

Form PTO-1595 (Rev. 09/04)
OMB No. 0651-0027 (exp. 6/30/2005)

U.S. DEPARTMENT OF COMMERCE
United States Patent and Trademark Office

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)/Execution Date(s):
 Thomas D. Stephens
 Execution Date(s) December 14, 2004
 Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
 Name: Broadwing Corporation
 Internal Address: _____
 Street Address: 7015 Albert Einstein Drive
 City: Columbia
 State: MD
 Country: USA Zip: 21046
 Additional name(s) & address(es) attached? Yes No


3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Government Interest Assignment
 Executive Order 9424, Confirmatory License
 Other _____

4. Application or patent number(s): This document is being filed together with a new application.
 A. Patent Application No.(s)
10/962,726
 B. Patent No.(s)
 Additional numbers attached? Yes No

5. Name and address to whom correspondence concerning document should be mailed:
 Name: Corvis Corporation
 Internal Address: Intellectual Property Department
 Street Address: 7015 Albert Einstein Drive
P.O. Box 9400
 City: Columbia
 State: MD Zip: 21046-9400
 Phone Number: 443-259-4156
 Fax Number: 443-259-4278
 Email Address: _____

6. Total number of applications and patents involved: 1
7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40
 Authorized to be charged by credit card
 Authorized to be charged to deposit account
 Enclosed
 None required (government interest not affecting title)

8. Payment Information
 a. Credit Card Last 4 Numbers _____
 Expiration Date _____
 b. Deposit Account Number 500477
 Authorized User Name _____

9. Signature:  January 26, 2005
 Signature Date
 Michael C. Antone Total number of pages including cover sheet, attachments, and documents: 7
 Name of Person Signing

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

CH \$40.00 500477 10962726

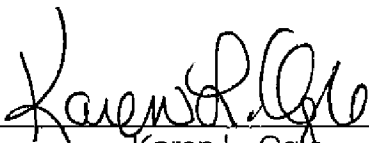


**CONSULATE GENERAL OF THE
UNITED STATES OF AMERICA**

Commonwealth of Australia)
State of Victoria)
City of Melbourne) ss
Consulate General of the)
United States of America)

I, Karen L. Ogle, Consul of the United States of America at Melbourne, Victoria, Australia, duly commissioned and qualified, do hereby certify that on this 14th day of December, 2004, before me personally appeared Thomas David Stephens, to me personally known or proved to me on the basis of satisfactory evidence to be the individual described in, whose name is subscribed to, and who executed the annexed instrument, and being informed by me of the contents of said instrument he duly acknowledged to me that he executed the same freely and voluntarily for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year last above written.



Karen L. Ogle
Consul of the United States of America

PATENT

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)

Thomas D. Stephens	2 Cadby Street, Brighton, Victoria 3186, Australia	Australia
Name of Assignor	Address	Nationality

Recorded on _____ Reel _____ Frame _____

hereby sells, assigns and transfers to

ASSIGNEE(S):

Broadwing Corporation	7015 Albert Einstein Drive, P.O. Box 9400, 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;

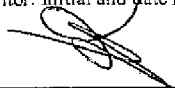
including all rights to claim priority, all rights to file patent applications, and all other intellectual property rights, in and to any and all improvements, inventions, and other intellectual property which is/are found in:

- (a) U.S. patent application executed on even date herewith.
 (b) the application(s) and invention disclosure(s) identified in the Attachments hereto.
 (c) U.S. patent application executed on _____.
 (d) U.S. provisional application no.: _____ filed on _____.
 (e) U.S. application no.: _____ filed on _____.
 (f) International application no. _____ filed on _____.
 (g) U.S. patent no. _____ issued _____.

A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.

- (h) Other: the invention entitled _____ a copy of which is attached.

Each Inventor: Initial and date here for acknowledgement of this page

 12/14/04

PATENT

- (i) and any legal equivalent thereof in any country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by a new application or 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;

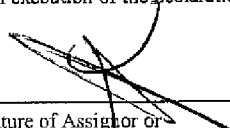
ASSIGNOR(S) further covenants that ASSIGNEE(S) will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR(S) and will testify as to the same in any interference, 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.

Thomas D. Stephens

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



Signature of Assignor or
Person entitled to sign on behalf of Assignor

12/14/04

Date

Place of signing of assignment

City/County :
State :
Country :

Before me this ___ day of _____, 200__ personally appeared Thomas D. Stephens, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged its contents of his/her own free will for the purpose therein expressed.

refer to attached cover document.

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.



CONSULATE GENERAL OF THE UNITED STATES OF AMERICA

Commonwealth of Australia)
State of Victoria)
City of Melbourne) ss
Consulate General of the)
United States of America)

I, Karen L. Ogle, Consul of the United States of America at Melbourne, Victoria, Australia, duly commissioned and qualified, do hereby certify that on this 14th day of December, 2004, before me personally appeared Thomas David Stephens, to me personally known or proved to me on the basis of satisfactory evidence to be the individual described in, whose name is subscribed to, and who executed the annexed instrument, and being informed by me of the contents of said instrument he duly acknowledged to me that he executed the same freely and voluntarily for the uses and purposes therein mentioned.

IN WITNESS WHEREOF, I have hereunto set my hand and official seal the day and year last above written.

[Handwritten signature of Karen L. Ogle]
Karen L. Ogle
Consul of the United States of America

PATENT

PATENT APPLICATIONS

Title	Application Number	Filing Date
Optical Communication Systems Including Optical Amplifiers and Amplification Methods	10/962,726	October 12, 2004
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]

Thomas D. Stephens

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

[Handwritten Signature]

Signature of Assignor or Person entitled to sign on behalf of Assignor

12/14/04

Date

Place of signing of assignment

City/County :
State :
Country :

Before me this ___ day of _____, 200__ personally appeared Thomas D. Stephens, to me known to be the person who is described in and who executed the foregoing assignment instrument and acknowledged its contents of his/her own free will for the purpose therein expressed.

Refer to attached core document

Notary Public or Consular Officer of the United States of America

PTO/SB/21 (09-04)

Approved for use through 07/31/2006. OMB 0651-0031


U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FORM <i>(to be used for all correspondence after initial filing)</i>	Application Number	10/962,726	
	Filing Date	October 12, 2004	
	First Named Inventor	Thomas D. Stephens	
	Art Unit	3663	
	Examiner Name		
Total Number of Pages in This Submission	8	Attorney Docket Number	020412PCT-US

ENCLOSURES (Check all that apply)		
<input type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Drawing(s)	<input type="checkbox"/> After Allowance Communication to TC
<input type="checkbox"/> Fee Attached	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment/Reply	<input type="checkbox"/> Petition	<input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition to Convert to a Provisional Application	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Terminal Disclaimer	<input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Request for Refund	Assignment Recordation Cover Sheet (x2) and Copy of Assignment
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> CD, Number of CD(s) _____	
	<input type="checkbox"/> Landscape Table on CD	
<input type="checkbox"/> Certified Copy of Priority Document(s)	Remarks	
<input type="checkbox"/> Reply to Missing Parts/ Incomplete Application		
<input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53		

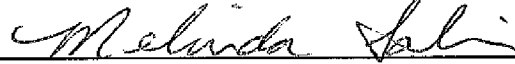
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name	Corvis Corporation		
Signature			
Printed name	Michael C. Antone		
Date	January 26, 2005	Reg. No.	39,094

CERTIFICATE OF TRANSMISSION/MAILING

Faxed to: 703-306-5995

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below:

Signature			
Typed or printed name	Melinda Salin	Date	January 26, 2005

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.