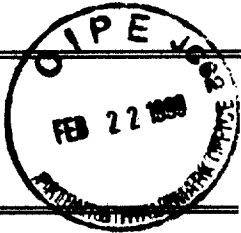


2/22/99



03-01-1999



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To the Assistant Commissioner of Patent... ents or copy thereof.

1. Name of conveying party(ies): Ronald A Butman, Raja Ramachandran, Thomas A. Burns, Thomas J. Malone, Michael D. Kmiec, Joseph C. Dougherty

Additional name(s) of conveying party(ies) attached?

[>]Yes  
[X]No

3. Nature of Conveyance:

[X]Assignment [ ]Merger  
[>]Security Agreement [>]Change of Name  
[>] Other ≥

Execution Date: 2/1/99

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

Name: PFN, Inc.

Internal Address: ≥

Street Address: University Park at MIT, 29 Landsdown Street

City: Cambridge State: Ma Zip: 02139

Additional name(s) and address(es) attached? [>]Yes [X]No

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) 5,867,667

|  
|  
|  
|

Additional numbers attached? [>]Yes [X]No

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

Name: Maureen Stretch

Street Address: 26 Charles Street

City: Natick State: MA Zip: 01760

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

7. Total fee (37CFR 3.41): \$40

[X] Enclosed

[>] Authorized to be charged to deposit account

8. Deposit account number:

Attach duplicate 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 information is true and correct and any attached copy is a true copy of the original document.

02/26/1999 DWGUYEN 00000195 08822898

01 FC 581 40.00 DP

Maureen Stretch  
Name of Person Signing

Maureen Stretch  
Signature

2/17/99  
Date

Total number of pages comprising cover sheet: [1]

## ASSIGNMENT

WHEREAS, Ronald A. Butman, Raja Ramachandran, Thomas A. Burns, Thomas J. Malone, Michael D. Kmiec, and Joseph C. Dougherty have made certain inventions or discoveries (or both) set forth in an Application for Letters Patent of the United States of America entitled Client Side Communications Server Apparatus and Method, the specification of which:

- was executed by us on the date(s) indicated below;
- was filed on March 24, 1997, as Application Serial No. 08/822,898;
- was patented under U.S. Patent No.      on     ;

WHEREAS, PFN, Inc., a corporation of the Commonwealth of Massachusetts, whose address is University Park at MIT, 29 Landsdowne Street, Cambridge, MA 02139 USA, and who, together with its successors and assigns is hereinafter called "Assignee", is desirous of acquiring the entire right, title, and interest together with the benefits and privileges hereinafter recited;

NOW, THEREFORE, for valuable consideration furnished by Assignee to us, receipt and sufficiency of which we hereby acknowledge, we hereby, without reservation;

1. Assign, transfer and convey to Assignee the entire right, title and interest together with the benefits and privileges in and to said inventions and discoveries, said Application for Letters Patent or similar forms of protection of the United States of America, and all other applications for Letters Patent on said inventions and discoveries in whatsoever countries, including all divisional, renewal, substitute, continuation and convention applications based in whole or in part upon said inventions or discoveries, or upon said application, and any and all Letters Patent, reissues and extensions of Letters Patent or similar forms of protection granted for said inventions and discoveries or upon said applications, and every priority right that is or may be predicated upon or arise from said inventions, said discoveries, said applications and said Letters Patent;

2. Authorize Assignee to file patent applications in any or all countries or groups of countries on any or all of said inventions and discoveries in our name or in the name of Assignee or otherwise as Assignee may deem advisable, under the International Convention or any other relevant convention or treaty or otherwise;

3. Authorize and request the Commissioner of Patents of the United States of America and the empowered officials of all other governments to issue or transfer all said Letters Patent to Assignee, as Assignee of the entire right, title and interest therein or otherwise as Assignee may direct;

4. Warrant that we have not knowingly conveyed to others any rights in said inventions, discoveries, applications or patents or any license to use the same or to make, use or sell anything embodying or utilizing any of said inventions or discoveries; and that we have good right to assign the same to Assignee without encumbrance;

5. Bind our heirs, legal representatives and assigns, as well as ourselves, to do, upon Assignee's request and at Assignee's expense, but without additional consideration to us or them, all acts reasonable serving to assure that said inventions and discoveries, said patent applications and said Letters Patent shall be held and enjoyed by Assignee as fully and entirely as the same could have been held and enjoyed by us, our heirs, legal representatives and assigns if this assignment had not been made; and particularly to execute and deliver to Assignee all lawful application documents including petitions, specifications, and oaths, and all assignments, disclaimers, and lawful affidavits in form and substance as may be requested by Assignee; to communicate to Assignee all facts known to us relating to said inventions and discoveries or the history thereof; and to furnish Assignee with any and all documents, photographs, models, samples and other physical exhibits in our control or in the control of our heirs, legal representatives or assigns which may be useful for establishing any facts of our conceptions, disclosures, and reduction to practice of said inventions or discoveries.

IN WITNESS WHEREOF:

DATE I EXECUTED APPLICATION: 11/4/97

Today's Date: 11/7/99

Name: Ronald A. Butman

Signature: Ronald A. Butman

STATE OF: Virginia

COUNTY OF: Montgomery

On this 7th day of January, 1999, before me personally appeared Ronald A. Butman known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

Kelly M. Start  
Notary Public  
My Commission Expires: 01/31/02

IN WITNESS WHEREOF:

DATE I EXECUTED APPLICATION: 10/29/97

Today's Date: August 21, 1998

Name: Raja Ramachandran

Signature: Raja Ramachandran

STATE OF: MASSACHUSETTS

COUNTY OF: MIDDLESEX

On this 21 day of AUGUST, 1998, before me personally appeared Raja Ramachandran known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

Kate Paul Row  
Notary Public  
My Commission Expires: 1-22-2004

IN WITNESS WHEREOF:

DATE I EXECUTED APPLICATION: 12/3/97

Today's Date: 8/21/98

Name: Thomas A. Burns

Signature: [Handwritten Signature]

STATE OF: MA

COUNTY OF: Middlesex

On this 21 day of August, 1998, before me personally appeared Thomas A. Burns known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

[Handwritten Signature]

Notary Public

My Commission Expires: 1-22-2005

IN WITNESS WHEREOF:

DATE I EXECUTED APPLICATION: 9/4/97

Today's Date: 2/1/99

Name: Thomas J. Malone

Signature: [Handwritten Signature]

STATE OF: MA

COUNTY OF: Middlesex

On this 2 day of February, 1999, before me personally appeared Thomas J. Malone known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.

[Handwritten Signature]

Notary Public

My Commission Expires: 7-24-03

IN WITNESS WHEREOF:

Attorney Docket #: PF96-003

PATENT

DATE I EXECUTED APPLICATION: 10/24/97

Today's Date: 8/17/98

Name: Michael D. Kmiec

Signature: 

STATE OF: PENNSYLVANIA

COUNTY OF: PHILADELPHIA

On this 17<sup>th</sup> day of August, 1998, before me personally appeared Michael D. Kmiec known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.



Notary Public


My Commission Expires: 11/28/98

IN WITNESS WHEREOF:

DATE I EXECUTED APPLICATION: 10/31/97

Today's Date: 8/21/98

Name: Joseph C. Dougherty

Signature: 

STATE OF: Massachusetts

COUNTY OF: Middlesex

On this 21 day of August, 1998, before me personally appeared Joseph C. Dougherty known to me to be the person described in and who executed the foregoing instrument, and who acknowledged that he/she executed the same as his/her free act and deed.



Notary Public

My Commission Expires: 1-22-2004