Aug. 15, 1950 E. THOMPSON 2,519,006

REFRIGERATION MOTOR CONTROL

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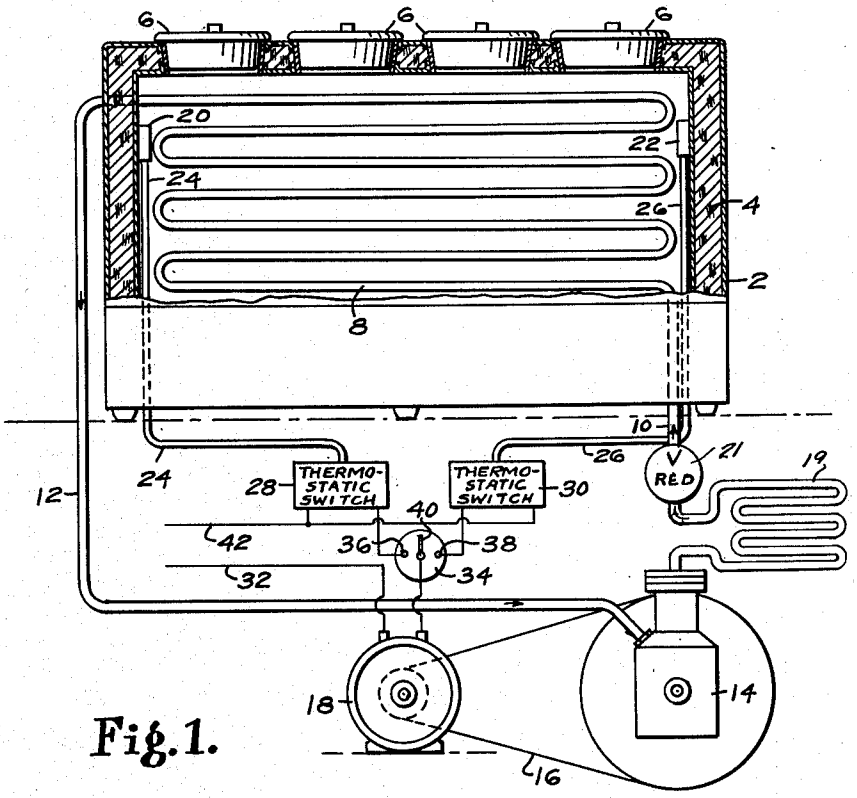


Fig. 1.

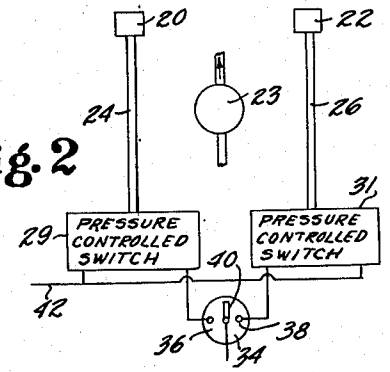


Fig. 2

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REFRIGERATION MOTOR CONTROL

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1 Claim. (Cl. 62—4)

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My present invention relates to an improved selective thermostat control for refrigeration and more specifically to the use of a plurality of thermostatic switches selectively controlled by manual operation to provide various ranges of temperature for the cabinet.

The control of my invention is especially adapted for commercial use as in stores so that during the winter season the proper range for storage of meats may be effected and during the summer a lower range which may be the proper temperature for ice cream may be employed. With the control of my invention the single refrigerator cabinet may be used with equal facility to provide a low or high range of temperature by merely moving the single switch lever.

In the accompanying drawings I have illustrated one complete example of the physical embodiment of my invention according to the best mode I have thus fare devised, but it will be understood that various changes and alterations may be made in the exemplified structure within the scope of the appended claim.

In the drawings:

Fig. 1 is a schematic view of the control of my invention as used with a refrigerator cabinet.

Fig. 2 is a detailed diagrammatic view of the control using pressure controlled switches in lieu of thermostatic switches.

Referring now to the drawings wherein I have illustrated the present preferred embodiment of my invention I provide a conventional refrigerating cabinet 2 having insulating means 4 and lids 6 providing access to the interior thereof.

A coil 8 has inlet pipe 10 and outlet or return pipe 12 from the compressor 14 and the compressor is operated by belt 16 from the electric motor 18. Interpolated in the inlet pipe 10 is the combined condenser and receiver 19 and between the condenser and receiver 19 the reducing valve and evaporator 21 is interpolated in the inlet pipe 10.

Within the cabinet 2 I provide a pair of thermostats 20 and 22 each having tubes 24 and 26 communicating with the temperature responsive switches 28 and 30.

Current from wire 32 passes to the motor and thence to the double throw switch 34 having spaced contacts 36 and 38, and the selective lever 40. From each contact 36 and 38 wires connect

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to the switches 28 and 30 which in turn connect with the return power line 42.

Thus the thermostats may control a range of, for instance, respectively 0° to 20° and 20° to 40°.

To select the temperature range in the cabinet the switch lever 40 is turned to either contact 36 or 38 to bring within the circuit the desired switch.

In Fig. 2 the thermostatic switches 28 and 30 have been replaced by pressure controlled switches 29 and 31 respectively. The reducing valve and evaporator 21 have been replaced by the thermostatic switch and evaporator 23. This type of control being used in refrigerating systems of low side float or thermostatic expansion valves whereby the system is set to operate at different pressure settings.

By the use of the device of my invention a single cabinet will serve a dual purpose effecting economy and giving the store proprietor extra space for seasonal commodities by a simple movement of a switch lever.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is:

The combination with a refrigerator having a condensing unit comprising a compressor and an operating motor and electrical circuit therefore, a plurality of thermostats of different thermal ranges in the refrigerator adapted to selectively control the temperature of the refrigerator, a thermostatic responsive switch connected to each of said thermostats, a control switch having a contact for connection to each thermostatic responsive switch, interpolated in the circuit, a control lever for the switch adapted to selectively energize the contacts and actuate the thermostat connected thereto whereby the range of temperature in the refrigerator will be controlled according to the thermal range of the actuated thermostat.

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REFERENCES CITED

The following references are of record in the file of this patent:

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Number	Name	Date
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