

- [54] **ELECTRICAL HEATING SYSTEM FOR BODY AND FOOT WARMTH**
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- [58] Field of Search..... 219/211, 527, 483,
219/486; 128/1.5, 379, 402

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FOREIGN PATENTS OR APPLICATIONS

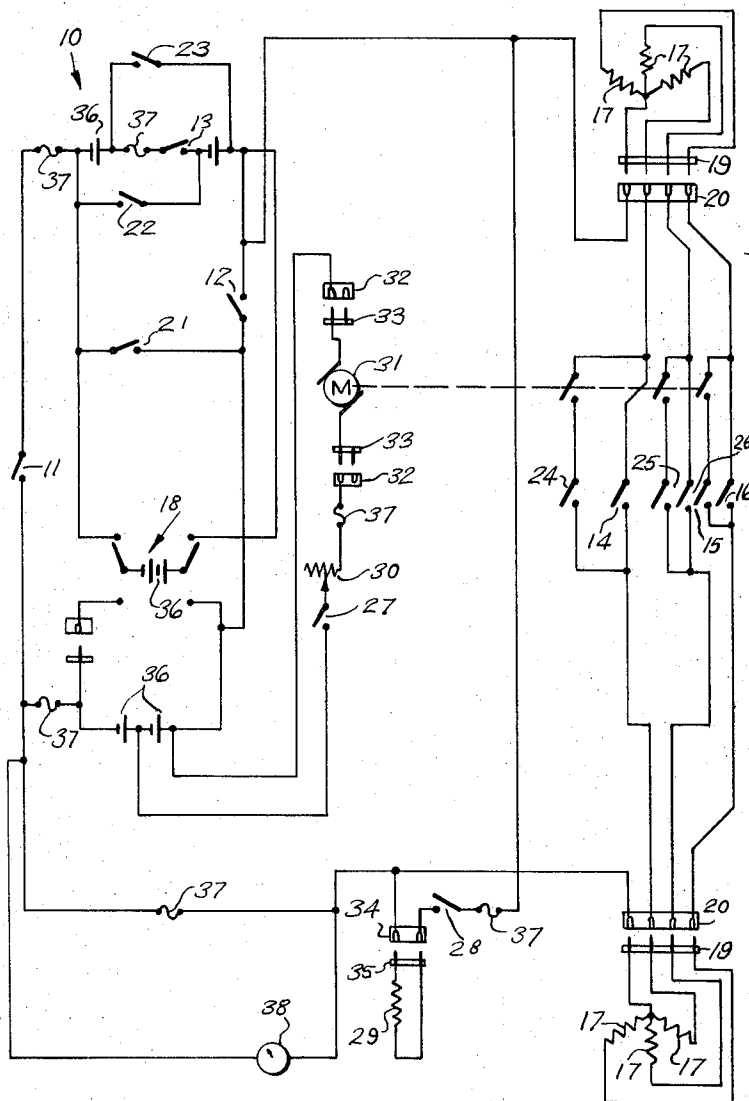
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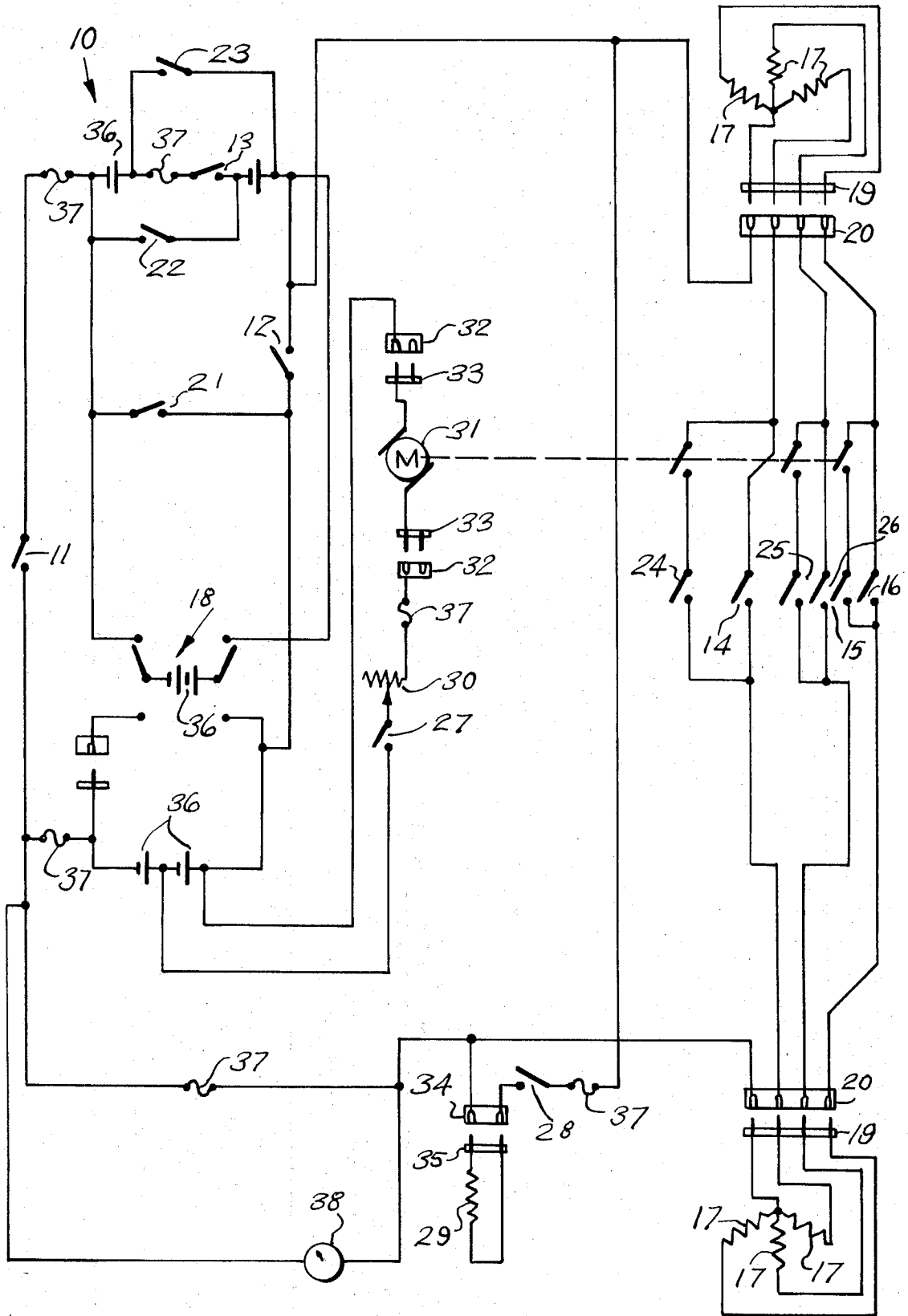
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[57] **ABSTRACT**
 A portable electric heating system. This device consists primarily of plug in units having heating elements controllable manually and automatically. The circuit consists of a multiple number of manual and motor operated switches with a battery power pack for supplying current to the plug in units.

1 Claim, 1 Drawing Figure





ELECTRICAL HEATING SYSTEM FOR BODY AND FOOT WARMTH

This invention relates to heating circuitry and more particularly to an electrical heating system for warming portions of a persons body during cold weather and the like.

It is therefore the primary purpose of this invention to provide an electrical heating system which will be both manual and automatic, the footing of manual switches and motor operated switches for automatic operation.

Another object of this invention is to provide a heating system of the type described which will include plug in units, the foot units having heating elements for the first second and third portions of the foot of the wearer. The arrangement of the foot heating element are such, so as to lessen the power drain that will occur if the entire foot area were heated simultaneously and the circuitry is such, that heat maybe applied to the middle third portion of the foot, thus imparting the temporary illusion that the entire foot area is being heated.

A further object of this invention is to provide an electrical heating system which will have low, intermediate, and high levels.

A further object of this invention is to provide an electrical heating system which will have heating element means for applying electrical heat to the kidney area of the persons body utilizing the system.

An even further object of this invention is to provide a heating system which may have the circuitry utilizing manual switching only for control of the plurality of elements as desired by the user.

Other objects of the present invention are to provide an electrical heating system for body and foot warmth which is simple in design, inexpensive to manufacture, rugged in construction, easy to use and efficient in operation.

These and other objects will be readily evident upon a study of the following specification and the accompanying drawings wherein:

The drawing is the sole view of the present invention.

According to this invention, an electrical heating system 10 includes a manually operated low heat function through the use of switches 11 and 12 (the same switch) with switch 13, the combination being closed. The switches 14, 15, and 16 are then operated to heat the three foot areas at will. 2-2.4 amperes are forced through the foot elements 17. The switch 18 is used to share the battery load on high heat only and may be flown in either direction.

In the manual and intermediate function, switch 18 is flown to the left and switches 21, 22 and 23 are closed for 3-3.4 amperes. The foot elements 17 are provided with plug means 19 and 20 for being taken in

and out of the circuitry of system 10. In the manual and high heat function, switches 21 and 13 are closed and the switch 18 is periodically flown from one side to the other to help equalize the power drain in which case, four amperes are supplied.

Switches 11 and 12 (the same switch) and switch 21 are inter-locked to prevent simultaneous closure which would blow the fuses 37 as soon as it occurs. In a like-wise fashion, switches 22, 23, and 13 are inter-locked.

In the automatic function, switches 24, 25, and 26 (the same switch) and also switch 27 are closed. Switch 28 operates the waist heater element or elements 29.

It will be noted that the foot elements 17 are mounted on self supporting inserts (not shown) which fit inside the wearers socks and the kidney or body elements 29 are embedded into two tape straps which snap around the waist of the wearer and there is no need to remove the cells 36 for charging, as they may be charged while in the power pack.

It shall also be noted that system 10 includes a rheostat 30 and plugs 32 and 33 for attachment to the motor 31, the motor 31 serving as automatic control means for system 10.

The waist feeding elements 29 includes plug means 34 and 35 so as to be connected to the cells 36.

System 10 also includes a plurality of fuses 37 for overload protection and an indicator 38 enables the user to visually see the amount of power left within the cells 36.

What I now claim is:

1. An electric device for heating certain portions of the body of a wearer, comprising:

- a. An electric current source including a plurality of electric cells;
- b. means for connecting the electrical current source to at least one of the heating units positioned about the torso of the wearer;
- c. means for connecting the electrical current source to at least one of the heating units positioned adjacent the sole of each foot of the wearer;
- d. a plurality of switches and a motor operated by the electric current source for automatically operating the switches for energizing and de-energizing the said heating units at predetermined intervals;
- e. means for disengaging said motor from the electrical current source and manually operated means for operating electrical switches for energizing and de-energizing said heating units.
- f. said foot heating elements having a plurality of heating units extending along the sole of the foot of the user and means for energizing the units individually or separately.

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