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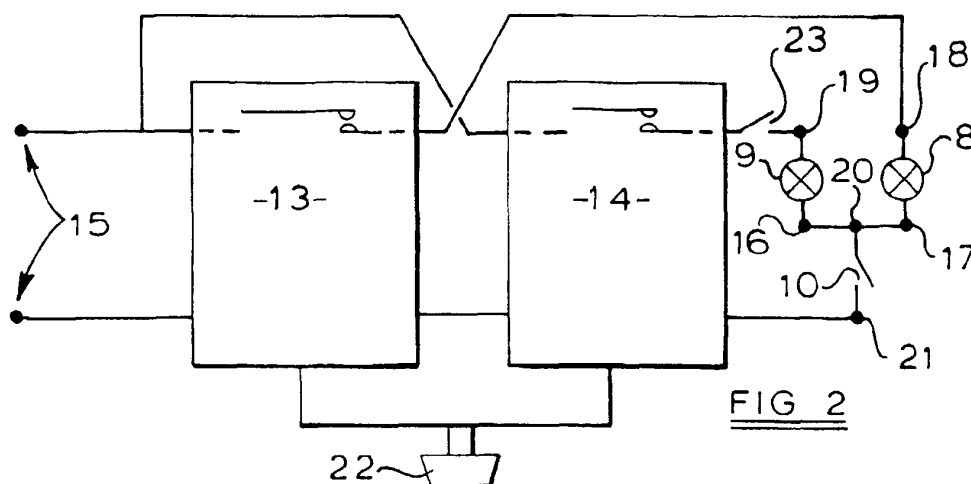
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(54) **Electric heater assembly for cooking range**

(57) An electric heater assembly for a glass-ceramic top cooking appliance includes a first heating zone (6) provided with at least one first heating element (8), a second heating zone (7) provided with at least one second heating element (9) and control means (13, 14; 24, 25, 26; 27) for energising the heating elements. The second heating zone at least partially surrounds the first heating zone. The control means is adapted to energise separately the at least one first and the at least one second heating elements (8, 9) from a power supply (15) such that the ratio of actual power dissipated to rated power for the at least one first heating element (8) is

substantially the same as, or different from, the ratio of actual power dissipated to rated power for the at least one second heating element (9). Thus, at least in a full power setting of the assembly a specific surface power loading is generated over the first heating zone (6) which is greater than, or substantially the same as, a corresponding specific surface power loading generated over the second heating zone (7), whereas in at least one lower power setting of the assembly a further specific surface power loading is generated over the first heating zone (6) which is substantially the same as, or lower than, a corresponding further specific surface power loading generated over the second heating zone (7).



EP 0 892 584 A3



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EUROPEAN SEARCH REPORT

Application Number
EP 98 30 5312

| 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) |
| X | US 5 396 047 A (KICHERER ROBERT ET AL) 7 March 1995 * column 1, line 46 - column 2, line 21 * * column 3, line 1 - line 28 * * column 6, line 33 - column 7, line 32; figures 1,2 * | 1-3,5 | H05B3/74 H05B1/02 |
| X | US 4 394 564 A (DILLS RAYMOND L) 19 July 1983 * column 4, line 6 - line 31 * * column 5, line 3 - line 49 * * column 6, line 15 - line 53; figures 2-4 * | 1 | |
| A | US 5 352 864 A (KRISTEN KLAUS ET AL) 4 October 1994 * column 1, line 9 - line 18 * * column 3, line 46 - line 58 * * column 6, line 51 - line 60; figures 1,5B * | 1 | |
| | | | TECHNICAL FIELDS SEARCHED (Int.Cl.6) |
| | | | H05B |
| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 6 May 1999 | Examiner Castanheira Nunes, F |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>& : member of the same patent family, corresponding document</p> | | | |

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 98 30 5312

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06-05-1999

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
|---|---------------------|----------------------------|---------------------|
| US 5396047 A | 07-03-1995 | DE 4130337 A | 18-03-1993 |
| | | AT 172554 T | 15-11-1998 |
| | | DE 59209535 D | 26-11-1998 |
| | | EP 0531987 A | 17-03-1993 |
| | | ES 2125877 T | 16-03-1999 |
| | | JP 6201140 A | 19-07-1994 |
| US 4394564 A | 19-07-1983 | CA 1167089 A | 08-05-1984 |
| US 5352864 A | 04-10-1994 | DE 4022846 A | 23-01-1992 |
| | | AT 117157 T | 15-01-1995 |
| | | DE 59104213 D | 23-02-1995 |
| | | EP 0471171 A | 19-02-1992 |
| | | ES 2066280 T | 01-03-1995 |
| | | JP 2715193 B | 18-02-1998 |
| | | JP 5347177 A | 27-12-1993 |