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

02-21-2001



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

PATENT 2

## **RECORDATION FORM COVER SHEET** 1.30.01

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TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).						
Submission	Туре	Conveyan	ce rype			
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Reel #	Prame #		Departmental Fi		et File	
Conveying Party(ies)  Mark if additional names of conveying parties attached Execution Date Month Day Year						
Name (line 1)	Zuo, Jon				01222001	
Name (line 2)					Execution Date	
Second Party					Month Day Year	
Name (line 1)	Ernst, Donald M.				01222001	
Name (line 2)					09774475	
Receiving Party  Mark if additional names of receiving parties attached						
Name (line 1)	Thermal Corp.				If document to be recorded is an assignment and the	
Name (line 2)	a Delaware corportion receiving party is not domiciled in the United					
					States, an appointment of a domestic	
Address (line 1)	P.O. Box 477				representative is attached. (Designation must be a separate document from	
Address (line 2)					Assignment.)	
Address (line 3)	Georgetown	DE	/Country	19947 Zip Code		
Domestic Representative Name and Address  Enter for the first Receiving Party only.						
Name [	Samuel W. Apicelli,	Esq.				
Address (line 1)	Duane, Morris & Heckscher LLP					
Address (line 2)	305 North Front Street					
Addroso sin a						
Address (line 3)	P.O. Box 1003					
Address (line 4)	Harrisburg, PA 17108-1003					
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Mail documents to be recorded with required cover sheet(s) information to: Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

**PATENT** 

REEL: 011514 FRAME: 0914

FORM PTO Expires 06/30/99 OMB 0651-0027	-1619B	Page 2				
Correspondent Name and Address  Area Code and Telephone Number 717-237-5516						
Name	Samuel W. Apicelli, Esq.					
Address (line 1)	Duane, Morris & Heckscher LLP					
Address (line 2)	305 North Front Street					
Address (line 3)	P.O. Box 1003					
Address (line 4)	Harrisburg, PA 17108-1003					
Pages Enter the total number of pages of the attached conveyance document including any attachments.						
	Number(s) or Patent Number(s)		nal numbers attached			
	e Patent Application Number or the Patent Number ent Application Number(s)		· · ·			
If this document is	being filed together with a <u>new</u> Patent Application,	Patent Num	Month Day Year 01222001			
Patent Cooperation Treaty (PCT)  Enter PCT application number  only if a U.S. Application Number PCT						
Number of Properties  Enter the total number of properties involved. # 1						
Fee Amount	Fee Amount for Propertion	es Listed (37 CFR 3.41): \$ 4	0			
Method of Payment: Enclosed $X$ Deposit Account $X$ Deposit Account (Enter for payment by deposit account or if additional fees can be charged to the account.)  Deposit Account Number: # $04-1679$						
	Authorization	to charge additional fees: Yes	X 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.  Samuel W. Apicelli, Esq. 01/31/2001						
Name of Person Signing Signature / Date  Reg. No. 36427						

PATENT REEL: 011514 FRAME: 0915

## ASSIGNMENT

WHEREAS, the undersigned, Jon Zuo, a citizen of United States of America, residing at 1030 Lehn Drive, Lancaster, PA 17601, having invented together with Donald M. Ernst, residing at 1302 Maple Avenue, Lancaster, PA 17603, (hereinafter referred to as "ASSIGNORS") are the inventors of certain inventions or improvements for SEMICONDUCTOR PACKAGE WITH LID HEAT SPREADER, which they have on the date indicated below next to their signature executed an application for Letters Patent of the United States;

WHEREAS, Thermal Corp., a Delaware corporation, having a mailing address of P.O. Box 477, Georgetown, DE 19947 (hereinafter referred to as "ASSIGNEE") is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to said application for patent, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States or in any other country;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby freely acknowledged, and intending to be legally bound, the said ASSIGNORS, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, to said ASSIGNEE, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions, and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and its possessions and territories and in all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, the same to be held and enjoyed by said ASSIGNEE, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, sale and transfer not been made.

AND the undersigned ASSIGNORS hereby covenants that they have full right to convey the entire interest herein assigned, and that they have not executed and will not execute any agreement in conflict herewith, and further covenants and agrees that they will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent in said ASSIGNEE, its successors, assigns, nominees, or legal representatives, and agrees to communicate to said ASSIGNEE or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing, and reissue applications, to make all rightful oaths, and generally to do everything possible to aid said ASSIGNEE, its successors, assigns, nominees and legal representatives to obtain and enforce for its own benefit proper patent protection for said inventions or improvements in the United States and its possessions and territories and in all other countries;

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PATENT REEL: 011514 FRAME: 0916 AND ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue to said ASSIGNEE, the entire right, title and interest, in and to any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, ASSIGNORS hereunto sets their hand and seal, intending to be legally bound.

Date: 1/22/01

Jon Zao

Date: Jonuary 22, 2001

Donald M.Ernst

flored M. Ernst

HBG\66152.1

Docket No.: H1799-00002

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RECORDED: 01/30/2001 REEL: 011514 FRAME: 0917