

06-13-2001



101748324

RE  
2-5-01RE  
U.S. Department of Commerce  
Patent and Trademark Office  
PATENTRECORDATION 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# 101628916

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) Larson, Jeffrey D.

Name (line 2)

Execution Date  
Month Day Year

01292001

## Second Party

Name (line 1) Sugahara, Hirohide

Name (line 2)

Execution Date  
Month Day Year

04042001

## Receiving Party

☐

Mark if additional names of receiving parties attached

Name (line 1) Fujitsu Limited

Name (line 2) a corporation of Japan

Address (line 1) 1-1 Kamikodanaka 4-Chome,

Address (line 2) Nakahara-ku, Kawasaki-shi

Address (line 3) Kanagawa

211-8588

JAPAN

☐ 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)

FOR OFFICE USE ONLY

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.

Mail documents to be recorded with required cover sheet(s) information to:

Commissioner For Patents, Box Assignments, Washington, D.C. 20231

1089/01-17 DPCS/1141165.1

PATENT

REEL: 011878 FRAME: 0719

**Correspondent Name and Address**

Area Code and Telephone (650) 858-7872

Name Lorrel A. Birnschein

Address (line 1) Fenwick &amp; West LLP

Address (line 2) 2 Palo Alto Square

Address (line 3) Palo Alto, CA 94306

Address (line 4)

**Pages**

Enter the total number of pages of the conveyance document including attachments # 6

**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)

09778649

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

PCT

PCT

PCT

PCT

PCT

**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

Enclosed ☐Deposit Account ☐**Deposit Account**

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

Deposit Account Number:

# 19-2555

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.*Lorrel A. Birnschein,  
Reg. No. 46,555

Name of Person Signing

Signature

Date

**RECORDATION FORM COVER SHEET**  
**CONTINUATION**  
**PATENTS ONLY**

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

**Conveying Party(ies)**

☐ Mark if additional names of conveying parties attached

Execution Date  
Month Day Year

Name (line 1) **Miyoshi, Takashi**

**01262001**

Name (line 2)

Execution Date  
Month Day Year

Name (line 1) **Horie, Takeshi**

**01262001**

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)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

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

☐ 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.)

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

☐ Mark if additional numbers attached

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

Patent Application Number(s)

Patent Number(s)



FORM PTO-1619A

Expires 06/30/99  
OMB 0651-0027

03-08-2001



101628916

U.S. Department of Commerce  
Patent and Trademark Office

PATENT

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 attachedName (line 1)  Larson, Jeffrey D.Name (line 2) Execution Date  
Month Day Year

01292001

## Second Party

Name (line 1)  Sugahara, HirohideName (line 2) Execution Date  
Month Day Year

## Receiving Party

☐ Mark if additional names of receiving parties attachedName (line 1)  Fujitsu LimitedName (line 2)  a corporation of Japan☐ 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.)Address (line 1)  1-1 Kamikodanaka 4-Chome,Address (line 2)  Nakahara-ku, Kawasaki-shiAddress (line 3)  Kanagawa 211-8588 JAPAN

## 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) 

02/14/2001 SDENB001 00000060 09778649

02 FC:581

40.00 OP

FOR OFFICE USE ONLY

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.

Mail documents to be recorded with required cover sheet(s) information to:  
Commissioner For Patents, Box Assignments, Washington, D.C. 20231

16787/04447/DOCS/1141165.1  
PATENT

REEL: 011878 FRAME: 0722

**Correspondent Name and Address**

Area Code and Telephone (650) 858-7872

Name Lorrel A. Birnschein

Address (line 1) Fenwick &amp; West LLP

Address (line 2) 2 Palo Alto Square

Address (line 3) Palo Alto, CA 94306

Address (line 4)

**Pages**

Enter the total number of pages of the conveyance document including 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)



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

01292001

**Patent Cooperation Treaty (PCT)**Enter PCT application number  
only if a U.S. Application Number  
has not been assigned

PCT

PCT

PCT

PCT

PCT

PCT

**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

Enclosed

☒

Deposit Account

☐**Deposit Account**

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

Deposit Account Number:

# 19-2555

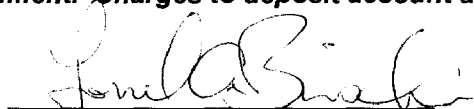
Authorization to charge additional fees:

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.

Lorrel A. Birnschein,  
Reg. No. 46,555

Name of Person Signing



Signature

2/5/01

Date

check  
U.S. PTO  
09/778649  
02/05/01

FORM PTO-1619C  
Expires 06/30/99  
OMB 0651-0027

RECORDATION FORM COVER SHEET  
CONTINUATION  
PATENTS ONLY

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

Conveying Party(ies)

☐

Mark if additional names of conveying parties attached

Execution Date  
Month Day Year

Name (line 1) Miyoshi, Takashi

01262001

Name (line 2)

Execution Date  
Month Day Year

Name (line 1) Horie, Takeshi

01262001

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)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

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

☐ 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.)

Application Number(s) or Patent Number(s)

☐

Mark if additional numbers attached

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

Patent Application Number(s)

Patent Number(s)







16787/04447/DOCS/1141165.1

PATENT

REEL: 011878 FRAME: 0724

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to Fujitsu Limited, a corporation of Japan, having a place of business at 1-1 Kamikodanaka, 4-Chome, Nakahara-ku, Kawasaki-shi, Kanagawa, 211-8588, Japan ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the provisional application filed under 35 U.S.C. §111(b) or non-provisional application filed under 35 U.S.C. §111(a) and entitled "Dynamic Queuing for Read/Write Requests" ("APPLICATION"), which:

- ☒ is to be filed herewith  
☐ was filed on \_\_\_\_\_, (YYYY), now bearing U.S. serial number \_\_\_\_\_; and

2. The entire worldwide right, title, and interest in and to:  
 (a) the APPLICATION; (b) all application claiming priority from the APPLICATION; (c) all divisional, continuation, substitute, renewal, reissue, and other related applications thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), (c) and (d) above; and (e) all right of priority in the APPLICATION, together with all rights to recover damages for infringement of provisional rights.

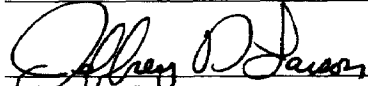
INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

<u>Name and Signature</u>	<u>Date of Signature</u>	<u>Date Declaration Executed By This Person</u>
	<u>11/29/01</u>	<u>1/29/01</u>
Jeffrey D. Larson		
State of _____ } S.S.		
County of _____ }		

On \_\_\_\_\_ before me, \_\_\_\_\_ personally  
 [DATE] [NOTARY PUBLIC]

appeared Jeffrey D. Larson personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Notary Seal

\_\_\_\_\_  
 Notary

Re:  
Title: Dynamic Queuing for Read/Write Requests  
Filed: (if applicable) N/A  
Serial No.: (if applicable) N/A

<u>Name and Signature</u>	<u>Date of Signature</u>	<u>Date Declaration Executed By This Person</u>
Hirohide Sugahara		




State of \_\_\_\_\_ } S.S.  
County of \_\_\_\_\_ }

On \_\_\_\_\_ before me, \_\_\_\_\_ personally  
[DATE] [NOTARY PUBLIC]

appeared Hirohide Sugahara personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Notary Seal

## Notary

Name and Signature	Date of Signature	Date Declaration Executed By This Person
 Takashi Miyoshi	 1/26/01	 1/26/01

State of \_\_\_\_\_ } S.S.  
County of \_\_\_\_\_ }

On \_\_\_\_\_ before me, \_\_\_\_\_ personally  
[DATE] [NOTARY PUBLIC]

appeared Takashi Miyoshi personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

**Notary Seal**

## Notary



Title of Document: **ASSIGNMENT**

Re:  
Title: Dynamic Queuing for Read/Write Requests  
Filed: (if applicable) N/A  
Serial No.: (if applicable) N/A

---

<u>Name and Signature</u>	<u>Date of Signature</u>	<u>Date Declaration Executed By This Person</u>
<u>Takeshi Horie</u> Takeshi Horie	<u>1/26/01</u>	<u>1/26/01</u>

State of \_\_\_\_\_ } S.S.  
County of \_\_\_\_\_ }

On \_\_\_\_\_ before me, \_\_\_\_\_ personally  
[DATE] [NOTARY PUBLIC]

appeared Takeshi Horie personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Notary Seal

\_\_\_\_\_  
Notary

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to Fujitsu Limited, a corporation of Japan, having a place of business at 1-1 Kamikodanaka, 4-Chome, Nakahara-ku, Kawasaki-shi, Kanagawa, 211-8588, Japan ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1. The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT MATTER") that are disclosed in the provisional application filed under 35 U.S.C. §111(b) or non-provisional application filed under 35 U.S.C. §111(a) and entitled "Dynamic Queuing for Read/Write Requests" ("APPLICATION"), which:

☐ is to be filed herewith

☒ was filed on February 5, 2001, now bearing U.S. serial number 09/778,649; and

2. The entire worldwide right, title, and interest in and to:

(a) the APPLICATION; (b) all application claiming priority from the APPLICATION; (c) all divisional, continuation, substitute, renewal, reissue, and other related applications thereto which have been or may be filed in the United States or elsewhere in the world; (d) all patents (including reissues and re-examinations) which may be granted on the applications set forth in (a), (b), (c) and (d) above; and (e) all right of priority in the APPLICATION, together with all rights to recover damages for infringement of provisional rights.

INVENTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in ASSIGNEE's own name.

INVENTOR agrees to do the following, when requested, and without further consideration, in order to carry out the intent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and other papers necessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; (2) communicate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all lawful acts that ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent protection relating to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein conveyed. INVENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE with the benefits and assistance provided to ASSIGNEE hereunder.

INVENTOR represents that INVENTOR has the rights, titles, and interests to convey as set forth herein, and covenants with ASSIGNEE that the INVENTOR has not made and will not hereafter make any assignment, grant, mortgage, license, or other agreement affecting the rights, titles, and interests herein conveyed.

INVENTOR grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

Name and Signature \_\_\_\_\_

Date of  
Signature \_\_\_\_\_

Date Declaration  
Executed By This Person \_\_\_\_\_

Jeffrey D. Larson  
State of \_\_\_\_\_ } S.S.  
County of \_\_\_\_\_ }

On \_\_\_\_\_ before me, \_\_\_\_\_ personally  
[DATE] [NOTARY PUBLIC]

appeared Jeffrey D. Larson personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Notary Seal

\_\_\_\_\_  
Notary

Title of Document: ASSIGNMENT

Re:  
 Title: Dynamic Queuing for Read/Write Requests  
 Filed: (if applicable) February 5, 2001  
 Serial No.: (if applicable) 09/778,649

<u>Name and Signature</u>	<u>Date of Signature</u>	<u>Date Declaration Executed By This Person</u>
<u>Hirohide Sugahara</u> Hirohide Sugahara	<u>April 4, 2001</u>	<u>April 4, 2001</u>

State of \_\_\_\_\_ } S.S.  
 County of \_\_\_\_\_ }

On \_\_\_\_\_ before me, \_\_\_\_\_ personally  
 [DATE] [NOTARY PUBLIC]

appeared Hirohide Sugahara personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Notary Seal

\_\_\_\_\_  
Notary

<u>Name and Signature</u>	<u>Date of Signature</u>	<u>Date Declaration Executed By This Person</u>
<u>Takashi Miyoshi</u> Takashi Miyoshi	_____	_____

State of \_\_\_\_\_ } S.S.  
 County of \_\_\_\_\_ }

On \_\_\_\_\_ before me, \_\_\_\_\_ personally  
 [DATE] [NOTARY PUBLIC]

appeared Takashi Miyoshi personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

Notary Seal

\_\_\_\_\_  
Notary