	2-25-2003 DEPARTMENT OF COMMERCE		
(Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)	J.S. Patent and Trademark Office		
Table and the second of the se	· · · · · · · · · · · · · · · · · · ·		
To the Honorable Commissioner of Patents and 1	102372064 Original documents or copy thereof.		
1. Name of conveying party(ies):	Name and address of receiving party(ies)		
Michinori Watanabe 12/18/2007 Toshiki Ogawara 12/18/2007	Name: Sanyo Denki Co., Ltd.		
Haruhisa Maruyama 12/18/2002 Masayuki Iijima 12/18/200	02.19.03		
Additional name(s) of conveying party(ies) attached?	Address: 15-1, Kitaotsuka 1-chome Toshima-ku		
3. Nature of conveyance:	Tokyo Japan		
Assignment			
Security Agreement			
Guille Other			
N.XXX			
Execution Date:	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:			
A. Patent Application No.(s) 10/340,512	B. Patent No.(s)		
l Additional numbers attached? ☐ Yes 🛣 No			
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:		
Name: David E. Spaw	7. Total fee (37 CFR 3.41)\$40.00		
Internal Address: Rankin, Hill, Porter & Clark LLP	Enclosed		
	Authorized to be charged to deposit account		
	8. Deposit account number:		
Street Address: 925 Euclid Avenue, Suite 700			
0,,000,,100,,	18-0160		
City: Cleveland State: Ohio Zip: 44115	(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 is a true copy of the original document.	information is true and correct and any attached copy		
David E. Spaw	February 10, 2003		
Name of Person Signing	∕ S ig nature Date		
	Total number of pages including cover sheet, attachments, and documents:		

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cuments to be recorded with required cover sheet inform
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

PATENT REEL: 013766 FRAME: 0448

ASSIGNMENT

WHEREAS, new and useful improvements have been made by the undersigned in

HEAT-EMITTING ELEMENT COOLING APPARATUS

that are the subject of an application for a U.S. Patent, (Application Number $\frac{10/340,512}{}$, filed $\frac{\text{January }10,\ 2003}{}$), which application is further identified as Rankin, Hill, Porter & Clark LLP Docket No. $\frac{\text{NIS}-14679}{}$.

WHEREAS, Sanyo Denki Co., Ltd., a corporation of Japan, and having a place of business at 15-1, Kitaotsuka 1-chome, Toshima-ku, Tokyo, Japan, hereinafter referred to as "assignee", is desirous of acquiring all right, title, and interest throughout the world in, to, and under said improvements and inventions and patent rights therefor.

NOW, THEREFORE, be it known that, for valuable consideration, the receipt and sufficiency of which are hereby acknowledged, all right, title, and interest, in the United States and throughout the world, in, to and under said improvements and inventions and all patents, patent applications, patent rights, and inventor's certificates thereof, therefor, and therein, including without limitation said application for patent in the United States, all divisions and continuations thereof, all patents which may be granted thereon, all reissues and extensions thereof, all right to sue for past infringement thereunder, all patents which may be granted for said improvements and inventions by states or nations other than the United States, or by other authority, entity, or organization, and all applications therefor, have been and are hereby sold. assigned, transferred, and delivered unto assignee, its successors and assigns; and it is covenanted and agreed by the undersigned, and for executors, administrators, and legal representatives of the undersigned, that at assignee's request any and all applications, affidavits, assignments, and other instruments will be made, executed, and delivered as may be necessary, or desirable to secure for or vest in assignee, its successors or assigns, any improvement, inventions, right, title, interest, application, patent, patent right or other right or property covered by this assignment, and the United States Commissioner of Patents and Trademarks is hereby requested and authorized to issue any and all United States patents granted on any of said applications to assignee as owner of the entire right, title, and interest in, to, and under the same, and appropriately empowered officials of foreign countries are hereby authorized to issue any letters patent granted on any of said applications to assignee as owner of the entire right, title and interest in, to, and under the same.

The undersigned hereby grants the firm of Rankin, Hill, Porter & Clark LLP the power to insert on this assignment any 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.

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PATENT REEL: 013766 FRAME: 0449 IN WITNESS WHEREOF, this assignment has been executed below by the undersigned:

	Inventor Name (sole or joint): Michinori WATANABE
	Signature: Michinori Watanabe
	Today's Date: December 18, 2002
	Witness: MUNTNOR! TAKAKUWA Witness: 2 4. 12mb. 6
٠	Inventor Name (joint): Toshiki OGAWARA
	Signature: Toshiki Ogawara
	Today's Date: December 18, 2002
	Witness: MVNFNURI TAKAKUMA Witness: 20 1 Sudahan
	Inventor Name (joint): Haruhisa MARUYAMA
	Signature: Haruhisa Maruyama
	Today's Date: <u>flecember 18, 2002</u>
	Witness: MUNENORI TAKAKUWA
	Witness: 7 () A.A.
	Inventor Name (joint): Masayuki IIJIMA
	Signature: Masayuki Iijima
	Today's Date: December 18, 2002
	Witness: MUNENORI TAKAKUWA
	Witness: 1 / 1 Ludinda

RECORDED: 02/19/2003

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