

**ASSIGNMENT RECORDATION COVER SHEET
-PATENTS ONLY-**

To: Honorable Commissioner of Patents and Trademarks:

Please record the attached original document(s) or copy thereof.

1. Name of conveying party(ies)

- a) Vinu Sunderasan
- b) Umesh Bellur
- c) Joel Yang
- d) Benjamin C. Cohen
- e) Krishna S. Garimella

2. Name and address of receiving party(ies):

- a) Name: Covad Communications Group, Inc.
- b) Address: 2330 Central Expressway
Santa Clara, CA 95110

3. Nature of conveyance

- | | |
|--|--|
| <input checked="" type="checkbox"/> Assignment | <input type="checkbox"/> Merger |
| <input type="checkbox"/> Security Agreement | <input type="checkbox"/> Change of Name |
| <input type="checkbox"/> Other _____ | <input type="checkbox"/> License Agreement |

Execution Date: July 25 and July 19, 2000

4. Application Number(s) or Patent Number(s): 09/608,501

The title of the (new) application is:

**Application Program Interface for Automating High Speed
Network Access Ordering and Provisioning Processes**

5. Please send all correspondence concerning this (these) documents to:

**Customer No. 23689
Jung-hua Kuo
Attorney at Law
P.O. Box 3275
Los Altos, CA 94024
Phone: (650) 988-8070
Fax: (650) 903-8090**

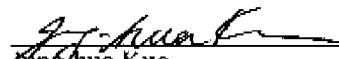
6. Total number of applications and patents involved: 1

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

- ☐ Enclosed
- ☒ Please charge \$40 to Deposit Account No. 50-1217 (Order No. COVDP008).
- ☒ Any deficiencies are hereby authorized to be charged to Deposit Account No. 50-1217 (Order No. COVDP004),

8. 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.

Date: August 10, 2000


Jung-hua Kuo
Registration No. 41,918

Attorney Docket No. COVDP004

700001673

PATENT
REEL: 010867 FRAME: 0889

ASSIGNMENT OF PATENT APPLICATION
(Accompanying Application)

Whereas I/we the undersigned inventor(s) have invented certain new and useful improvements as set forth in the patent application entitled:

**APPLICATION PROGRAM INTERFACE FOR AUTOMATING HIGH SPEED NETWORK
ACCESS ORDERING AND PROVISIONING PROCESSES**

(Atty. Docket No.: COVDP008) for which I (we) have executed an application for a United States Letters Patent, which was filed in the U.S. Patent and Trademark Office on June 30, 2000, and which bears the Application No. 09/608,501.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We the undersigned inventor(s) hereby:

1) Sell(s), assign(s) and transfer(s) to COVAD COMMUNICATIONS GROUP, INC., a Delaware corporation having a place of business at 2330 Central Expressway, Santa Clara, CA 95050, (hereinafter referred to as "ASSIGNEE"), the entire right title and interest in any and all improvements and inventions disclosed in, application(s) based upon, and Patent(s) (including foreign patents) granted upon the information which is disclosed in the above referenced application.

2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division(s), continuation(s), substitutes(s) or reissue(s) thereof to the ASSIGNEE.

3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative and applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.

4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon the inventor(s), as well as the inventor's heirs, legal representatives and assigns.

5) Warrant and represent that I/we have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

1) Signature: 
Typed Name: Vinu Sunderasan

Date: 7/25/2000.

2) Signature: _____
Typed Name: Umesh Bellur

Date: _____

3) Signature: _____
Typed Name: Joel Yang

Date: _____

4) Signature: _____
Typed Name: Benjamin C. Cohen

Date: _____

5) Signature: _____
Typed Name: Krishna S. Garimella

Date: _____

ASSIGNMENT OF PATENT APPLICATION

(Accompanying Application)

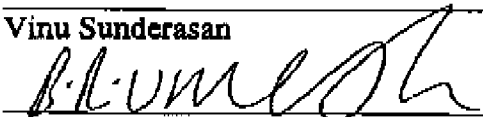
Whereas I/we the undersigned inventor(s) have invented certain new and useful improvements as set forth in the patent application entitled:

APPLICATION PROGRAM INTERFACE FOR AUTOMATING HIGH SPEED NETWORK ACCESS ORDERING AND PROVISIONING PROCESSES

(Atty. Docket No.: COVDP008) for which I (we) have executed an application for a United States Letters Patent, which was filed in the U.S. Patent and Trademark Office on June 30, 2000, and which bears the Application No. 09/608,501.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We the undersigned inventor(s) hereby:

- 1) Sell(s), assign(s) and transfer(s) to COVAD COMMUNICATIONS GROUP, INC., a Delaware corporation having a place of business at 2330 Central Expressway, Santa Clara, CA 95050, (hereinafter referred to as "ASSIGNEE"), the entire right title and interest in any and all improvements and inventions disclosed in, application(s) based upon, and Patent(s) (including foreign patents) granted upon the information which is disclosed in the above referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division(s), continuation(s), substitutes(s) or reissue(s) thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative and applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon the inventor(s), as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I/we have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

- 1) Signature: _____
Typed Name: Vinu Sunderasan
- 2) Signature: 
Typed Name: Umesh Bellur
- 3) Signature: _____
Typed Name: Joel Yang
- 4) Signature: _____
Typed Name: Benjamin C. Cohen
- 5) Signature: _____
Typed Name: Krishna S. Garimella

Date: _____

Date: 7/19/2000

Date: _____

Date: _____

Date: _____

ASSIGNMENT OF PATENT APPLICATION
(Accompanying Application)

Whereas I/we the undersigned inventor(s) have invented certain new and useful improvements as set forth in the patent application entitled:

**APPLICATION PROGRAM INTERFACE FOR AUTOMATING HIGH SPEED NETWORK
ACCESS ORDERING AND PROVISIONING PROCESSES**

(Atty. Docket No.: COVDP008) for which I (we) have executed an application for a United States Letters Patent, which was filed in the U.S. Patent and Trademark Office on June 30, 2000, and which bears the Application No. 09/608,501.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/We the undersigned inventor(s) hereby:

- 1) Sell(s), assign(s) and transfer(s) to COVAD COMMUNICATIONS GROUP, INC., a Delaware corporation having a place of business at 2330 Central Expressway, Santa Clara, CA 95050, (hereinafter referred to as "ASSIGNEE"), the entire right title and interest in any and all improvements and inventions disclosed in, application(s) based upon, and Patent(s) (including foreign patents) granted upon the information which is disclosed in the above referenced application.
- 2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division(s), continuation(s), substitutes(s) or reissue(s) thereof to the ASSIGNEE.
- 3) Agree to execute all papers and documents and, entirely at the ASSIGNEE's expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative and applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.
- 4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon the inventor(s), as well as the inventor's heirs, legal representatives and assigns.
- 5) Warrant and represent that I/we have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

1) Signature: _____ Date: _____
Typed Name: Vinu Sunderasan

2) Signature: _____ Date: _____
Typed Name: Umesh Bellur

3) Signature: Joel Yang Date: 7/19/00
Typed Name: Joel Yang

4) Signature: Benjamin C. Cohen Date: 7/19/00
Typed Name: Benjamin C. Cohen

5) Signature: Krishna S. Garimella Date: 7/19/00
Typed Name: Krishna S. Garimella