RECORI U.S. DEPARTMENT OF COMMERCE Form PTO-1595 (modified) 6-30-03 102488636 U.S. Patent and Trademark Office (Rev. 03/01) OMB No. 0651-0027 To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof. 2. Name and address of receiving party(ies): 1. Name of conveying party(ies): NEC CORPORATION Takefumi OGUMA 7-1. Shiba 5-chome Nobutaka WATANABE Minato-ku, Tokyo, Japan Additional name(s) of conveying party(ies) attached? ☐ Yes ☑ No 3. Nature of conveyance: ☐ Merger ☑ Assignment ☐ Security Agreement ☐ Change of Name ☐ Other Additional name(s) & address(es) attached?

Yes Execution Date: May 26, 2003 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: B. Patent No.(s) A. Patent Application No.(s) 10/365,552 Additional numbers attached? ☐ Yes ☑ No 6. Total number of applications and patents involved: 5. Name and address of party to whom correspondence concerning document should be mailed: 7. Total fee (37 CFR 3.41): \$40.00 SUGHRUE MION, PLLC ✓ Enclosed. WASHINGTON OFFICE ☐ Authorized to be charged to Deposit Account No. 19-4880. 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 PATENT TRADEMARK OFFICE 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 the original document. June 30, 2003 Reg. No. 35,603 Date Total number of pages including cover sheet, attachments, and documents: 2 Mail documents to be recorded with required cover sheet information to: MAIL STOP ASSIGNMENT RECORDATION SERVICES Director of the U.S. Patent and Trademark Office 03/2003 ECOOPER 00000178 10365558 P.O. Box 1450 40.00 DP FC:802\ Alexandria, VA 22313-1450

> **PATENT** REEL: 014226 FRAME: 0018

Assignment

Whereas, I/We, <u>Takefumi OC</u> Tokyo, Japan	GUMA and Nobutaka WATANABE of
hereinafter called assignor(s), have invented certain improvements in "HEATING ELEMENT DEVICE, HEATING ELEMENT MOUNTED STRUCTURE, TEMPERATURE	
CONTROL CIRCUIT, TEMPERATURE CONTROL APPARATUS, AND MODULE"	
and executed an application for Letters Patent of the United States of America therefor on; and	
Whereas,	NEC Corporation
	7-1, Shiba 5-chome, Minato-ku,
	Tokyo, Japan
(assignee), 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 of	consideration, receipt whereof is hereby acknowledged,
I/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 I/we request the Director – U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/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.	
I/We hereby authorize and request our attorneys SUGHRUE MION, PLLC of 2100 Pennsylvania Avenue, NW, Washington, DC 20037-3213 to insert here in parentheses (Application number	
Date: May 26, 2003 Takefumi OG	UMA OGNO
Date: May 26, 2003 Nobutaka WA	TANABE
Witness:	
Date: May 26, 2003 Jadeyorli langamas	
Date: May 26, 2003	
(Localization not required for recording but is prima facie evidence of execution under 35 U.S.C. 8261)	

PATENT
RECORDED: 06/30/2003 REEL: 014226 FRAME: 0019