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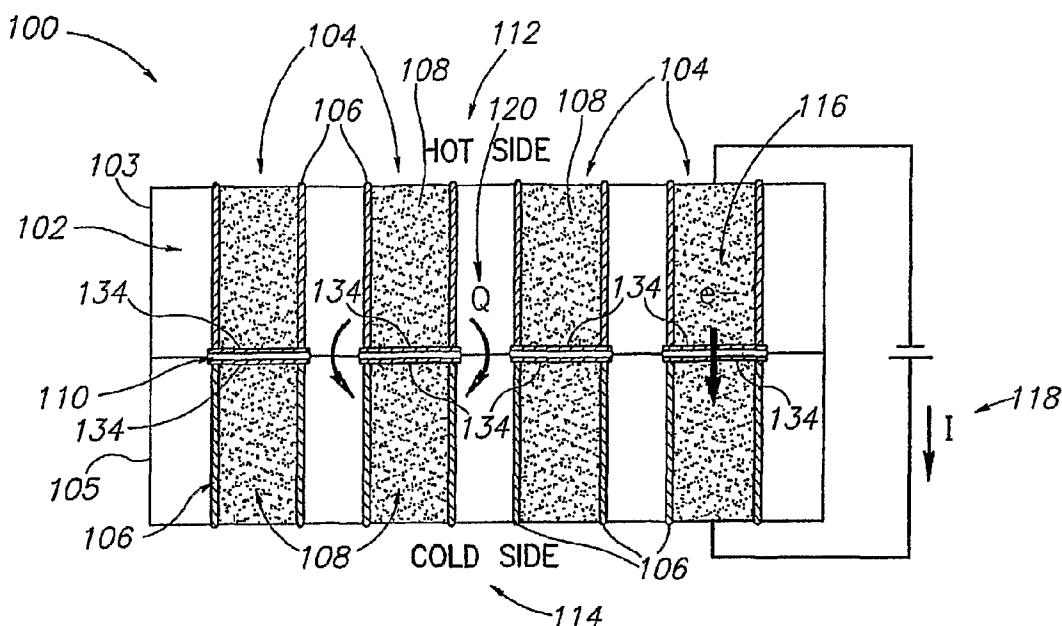
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(54) Title: METHODS AND APPARATUS FOR THERMAL ISOLATION FOR THERMOELECTRIC DEVICES



(57) Abstract: Methods and apparatus for improved thermal isolation for thermoelectric devices are disclosed. In one embodiment, a thermoelectric device includes a first substrate having a first conductive pad, a second substrate having a second conductive pad, and a gap formed between the first and second conductive pads. At least one of the first and second substrates includes at least one opening positioned adjacent to an outer peripheral edge of the conductive pad. The opening may comprise a trench disposed partially or entirely around the outer peripheral edge of the conductive pad. In operation, the opening inhibits heat transfer between the first and second substrates.

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## INTERNATIONAL SEARCH REPORT

International application No

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A. CLASSIFICATION OF SUBJECT MATTER  
 INV. H01L35/30 H01J45/00

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)  
 H01L H01J

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

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X A	WO 98/26880 A (BOREALIS TECH LTD [US]) 25 June 1998 (1998-06-25) page 9, line 1 - page 11, line 4; figures 1-7	1-6, 14-19 7-13, 20-25
A	US 3 578 992 A1 (SHIMADA KATSUNORI) 18 May 1971 (1971-05-18) figure 2	1-25
A	US 3 376 437 A1 (MEYERAND JR RUSSELL G ET AL) 2 April 1968 (1968-04-02) figure 1	1-25

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☒ See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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