00, 02/04/00, 02/04/00
and 02/03/00, respectively

4. Application number(s) or patent number(s)

09/423409

If this document is being filed together with a new application, the execution date of the application is 02/04/00, 02/08/00, 02/04/00,
02/04/00, 02/04/00, 02/03/00, respectively

A. Patent Application No.(s)
09/423,409
PCT/US98/09124
60/045,637

B. Patent No.(s)
November 4, 1999
May 5, 1998
May 5, 1997

Additional numbers attached?

Yes No

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

02/29/2000 PVOLPE 00000035 09423409
Name: Henry Tang
BAKER BOTTS, L.L.P.

Address: 30 Rockefeller Plaza - 44 Fl.

City: New York State: NY Zip: 10112

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:

02-4377

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

DO NOT USE THIS SPACE

9. Statement and signature

To the best of my knowledge and belief, the foregoing instrumentation is true and correct and any attached copy is a true copy of the original document.

Paul A. Ragusa

Name of Person Signing

Signature

February 16, 2000

Date

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

7

A S S I G N M E N T

WHEREAS, WE, SHIH-FU CHANG, WILLIAM CHEN, HORACE J. MENG, HARI SUNDARAM and DI ZHONG, citizens of Taiwan, United States, United States, India and China, respectively, residing in New York, County of New York, respectively, have made an invention entitled "ALGORITHMS AND SYSTEM FOR OBJECT-ORIENTED CONTENT-BASED VIDEO SEARCH" as set forth and described in application for Letters Patent of the United States, Serial No. 09/423,409, filed November 4, 1999 and

WHEREAS, THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK (hereinafter "COLUMBIA"), having its principal place of business at 116th Street & Broadway, New York, New York 10027, is desirous of acquiring the whole right, title and interest in and to said Letters Patent and any continuations, divisions, extensions, substitutions, reissues and reexaminations thereof;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that WE, the said SHIH-FU CHANG, WILLIAM CHEN, HORACE J. MENG, HARI SUNDARAM and DI ZHONG for and in consideration of the sum of One Dollar (\$1.00), lawful money of the United States, to us in hand paid by said COLUMBIA, and other valuable considerations unto us moving from said COLUMBIA, at or before the ensembling and delivery of these presents, the receipt of which is hereby acknowledged, have sold, assigned, transferred and conveyed and by these presents do sell, assign, transfer and convey, unto said COLUMBIA, its successors and assigns, the entire right, title and interest in and to the said invention entitled "ALGORITHMS AND SYSTEM FOR OBJECT-ORIENTED CONTENT-BASED VIDEO SEARCH" as set forth and described in application for Letters Patent of the United States, Serial No. 09/423,409, filed November 4, 1999, and any and all improvements thereon, and in and to said application and any division, continuation or continuation-in-part thereof, and in and to any Letters Patent of the United States which may be issued on any of said applications, and any reissues thereof, and in and to any and all applications for Letters Patent filed in foreign countries for said invention or improvements including all priority rights, and any and all Letters Patent which may be granted in foreign countries therefor, TO HAVE AND TO HOLD THE SAME to the full end of the term or terms for which any and all said Letters Patent may be granted;

AND WE, the said SHIH-FU CHANG, WILLIAM CHEN, HORACE J. MENG, HARI SUNDARAM and DI ZHONG, do hereby authorize and request the Commissioner of Patents and Trademarks to issue the said Letters Patent of the United States to said COLUMBIA, as the assignee of the entire right, title and interest in and to the same, for the sole use and benefit of said COLUMBIA, its successors and assigns;

AND WE, the said SHIH-FU CHANG, WILLIAM CHEN, HORACE J. MENG, HARI SUNDARAM and DI ZHONG, for the considerations aforesaid, do hereby covenant and agree to and with said COLUMBIA, its successors and assigns, that we have the full power to make this assignment, and that the rights assigned are not encumbered by any grant, license or right heretofore given, and that we, our executors or administrators, shall and will do all lawful acts and things and make, execute and deliver without further compensation, any and all other instruments in writing, further applications, papers, affidavits, powers of attorney, assignments, and other documents which, in the opinion of counsel for said COLUMBIA, its successors and assigns, may be required or necessary more effectively to secure to and vest in said COLUMBIA, its successors and assigns, the entire right, title and interest in and to said invention and improvements, applications, Letters Patent, rights, titles, benefits, privileges, and advantages hereby sold, assigned, transferred and conveyed, and that we will sign any applications for reissue which may be desired by the owner of the patent or patents which may be issued for the said invention or improvements.

IN WITNESS WHEREOF, WE, the said SHIH-FU CHANG, WILLIAM CHEN, HORACE J. MENG, HARI SUNDARAM and DI ZHONG, have hereunto set our hands and seals on the date below written.


SHIH-FU CHANG

STATE OF NY)
COUNTY OF NY) : ss.:

Notary Public
Qualifies on 02/01/2000
Commission Expires 02/01/2003

BE IT KNOWN, that on this 4th day of February, 2000, before me personally came SHIH-FU CHANG, to me known and known to me to be the person mentioned in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed for the use and purposes therein mentioned.


Notary Public

98 FEB 2000

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Hari Sundaram

HARI SUNDARAM

STATE OF)
: ss.:
COUNTY OF)

LISA DONADIO
Notary Public, State of New York
No. 01006015254
Qualified in New York County
Commission Expires Oct. 26 2000

BE IT KNOWN, that on this 4th day of February, 2000, before me personally came HARI SUNDARAM, to me known and known to me to be the person mentioned in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed for the use and purposes therein mentioned.

Lisa Donadio

Notary Public

Di Zhong

DI ZHONG

STATE OF New York)
: ss.:
COUNTY OF New York

BE IT KNOWN, that on this 3 day of Feb, 2000, before me personally came DI ZHONG, to me known and known to me to be the person mentioned in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed for the use and purposes therein mentioned.

Florence J. Grant
Notary Public

FLORENCE J. GRANT,
Notary Public, State of New York
No. 31-4666482
Qualified in New York County
Commission Expires March 30, 2000

NY02:231550.1