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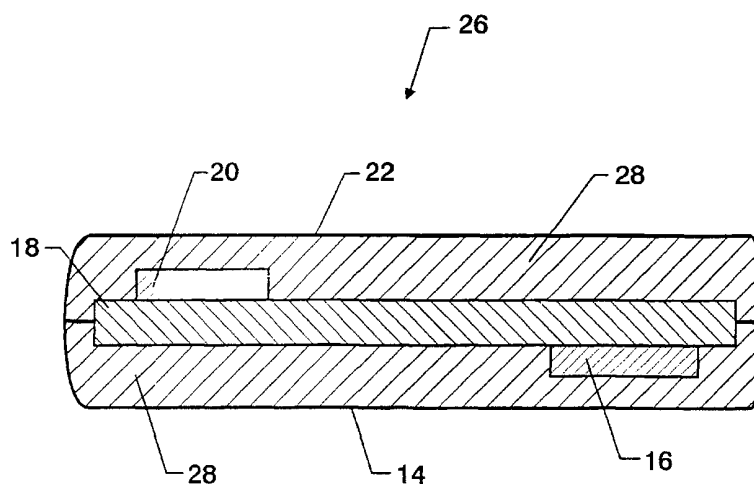
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(54) Title: **PIEZOELECTRIC COMPOSITE DEVICE AND METHOD FOR MAKING SAME**



(57) **Abstract:** The present invention includes a method of fabricating a piezoelectric composite device comprising steps of (a) disposing a first layer of electrically non-conductive film over the first layer of tape; (b) disposing a first electrically conductive lead over the first layer of electrically non-conductive film; (c) disposing a piezoelectric wafer over the first electrically lead and the first layer of electrically non-conductive film; (d) disposing a second electrically conductive lead over the piezoelectric wafer; (e) disposing a second electrically non-conductive film over the second electrically conductive lead and the wafer, wherein the layers of electrically conductive lead and the wafer, wherein the layers of electrically non-conductive film, the electrically conductive leads, and the wafer form a laminate assembly; and (f) consolidating the laminate assembly at a predetermined temperature and pressure. The present invention also comprises a highly flexible piezoelectric composite device made by a thermoplastic process that consolidates the laminate assembly and forms a hermetic seal.



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

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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 H01L

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, INSPEC, COMPENDEX

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 4 849 668 A (CRAWLEY EDWARD F ET AL) 18 July 1989 (1989-07-18)	1,4,7,8, 18,19, 22,27, 29,34, 36,41 13
A	column 3, line 12 -column 4, line 30 column 5, line 13 -column 6, line 27; figures 3-5 --- -/--	

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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