

[54] **INDUCTION COOK-TOP WITH IMPROVED TOUCH CONTROL**

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[21] Appl. No.: **35,083**

[22] Filed: **May 1, 1979**

[51] Int. Cl.<sup>3</sup> ..... **H05B 6/06; H05B 6/12; G08C 9/02**

[52] U.S. Cl. .... **219/10.49 R; 219/10.77; 219/506; 307/116; 340/365 C; 340/365 E; 328/5; 200/DIG. 1**

[58] **Field of Search** ..... **219/10.77, 10.49 R, 219/10.55 B, 445, 453, 459, 492-494, 490, 497, 499, 501, 506; 200/DIG. 1; 307/116, 126, 96, 97, 308, 252 K, 252 M, 238, 239, 296; 363/57, 135, 95, 96; 361/94, 97; 328/48, 71, 5; 340/365 S, 365 C, 365 E, 366 R, 382, 716; 235/92 CT, 92 EV, 92 PE; 323/101**

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[57]

#### ABSTRACT

An induction heating system (40) is provided and includes a plurality of induction heating coils (118). Touch control pads (50, 52, 70, and 72) are provided together with circuitry (80) for generating energization control signals. Circuitry (112 and 116) is provided for electrically energizing the induction heating coils (118). An electronic digital processor (82) is responsive to the energization control signals for generating energization signals for actuating and controlling the energization circuitry (112 and 116) to thereby vary the energization of the plurality of induction heating coils (118). Circuitry (150 and 152) is provided for maintaining touch control pads (50, 52, 70 and 72) operable when an operator is in contact with a pan disposed adjacent the plurality of induction heating coils (118).

**13 Claims, 24 Drawing Figures**

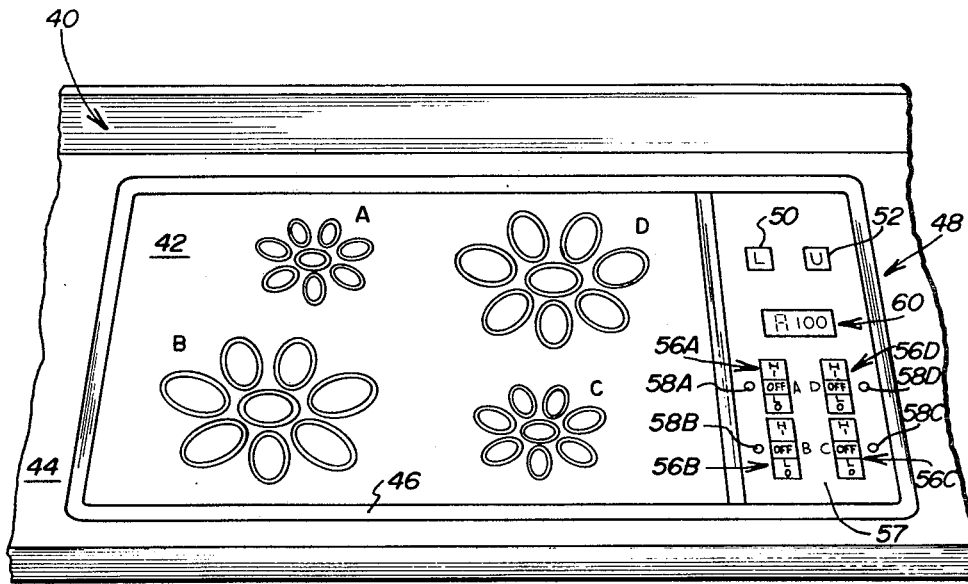


FIG. 1

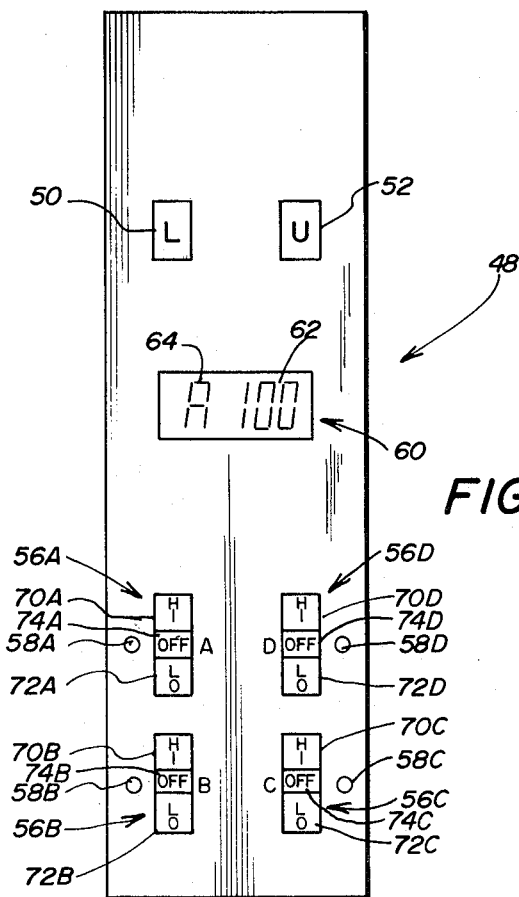


FIG. 2

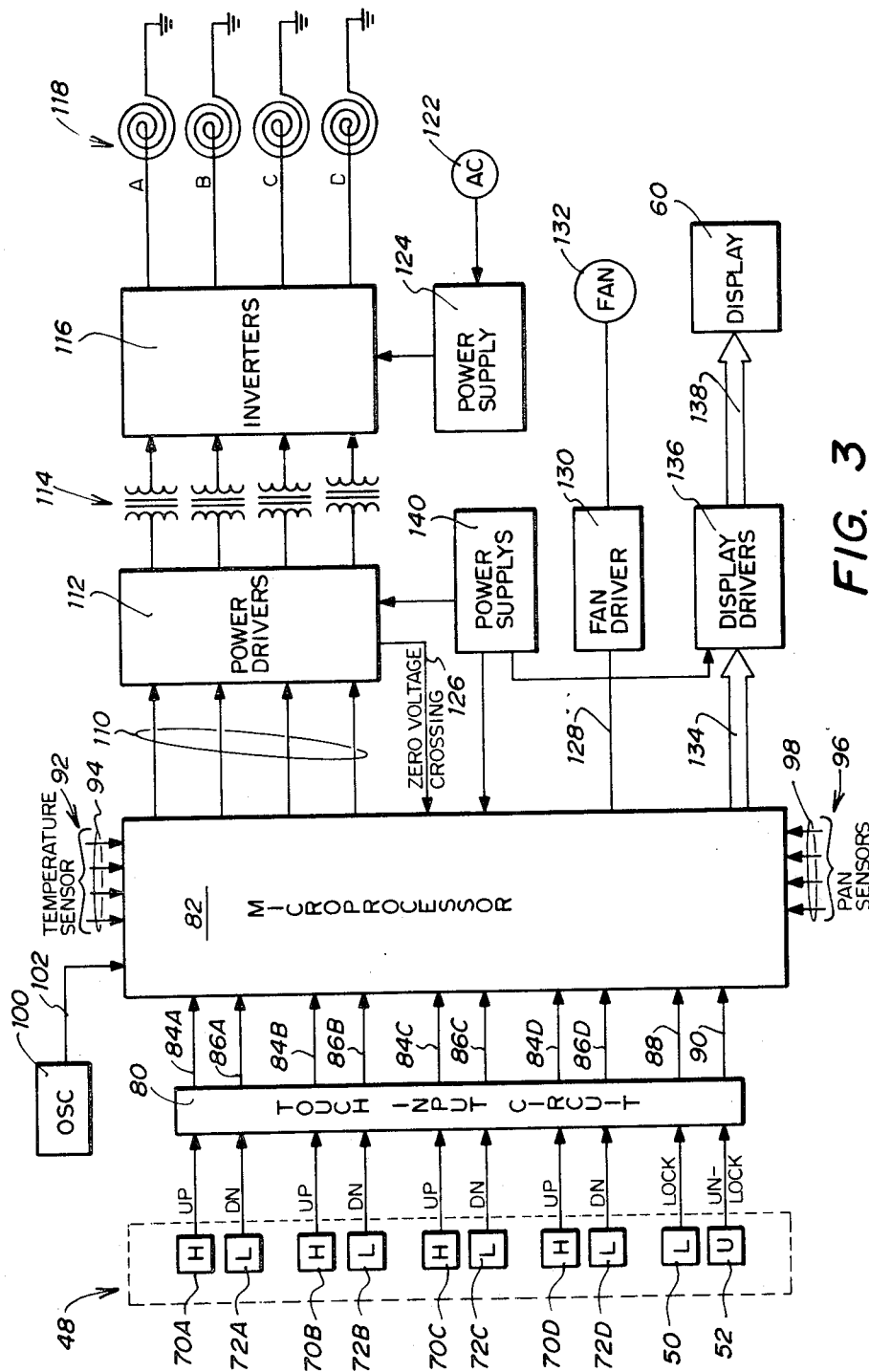


FIG. 3

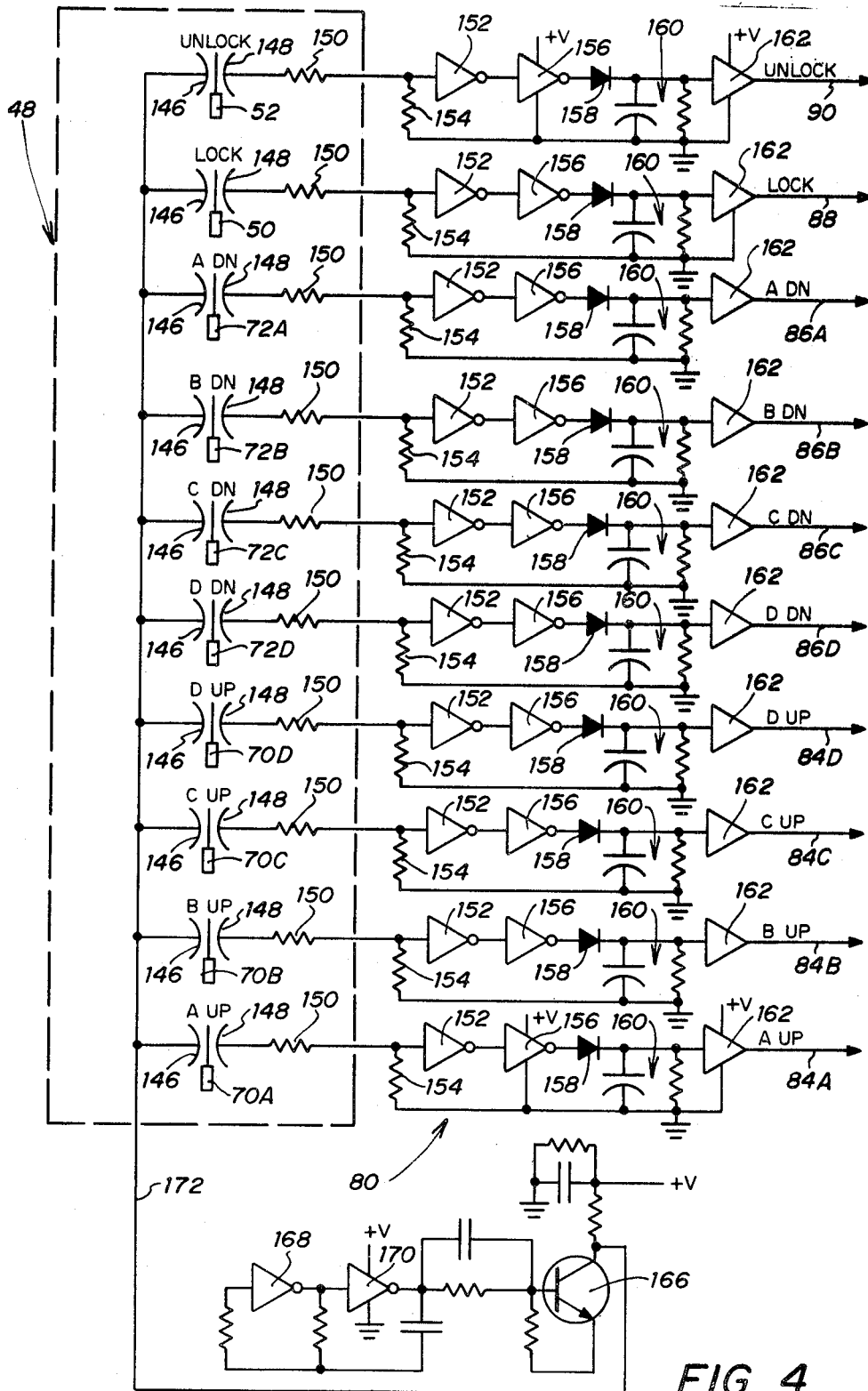


FIG. 4

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