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(54) **Electric heaters**

(57) A printed circuit "plate" heater 10 comprises an insulated steel disc having conductive tracks (18 etc.) deposited thereon. Live 11 and neutral 12 terminals are formed in the centre. Towards the circumference of the heater, is an unheated conductive ring 15 connecting eight discrete thermal fuses 16 designed to blow at 180° (ie. serious overheat condition). Conductive track 17 links the fuses to seventy-two heater cells 22 connected in parallel and formed of 1000Ω/square resistivity material or tortuous tracks of 10Ω/square material having a high PTC of resistance. In the event of localised overheating of a heater cell, its resistance will increase, leading to a decrease in its heat output. Serious overheating will result in a flow of heat to one or more fuses 17 which will then blow.

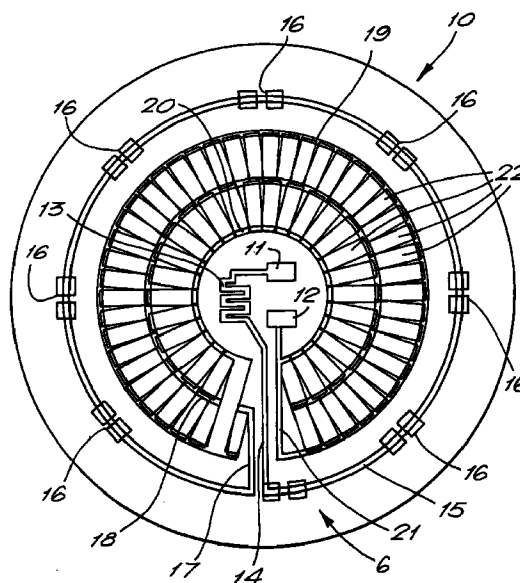


FIG. 3.

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EUROPEAN SEARCH REPORT

Application Number
EP 95 30 8639

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|---|---|---|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
| A | EP-A-0 585 015 (IST LAB LTD) 2 March 1994 * claim 1 * | 1 | H05B1/02 H01H37/00 H05B3/82 |
| A | DE-A-35 45 445 (BOSCH SIEMENS HAUSGERAETE) 25 June 1987 * claims 1-3 * | 1 | |
| A | GB-A-1 548 406 (HUSQVARNA AB) 11 July 1979 | | |
| The present search report has been drawn up for all claims | | | TECHNICAL FIELDS SEARCHED (Int.Cl.6) H05B |
| Place of search THE HAGUE | | Date of completion of the search 20 November 1996 | Examiner De Smet, F |
| 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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