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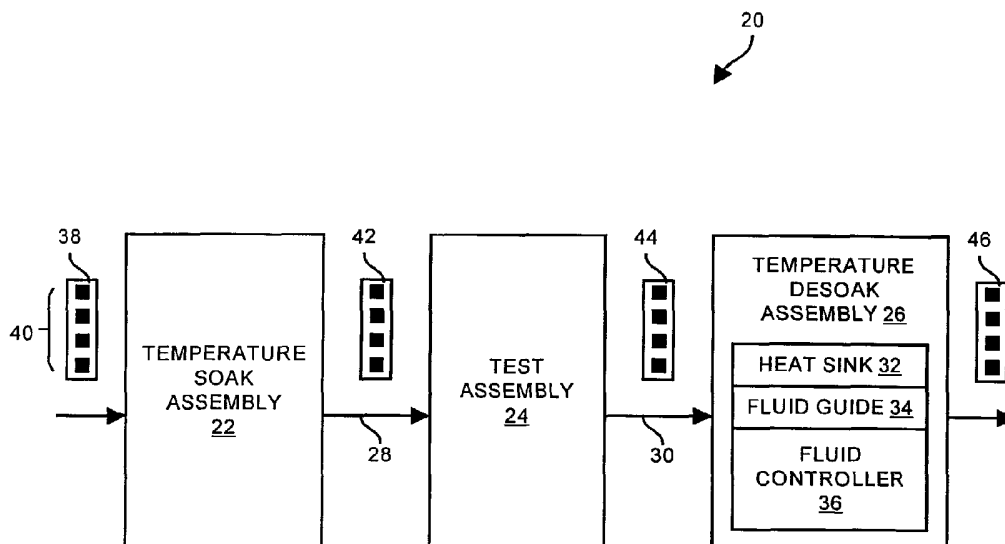
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(54) Title: METHODS AND APPARATUS FOR TESTING A SEMICONDUCTOR WITH TEMPERATURE DESOAK



(57) Abstract: A semiconductor handling system has a temperature soak assembly to temperature soak a semiconductor structure (e.g., a panel), a test assembly to test the semiconductor structure, and a temperature desoak assembly to temperature desoak the semiconductor structure. The temperature desoak assembly includes (i) a heat sink that defines a surface which is configured to thermally couple with the semiconductor structure, (ii) a fluid guide coupled to the heat sink, and (iii) a fluid controller coupled to the fluid guide. The fluid controller provides a fluid (e.g., room temperature air) which the fluid guide directs over the heat sink to bring a temperature of the heat sink to a temperature of the fluid. This arrangement provides an effective low cost and low power means for temperature desoaking a semiconductor structure.



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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 G01R31/26 H01L21/66 G06F1/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 G01R H01L G06F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)
EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 018, no. 420 (P-1782), 5 August 1994 (1994-08-05) & JP 06 130121 A (FUJI ELECTRIC CO LTD), 13 May 1994 (1994-05-13) abstract ---	1,2,5,7, 10,11, 19,20
X	PATENT ABSTRACTS OF JAPAN vol. 1999, no. 03, 31 March 1999 (1999-03-31) & JP 10 321684 A (PFU LTD), 4 December 1998 (1998-12-04) abstract ---	1,10,19
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Date of the actual completion of the international search 28 February 2003	Date of mailing of the international search report 06/03/2003
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Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Six, G
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International Application No PCT/US 02/23696
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 2000, no. 01, 31 January 2000 (2000-01-31) & JP 11 274384 A (CANON INC), 8 October 1999 (1999-10-08) abstract <p style="text-align: center;">-----</p>	1

INTERNATIONAL SEARCH REPORT

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