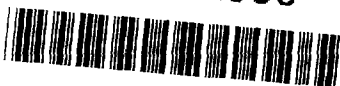




11-21-2000



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RECORDATION FORM COVER SHEET  
PATENTS ONLY

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

New

Resubmission (Non-Recordation)  
Document ID# \_\_\_\_\_

Correction of PTO Error  
Reel # \_\_\_\_\_ Frame # \_\_\_\_\_

Corrective Document  
Reel # \_\_\_\_\_ Frame # \_\_\_\_\_

Conveyance Type

Assignment     Security Agreement

License     Change of Name

Merger     Other \_\_\_\_\_

**U.S. Government**  
(For Use ONLY by U.S. Government Agencies)

Departmental File     Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Name (line 1) PRAMODE KANDPAL

Name (line 2) \_\_\_\_\_

Execution Date  
Month Day Year  
8-15-00

Second Party

Name (line 1) ALISTAIR J. PRICE

Name (line 2) \_\_\_\_\_

Execution Date  
Month Day Year  
8-23-00

09588527

Receiving Party

Mark if additional names of receiving parties attached

Name (line 1) CORVIS CORPORATION

Name (line 2) \_\_\_\_\_

Address (line 1) 7015 ALBERT EINSTEIN DRIVE

Address (line 2) \_\_\_\_\_

Address (line 3) COLUMBIA    MARYLAND    21046-9400  
City    State/Country    Zip Code

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name \_\_\_\_\_

Address (line 1) \_\_\_\_\_

Address (line 2) \_\_\_\_\_

Address (line 3) \_\_\_\_\_

Address (line 4) \_\_\_\_\_

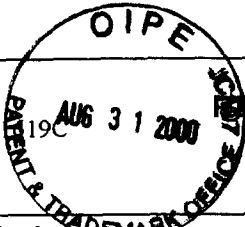
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09/03/00 11:40:07 00/000132 500477 09588527

40.00 Cr

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

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U.S. Department of Commerce  
Patent and Trademark Office  
**PATENT**

## Conveying Party(ies)

Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1) DAVID F. SMITH

Execution Date  
Month Day Year  
8-15-00

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

Execution Date  
Month Day Year

Name (line 1)

Name (line 2)

## Receiving Party(ies)

Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Name (line 1)

If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

## Application Number(s) or Patent Number(s)

Mark if additional numbers attached

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

Patent Application Number(s)

Patent Number(s)

|                   |  |  |
|-------------------|--|--|
| <u>09/588,527</u> |  |  |
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**Correspondent Name and Address**

Area Code and Telephone Number **443-259-4150**

Name **MICHAEL C. ANIONE**

Address (line 1) **CORVIS CORPORATION IP DEPARTMENT**

Address (line 2) **7015 ALBERT EINSTEIN DRIVE**

Address (line 3) **PO BOX 9400**

Address (line 4) **COLUMBIA, MARYLAND 21046-9400**

**Pages**

Enter the total number of pages of the attached conveyance document including any attachments.

# **3**

**Application Number(s) or Patent Number(s)**

Mark if additional numbers attached

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

Patent Application Number(s)

Patent Number(s)

|                      |                      |                      |                      |                      |                      |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
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| <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> | <input type="text"/> |

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

Month Day Year

**Patent Cooperation Treaty (PCT)**

Enter PCT application number only if a U.S. Application Number has not been assigned.

|                          |                          |                          |
|--------------------------|--------------------------|--------------------------|
| PCT <input type="text"/> | PCT <input type="text"/> | PCT <input type="text"/> |
| PCT <input type="text"/> | PCT <input type="text"/> | PCT <input type="text"/> |

**Number of Properties**

Enter the total number of properties involved.

# **1**

**Fee Amount**

Fee Amount for Properties Listed (37 CFR 3.41): \$ **40.00**

Method of Payment:  
Deposit Account

Enclosed  Deposit Account

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number: # **500477**

Authorization to charge additional fees: Yes  No

**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.

**Michael C. Antone**  
Name of Person Signing

*Michael C. Antone*  
Signature

**8/31/00**  
Date

### ASSIGNMENT OF INVENTION

- For:  U.S. and/or  Foreign Rights
- For:  U.S. Application or  U.S. Provisional Application
- For:  U.S. Patent
- For:  PCT Application
- By:  Inventor(s) or  Present Owner

In consideration of the payment by ASSIGNEE(S) to ASSIGNOR(S) of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

**ASSIGNOR(S)**

|                   |   |             |
|-------------------|---|-------------|
| Pramode Kandpal   | 7015 Albert Einstein Drive, PO Box 9400,<br>Columbia, MD 21046-9400 | U.S.A.      |
| name of Assignor  | Address   | Nationality |
| Alistair J. Price | 7015 Albert Einstein Drive, PO Box 9400,<br>Columbia, MD 21046-9400 | U.K.        |
| name of Assignor  | Address   | Nationality |
| David F. Smith    | 7015 Albert Einstein Drive, PO Box 9400,<br>Columbia, MD 21046-9400 | U.K.        |
| name of Assignor  | Address   | Nationality |

Recorded on \_\_\_\_\_ Reel \_\_\_\_\_ Frame \_\_\_\_\_

hereby sells, assigns and transfers to

**ASSIGNEE(S):**

|                    |  |                      |
|--------------------|--|----------------------|
| CORVIS Corporation | 7015 Albert Einstein Drive<br>PO Box 9400<br>Columbia, MD 21046-9400 | Delaware Corporation |
| (name of ASSIGNEE) | Address  | Nationality          |

and the successors, assigns and legal representatives of the ASSIGNEE(S)

- the entire right, title and interest for the United States and its territorial possessions
- an undivided \_\_\_\_\_ percent ( \_\_\_\_\_ %) interest for the United States and its territorial possessions
- and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

**Optical Transmission Systems and Optical Receivers and Receiving Methods for use therein**

and which is found in

- (a)  U.S. patent application executed on even date herewith
- (b)  U.S. patent application executed on \_
- (c)  U.S. provisional application naming the above inventor(s) for the above-entitled invention
  - Express mail label no.: \_ Mailed: \_\_\_\_\_
  - To comply with 37 CFR 3.21 for recordal of this assignment, ASSIGNOR(S) signing below, hereby authorize and request my attorney to insert below the filing date and application number when they become known.
- (d)  U.S. application no.: 09/588,527 filed on June 6, 2000

- (e)  International application no. \_\_\_\_\_ filed on \_\_\_\_\_ and amended on \_\_\_\_\_.
- (f)  U.S. patent no. \_\_\_\_\_ issued \_\_\_\_\_  
 A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.
- (g)  and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenants that ASSIGNEE(S) will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR(S) and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE(S) or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

IN WITNESS WHEREOF, ASSIGNOR(S) have hereunto set hand and seal this:

**WARNING:** The date of signing must be the same as the date of execution of the declaration, if item (a) was checked above.

Pramode Kandpal  
Name of Assignor or  
**Name & Title** of Person entitled to sign on  
behalf of Assignor

*Pramode Kandpal*  
Signature of Assignor or  
Person entitled to sign on behalf of Assignor

8/15/00  
Date

Alistair J. Price  
Name of Assignor or  
**Name & Title** of Person entitled to sign on  
behalf of Assignor

*Alistair J. Price*  
Signature of Assignor or  
Person entitled to sign on behalf of Assignor

8/28/00  
Date

David F. Smith  
Name of Assignor or  
**Name & Title** of Person entitled to sign on  
behalf of Assignor

*David F. Smith*  
Signature of Assignor or  
Person entitled to sign on behalf of Assignor

8-15-00  
Date

Place of signing of assignment

City/Country :  
State :  
Country :

Before me this 15 day of August, 2000 personally appeared Pramode Kandpal, Alistair J. Price, and David F. Smith, to me known to be the person(s) who  is  are described in and who executed the foregoing assignment instrument and acknowledged its contents of their own free will for the purpose therein expressed.

**GLADYS MARIE DONACHY**  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires November 1, 2003

*Gladys Marie Donachy*  
Notary Public or Consular Officer of the United States of America

NOTE: Notarization of this document is only prima facie evidence of execution, 35 USC 261.

Place of signing of assignment

City/County : *Howard*  
State : *Maryland*  
Country : *USA*

Before me this 28 day of August 2000 personally appeared Alistair J. Price to me known to be the person(s) who  is  are described in and who executed the foregoing assignment instrument and acknowledged its contents of their own free will for the purpose therein expressed.

*Gladys Marie Donachy*  
Notary Public or Consular Officer of the United States of America

NOTE: Notarization of this document is only prima facie evidence of execution, 35 USC 261.

GLADYS MARIE DONACHY  
NOTARY PUBLIC STATE OF MARYLAND  
My Commission Expires November 1, 2000