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### (54) PCT Thermistorelement

(57) A PTC thermistor element (1) has resistance of 0.2  $\Omega$  or less at 25°C and includes a planar thermistor body (2) made of a barium titanate ceramic material, a pair of electrodes (2c, 2d) on the main surfaces of the thermistor body (2), a pair of lead wires (3, 4) each bonded to a corresponding one of the pair of electrodes (2c, 2d), and an electrically insulating resin layer (7) covering the thermistor body (2), the electrodes (2c, 2d) and the lead wires (3, 4) entirely except where the lead wires (3, 4) are pulled. The thermistor body (2) has a thickness 0.1 - 0.3mm and each of its mutually oppositely facing main surfaces has an area of 25 - 121 mm<sup>2</sup>. Cu wires or Fe wires having a diameter less than 0.65 mm and covered with a solder are preferably used as the lead wires (3, 4), at least one of them having a kinked portion where it is pulled out of the thermistor body for absorbing an external force applied at its tip so as to prevent it from reaching the thermistor body (2). The resin layer (7) has a thickness 0.4 - 0.8 mm over the thermistor body (2) and preferably is made of a resin material such as silicone resin materials and epoxy resin materials having bending strength according to JIS K6911 of not less than 10 Mpa and not greater than 50 Mpa.

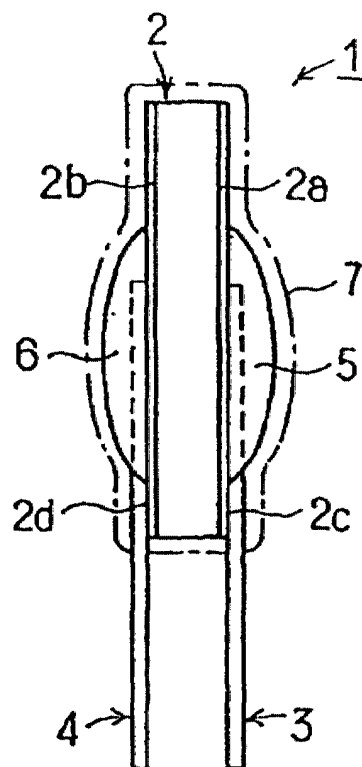


FIG. 1B

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# EUROPEAN SEARCH REPORT

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EP 99 11 9643

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CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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