

12-16-1999

FORM PTO 1595  
1 31 92



M COVER SHEET

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

ONLY

To the Honorable C.  
copy thereof

101223512

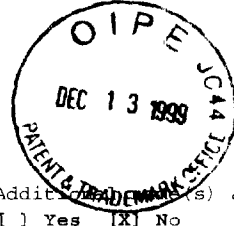
Please record the attached original documents on

MED 12-13-99

1. Name of conveying party(ies):  
Jerome F. Duluk, Jr.; Sushma S. Trivedi;  
Sam Ng; Lindy Fung; Richard E. Hessel; Jack  
Benkual

2. Name and address of receiving party(ies):  
**RAYCER, INC.**  
2585 E. Bayshore Frontage Rd.  
Palo Alto, California 94303

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



3. Nature of Conveyance:  
[X] Assignment [ ] Merger  
[ ] Security Agreement [ ] Change of Name  
[ ] Other

Additional trademark(s) & address(es) attached?  
[ ] Yes [X] No

Execution Date: 8/27/99; 8/31/99; 9/2/99;  
9/7/99; 9/9/99

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)

09/372,137 filed August 20, 1999

Additional numbers attached? [ ] Yes [X] No

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

R. Michael Ananian  
FLEHR HOHBACH TEST ALBRITTON & HERBERT LLP  
Four Embarcadero Center, Suite 3400  
San Francisco, CA 94111-4187

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

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

[X] Enclosed  
[ ] Authorized to be charged to  
deposit account

8. Deposit account number: 06-1300  
Please debit any underpayment or credit any  
overpayment to the above deposit account.

Our Order No. A-66399/RMA

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.

R. Michael Ananian, Reg. No. 35,050  
Name of Person Signing

*R. Michael Ananian*  
Signature

December 7, 1999  
Date

Total number of pages including cover sheet, attachments and document: [9]

OMB No. 0651-0011 (exp. 4/94)

Do not detach this portion

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks, Box Assignments

Washington, DC 20231

File No. A-66399/RMA

Rev. 8/93 (142631)

PATENT  
REEL: 010434 FRAME: 0908

## ASSIGNMENT

WHEREAS, (1) JEROME F. DULUK, JR., of Palo Alto, California; (2) SUSHMA S. TRIVEDI, of Sunnyvale, California; (3) SAM NG, of Fremont, California; (4) LINDY FUNG, of Sunnyvale, California; (5) RICHARD E. HESSEL, of Pleasanton, California; and (6) JACK BENKUAL, of Cupertino, California have invented certain new and useful improvements in an *APPARATUS AND METHOD FOR FRAGMENT OPERATIONS IN A 3D-GRAPHICS PIPELINE* and have executed an application for a United States patent disclosing and identifying the invention bearing Serial No. 09/372,137 filed on August 20, 1999; and

WHEREAS, RAYCER, INC., a corporation of the State of Delaware, having a place of business at 2585 East Bayshore Frontage Road, Palo Alto, California 94303 hereinafter termed "Assignee"), is desirous of acquiring the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, inventor's certificates and other forms of protection (hereinafter termed "patents") thereon granted in the United States and foreign countries.

NOW, THEREFORE, in consideration of good and valuable consideration acknowledged by said Inventors to have been received in full from said Assignee:

1. Said Inventors do hereby sell, assign, transfer and convey unto said Assignee, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply for foreign patents on said invention pursuant to the International Convention for the Protection of Industrial Property or otherwise; (c) in and to any and all applications filed and any and all patents granted on said invention in the United States or any foreign country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; and (d) in and to each and every reissue or extensions of any of said patents.


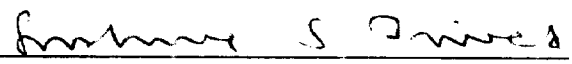
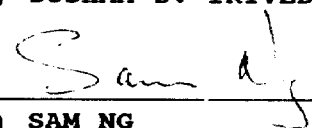
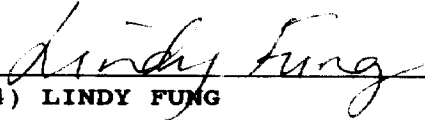
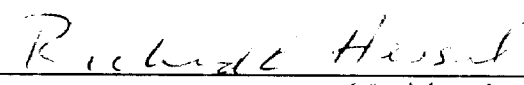
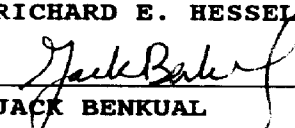
2. Said Inventors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right title and interest herein conveyed in the United States and foreign countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, execution of petitions, oaths, specifications, declarations or other papers, and other assistance all

to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for prosecuting any of said applications; (c) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (d) for filing and prosecuting applications for reissuance of any said patents; (e) for interference or other priority proceedings involving said invention; and (f) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, their heirs, legal representatives and assigns.

4. Said Inventors hereby warrant and represent that they have not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, the said Inventors have executed and delivered this instrument to said Assignee on the dates set forth below:

<u>8-27-99</u> Date	<u></u> (1) JEROME F. DULUK, JR. (Certificate attached)
<u>4/7/99</u> Date	<u></u> (2) SUSHMA S. TRIVEDI
<u>8/15/99</u> Date	<u></u> (3) SAM NG
<u>9/2/99</u> Date	<u></u> (4) LINDY FUNG
<u>8/27/99</u> Date	<u></u> (5) RICHARD E. HESSEL (Certificate attached)
<u>9/9/99</u> Date	<u></u> (6) JACK BENKUAL

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of Santa Clara

} ss.

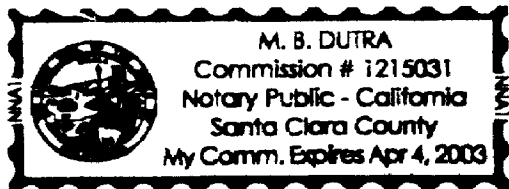
On Aug 27, 99  
Date

before me, M.B. Dutra, Notary Public  
Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Jerome F. Duluk, Jr  
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.



Place Notary Seal Above

WITNESS my hand and official seal.

M.B. Dutra  
Signature of Notary Public

**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: Patent Assignment for File # A 66399

Document Date: 08/20/99 Number of Pages: 2

Signer(s) Other Than Named Above: Multiple Signers

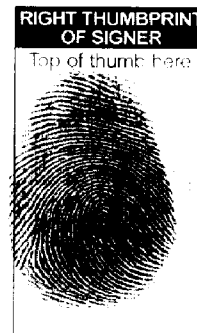
**Capacity(ies) Claimed by Signer**

Signer's Name: Jerome F. Duluk, Jr.

- Individual
- Corporate Officer — Title(s): \_\_\_\_\_
- Partner — Limited | General
- Attorney in Fact
- Trustee
- Guardian or Conservator

Other: Inventor

Signer Is Representing: \_\_\_\_\_



# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of

Santa Clara

SS.

On Sept. 07, 1999

Date

, before me, M.B. Dutra, Notary Public

Name and Title of Officer (e.g. "Jane Doe, Notary Public")

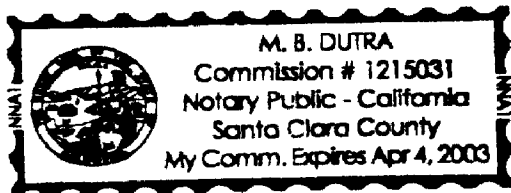
personally appeared

Sushma S. Trivedi

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.



Place Notary Seal Above

WITNESS my hand and official seal.

M.B. Dutra

Signature of Notary Public

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### Description of Attached Document

Title or Type of Document: Patent Assignment; File # A-66399

Document Date: 08/20/99 Number of Pages: 2

Signer(s) Other Than Named Above: Multiple Signers

### Capacity(ies) Claimed by Signer

Signer's Name: Sushma S. Trivedi

Individual

Corporate Officer — Title(s):

Partner —  Limited  General

Attorney in Fact

Trustee

Guardian or Conservator

Other Inventor

Signer Is Representing:

RIGHT THUMBPRINT OF SIGNER

Top of thumb here



**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of

Santa Clara

} ss.

On Aug. 31, 1999

Date

before me, M.B. Dutra, Notary Public

Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared

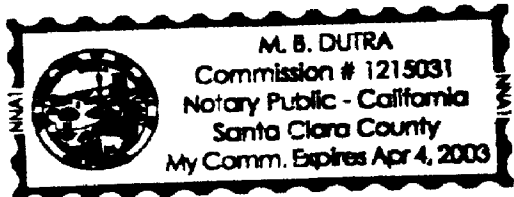
Sam Ng

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.



Place Notary Seal Above

WITNESS my hand and official seal.

M.B. Dutra

Signature of Notary Public

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Document Date: 08/20/99 Number of Pages: 2

Signer(s) Other Than Named Above: Multiple Signers

**Capacity(ies) Claimed by Signer**

Signer's Name: Sam Ng

Individual

Corporate Officer — Title(s): \_\_\_\_\_

Partner — Limited | General \_\_\_\_\_

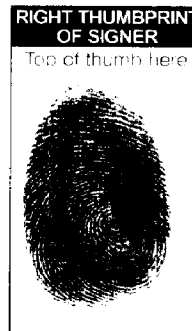
Attorney in Fact \_\_\_\_\_

Trustee \_\_\_\_\_

Guardian or Conservator \_\_\_\_\_

Other: Inventor

Signer Is Representing: \_\_\_\_\_



# CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

State of California

County of Santa Clara

} ss.

On Sept 02, 1999, before me, M.B. Dutra, Notary Public

Date

Name and Title of Officer (e.g. "Jane Doe, Notary Public")

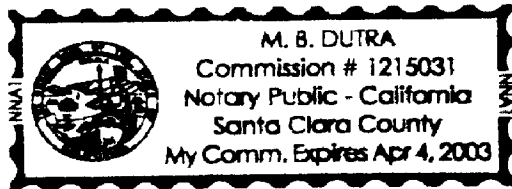
personally appeared Lindy Fung

Name(s) of Signer(s)

~~personally known to me~~

proved to me on the basis of satisfactory evidence

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Signature of Notary Public

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### Capacity(ies) Claimed by Signer

Signer's Name: Lindy Fung

Individual

Corporate Officer — Title(s): \_\_\_\_\_

Partner — Limited General \_\_\_\_\_

Attorney in Fact \_\_\_\_\_

Trustee \_\_\_\_\_

Guardian or Conservator \_\_\_\_\_

Other: Inventor

Signer Is Representing: \_\_\_\_\_

RIGHT THUMBPRINT OF SIGNER

Top of thumb here



**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

County of Santa Clara

} ss.

On Aug. 27, 1999

Date

before me, M.B. Dutra, Notary Public

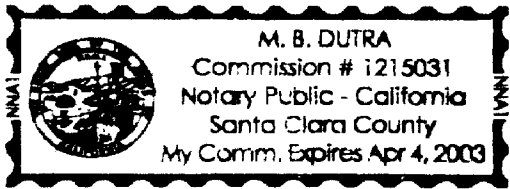
Name and Title of Officer (e.g., Jane Doe, Notary Public)

personally appeared Richard E. Hessel

Name(s) of Signer(s)

~~personally known to me~~  
 proved to me on the basis of satisfactory evidence

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M.B. Dutra

Signature of Notary Public

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**Description of Attached Document**

Title or Type of Document: Patent Assignment for file # A-106399

Document Date: 08/20/99

Number of Pages: 2

Signer(s) Other Than Named Above: multiple signers

**Capacity(ies) Claimed by Signer**

Signer's Name: Richard E. Hessel

Individual

Corporate Officer — Title(s): \_\_\_\_\_

Partner — Limited General \_\_\_\_\_

Attorney in Fact \_\_\_\_\_

Trustee \_\_\_\_\_

Guardian or Conservator \_\_\_\_\_

Other: Inventor

Signer Is Representing: \_\_\_\_\_

**RIGHT THUMBPRINT OF SIGNER**

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**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

State of California

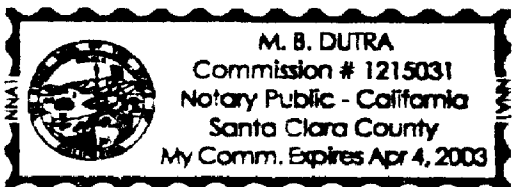
County of Santa Clara } ss.

On Sept. 09, 1999, before me, M.B. Dutra, Notary Public  
Date Name and Title of Officer (e.g., "Jane Doe, Notary Public")

personally appeared Jack Benkual  
Name(s) of Signer(s)

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 proved to me on the basis of satisfactory evidence

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M.B. Dutra  
Signature of Notary Public

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Signer(s) Other Than Named Above: Multiple signers

**Capacity(ies) Claimed by Signer**

Signer's Name: Jack Benkual  
 Individual  
Corporate Officer — Title(s): \_\_\_\_\_  
Partner — Limited General  
Attorney in Fact  
Trustee  
Guardian or Conservator  
 Other Inventor



Signer Is Representing: \_\_\_\_\_