To the Honorable Commissioner of Patents and Trademark  1. Name of conveying party(ies):  1. Name of conveying party(ies):  1. Additional name(s) of conveying party(ies):  1. Nature of conveying party(ies):  1. Nature of conveying party(ies):  1. Nature of conveying party(ies):  1. Security Agreement	Form PTO-1595 (modified) RECO (Rev. 03/01)	U.S. DEPARTMENT OF COMM
1. Name of conveying party(ies): Nobuyuki ENOMOTO Alsushi IWATA    Commission of Conveying party(ies):   Commission of Pages including cover sheet, attachments, and documents: 2   Mail documents to be recorded with required cover sheet information to:   Commissioner of Patents & Trademarks   Commissioner of Patents & Trademarks	OMB No. 0651-0027	102571409
Note that the process of the part of the part of the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy or original document.  NEC CORPORATION 7-1, Shiba 5-chome Minato-ku, Tokyo, Japan  NEC Corporation 4-count Number of the Additional name(s) & address(es) attached?	1 37 0 1 (1)	
Additional name(s) of conveying path (Sc) attached?   Yes   No  3. Nature of conveyance:   Merger   Security Agreement   Change of Name   ENOMOTO—at Reel 013410, Frame 0920.  Execution Date: October 11, 2002   Additional name(s) & address(s) attached?   Yes   No  4. Application number(s) or patent number(s): If this document is being filled together with a new application, the execution date of the application is: October 11, 2002  A. Patent Application No.(s)   B. Patent No.(s)   B. Patent No.(s)   Name and address of party to whom correspondence concerning document should be mailed: SUGHRUE MION, PLLC  WASHINGTON OFFICE   Total number of applications and patents involved:   1		
Additional name(s) of conveying patholosis attached?   Yes   No 3. Nature of conveyance:   Security Agreement   Change of Name   Other Change Inventor's name to read	Atsushi IWATA	
Additional name(s) of conveying patryles) attached?	DCT 0 3 2003	Minato-ku, Tokyo, Japan
3. Nature of conveyance:  □ Assignment □ Merger □ Security Agreement □ Change of Name □ Other Change Inventor's name to read □ Execution Date: October 11, 2002  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: October 11, 2002  A. Patent Application No.(s) 10/272,943  Additional numbers attached? □ Yes ☑ No  5. Name and address of party to whom correspondence concerning document should be mailed:  SUGHRUE MION, PLLC  WASHINGTON OFFICE  ■ 23373  PATENT TRADEMARK OFFICE  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 original document.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks Box Assignment		
3. Nature of conveyance:  Assignment	The state of the s	
□ Assignment □ Merger □ Security Agreement □ Change of Name □ Other Change Inventor's name to read ENOMOTO- at Reel 013410, Frame 0920.  Execution Date: October 11, 2002 Additional name(s) & address(es) attached? □ Yes ☑ 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: October 11, 2002  A. Patent Application No.(s)  10/272,943  Additional numbers attached? □ Yes ☑ No  5. Name and address of party to whom correspondence concerning document should be mailed:  SUGHRUE MION, PLLC  WASHINGTON OFFICE  23373  PATENT TRADEMARK OFFICE  PATENT TRADEMARK OFFICE  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 original document.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks BOX Assignment	Additional name(s) of conveying party(les) attached?  Yes	0
□ Security Agreement □ Change of Name □ Other Change Inventor's name to read ENOMOTO at Reel 013410, Frame 0920.  Execution Date: October 11, 2002   Additional name(s) & address(es) attached? □ Yes ☑ 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: October 11, 2002  A. Patent Application No.(s)	3. Nature of conveyance:	
☐ Other Change Inventor's name to read ENOMOTO at Reel 013410, Frame 0920.  Execution Date: October 11, 2002  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: October 11, 2002  A. Patent Application No.(s)  10/272,943  Additional numbers attached? ☐ Yes ☑ No  5. Name and address of party to whom correspondence concerning document should be mailed:  SUGHRUE MION, PLLC  WASHINGTON OFFICE  23373  PATENT TRADEMARK OFFICE  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 original document.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks Box Assignment	☐ Assignment ☐ Merger	
ENOMOTO— at Reel 013410, Frame 0920.  Execution Date: October 11, 2002  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: October 11, 2002  A. Patent Application No.(s)  10/272,943  Additional numbers attached?	☐ Security Agreement ☐ Change of Name	
Additional name(s) & address(es) attached?    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: October 11, 2002  A. Patent Application No.(s)  Additional numbers attached?    B. Patent No.(s)  B. Patent No.(s)  Additional numbers attached?    B. Patent No.(s)  Additional number of application is: October 11, 2002  A. Patent No.(s)  B. Patent No.(s)  Additional number of application is: October 11, 2002  A. Patent No.(s)  B. Patent No.(s)  Additional number of application is: October 11, 2002  A. Patent No.(s)  B. Patent No.(s)  Additional number of application is: October 11, 2002  A. Patent No.(s)  B. Patent No.(s)  Additional number of application is: October 11, 2002  A. Patent No.(s)  B. Patent No.(s)  Additional number of application is: October 11, 2002  A. Patent No.(s)  B. Patent No.(s)  A. Patent No.(s)  A. Patent No.(s)  B. Patent No.(s)  A. Catent No. 19-488  The USPTO is directed and authorized to charge all required fees, except for the Issue Feat the Publication Fee, to Deposit Account No. 19-488  The USPTO is directed and authorized to charge all required fees, except for the Issue Feat the Publication Fee, to Deposit Account No. 19-488  The USPTO is directed and authorized to charge all required fees, except for the Issue Feat and the Publication Fee, to Deposit Account No. 19-488  The USPTO is directed and authorized to charge all required fees, except for the Issue Feat and the Publication Fee, to De	☑ Other Change Inventor's name to read	
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: October 11, 2002  A. Patent Application No.(s)  10/272,943  Additional numbers attached? ☐ Yes ☑ No  5. Name and address of party to whom correspondence concerning document should be mailed:  SUGHRUE MION, PLLC  WASHINGTON OFFICE  23373  PATENT TRADEMARK OFFICE  PATENT TRADEMARK OFFICE  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 original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to: Commissioner of Patents & Trademarks  Box Assignment	ENOMOTO at Reel 013410, Frame 0920.	
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: October 11, 2002  A. Patent Application No.(s)  10/272,943  Additional numbers attached?  Yes No  5. Name and address of party to whom correspondence concerning document should be mailed:  SUGHRUE MION, PLLC  WASHINGTON OFFICE  WASHINGTON OFFICE  ACCOUNT No. 19-4880. Please also credit any overpayments to s Deposit Account No. 19-4880. Please also credit any overpayments to s Deposit Account Number:  19-4880  (Attach duplicate copy 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 original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	<u> </u>	Additional name(s) & address(es) attached? ☐ Yes ☑ No
A. Patent Application No.(s)  10/272,943  Additional numbers attached?  Yes  No  5. Name and address of party to whom correspondence concerning document should be mailed:  SUGHRUE MION, PLLC  WASHINGTON OFFICE  PATENT TRADEMARK OFFICE  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 original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment		
Additional numbers attached?	If this document is being filed together with a new appli	ication, the execution date of the application is: October 11, 2002
5. Name and address of party to whom correspondence concerning document should be mailed:  SUGHRUE MION, PLLC  WASHINGTON OFFICE  WASHINGTON OFFICE  23373  PATENT TRADEMARK OFFICE  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 original document.  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 original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks Box Assignment		B. Patent No.(s)
CONCERNING document should be mailed:  SUGHRUE MION, PLLC  WASHINGTON OFFICE  WASHINGTON OFFICE  PATENT TRADEMARK OFFICE  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 original document.  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 original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	Additional number	rs attached? □ Yes ☑ No
SUGHRUE MION, PLLC  WASHINGTON OFFICE  ###################################		6. Total number of applications and patents involved:
WASHINGTON OFFICE  23373  PATENT TRADEMARK OFFICE  DO NOT USE THIS SPACE  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of original documents.  To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of original document.  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment		7. Total fee (27 CER 2.41). \$40.00
Authorized to be charged to Deposit Account No. 19-488  The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to so Deposit Account.  8. Deposit Account Number:  19-4880  (Attach duplicate copy 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 original document.  J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	•	1
fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to s Deposit Account.  8. Deposit Account Number:  19-4880  (Attach duplicate copy 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 original document.  J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	I JORNIA HARTA ANDE HAND ANDER AND EDEL	
Account No. 19-4880. Please also credit any overpayments to s  Deposit Account.  8. Deposit Account Number:  19-4880  (Attach duplicate copy 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 original document.  March 12, 2003  Date  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	1 10 110 110 110 1110 1110 1110 1110 1	
Deposit Account.  8. Deposit Account Number:  19-4880 (Attach duplicate copy 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 original document.  J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	23373	fees, except for the Issue Fee and the Publication Fee, to Deposi
8. Deposit Account Number:  19-4880 (Attach duplicate copy 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 original document.  J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	PATENT TRADEMARK OFFICE	
(Attach duplicate copy 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 original document.  J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment		8. Deposit Account Number:
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 original document.  J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment		
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 original document.  J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	DO NO	
J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	····	
J. Frank Osha  Reg. No. 24,625  Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	To the best of my knowledge and belief, the foregoing in	formation is true and correct and any attached copy is a true copy o
Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	original document.	
Total number of pages including cover sheet, attachments, and documents: 2  Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	J. Charles Orle	March 12, 2003
Mail documents to be recorded with required cover sheet information to:  Commissioner of Patents & Trademarks  Box Assignment	J. Frank Usna Reg. No	o. 24,625 Date
Commissioner of Patents & Trademarks Box Assignment		
Box Assignment	Mail documents to be recorded	d with required cover sheet information to:
72003 LINELLED/000002E 10E7E943	Wash	

PATENT REEL: 014564 FRAME: 0681

10-	28-\$002
10/18/02	Q72442
Form PTO-1595 (modified) RF	T U.S. DEPARTMENT OF COMMERCE
(Rev. 03/01) OMB No. 0651-0027	U.S. Patent and Trademark Office
To the Honorable Commissioner of Patents and Tradem	arks: Please record the attached original documents or copy thereof.
1. Name of conveying party(ies): OIPE	2. Name and address of receiving party(ies):
Nobuyuki ENOMTO Atsushi IWATA	NEC CORPORATION 7-1, Shiba 5-chome Minato-ku, Tokyo, Japan
	.s
THE DEMOST OF	0/2°C
Additional name(s) of conveying party(ies) attached? ☐ Yes ☑ No	00 E
3. Nature of conveyance:	
☑ Assignment ☐ Merger	
☐ Security Agreement ☐ Change of Name	
Other	
Execution Date: October 11, 2002	Additional name(s) & address(es) attached?   Yes   No
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application	ation, the execution date of the application is: October 11, 2002
A. Patent Application No.(s)	B. Patent No.(s)
Additional numbers	
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
SUGHRUE MION, PLLC	7. Total fee (37 CFR 3.41): \$40.00
2100 Pennsylvania Avenue, N.W.	☑ Enclosed.
Suite 800 Washington, D.C. 20037-3213	☐ Authorized to be charged to Deposit Account No. 19-4880.
Washington, 210, 2002 / 3213	The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit
	Account No. 19-4880. Please also credit any overpayments to said
	Deposit Account.
	8. Deposit Account Number: 19-4880
	(Attach duplicate copy of this page if paying by deposit account)
DO NO	T USE THIS SPACE
9. Statement and signature.	
To the best of my knowledge and belief, the foregoing inj original document.	formation is true and correct and any attached copy is a true copy of the
Hol 18hnste	October 1 <b>8</b> , 2002
Howard L. Bernstein Reg. No.	o. 25,665 Date
	g cover sheet, attachments, and documents: 2
	l with required cover sheet information to: r of Patents & Trademarks
· · · · · · · · · · · · · · · · · · ·	ox Assignment
	ngton, D.C. 20231

10/25/2002 LMUELLER 00000089 10272943

01 FC:8021

40.00 OP

PATENT REEL: 014564 FRAME: 0682

M1-5201

## For Non-U.S. Clients

## **Assignment**

Whereas, +/ We,

**RECORDED: 10/03/2003** 

## Nobuyuki ENOMOTO and Atsushi IWATA of Tokyo, Japan

hereinafter called assignor(s), have invented certain improvements in

CONGESTION CONTROL FOR COMMUNICATION

and executed an application for Letters Patent of the United States of America therefor on  October 11, 2002 ; and
Whereas,
NEC Corporation, 7-1, Shiba 5-chome, Minato-ku, Tokyo, Japan
(assignee(s)), desires to acquire the entire right, title, and interest in the application and invention, and to
any United States patents to be obtained therefor;
Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,
1/We, the above-named assignor(s), hereby sell, assign and transfer to the above named assignee, its
successors and assigns, the entire right, title and interest in the application and the invention disclosed
therein for the United States of America, including the right to claim priority under 35 U. S. C. § 119, and
t/we request the Commissioner of Patents to issue any Letters Patent granted upon the invention set forth
in the application to the assignee, its successors and assigns; and #we will execute without further
consideration all papers deemed necessary by the assignee in connection with the United States
application when called upon to do so by the assignee.
Avenue, N.W., Washington, D.C. 20037-3213 to insert here in parentheses (Application number $\frac{10/272,943}{}$ , filed $\frac{\text{October }18,\ 2002}{}$ ) the filing date and application
number of said application when known.
Date: October 11, 2002
Nobuzuki Enomoto
Nobuyuki Enomoto Nobuyuki ENOMOTO
Atsushi IWATA
Witness:
Lumitabe Watanake

REEL: 014564 FRAME: 0683