June 14, 1966 J. E. ZAM 3,255,582

WRIST ALARM CLOCK

Filed March 12, 1964

FIG. 1

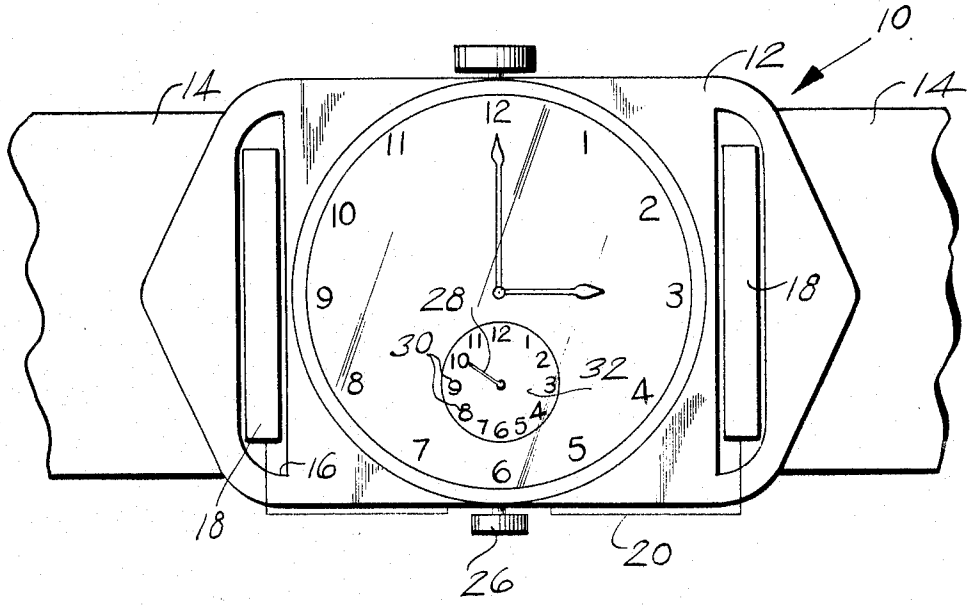


FIG. 2

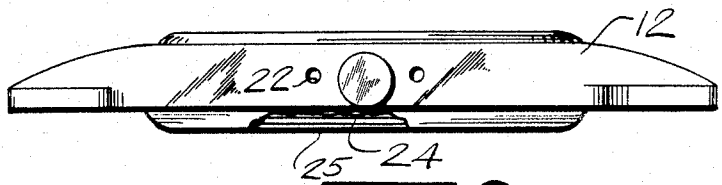
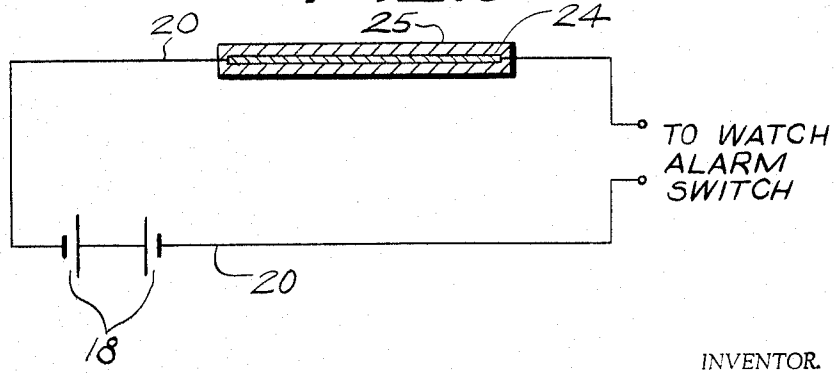


FIG. 3



INVENTOR.

J. E. Zam

United States Patent Office 3,255,582 Patented June 14, 1966

3,255,582

WRIST ALARM CLOCK

James E. Zam, P.O. Box 664, Fort Macleod, Alberta, Canada

Filed Mar. 12, 1964, Ser. No. 352,427
5 Claims. (Cl. 58—57.5)

This invention relates to electric alarm devices, and more particularly to a timing device which alarms by heating the skin.

It is an object of the present invention to provide a wrist watch having an attachment adapted to it with self-contained batteries and a means for heating the skin for a short period of time to awaken the individual wearing the device.

Another object of the present invention is to provide an alarm apparatus which, when set for a desired time, will close a circuit which, by battery means, will heat a metal conductor for a period of up to thirty seconds. This against the skin of the wrist will awaken the person at the preset time.

A further object of the present invention is to provide a wrist alarm which will replace the ordinary clock which gives forth a loud sound and interferes with other people who may be present. The present invention will also serve to awaken persons who are hard of hearing so that they may be awakened at the desired time.

Other objects of the invention are to provide a wrist alarm bearing the above objects in mind which is of simple construction, has a minimum number of parts, is inexpensive to manufacture and efficient in operation and use.

For other objects and for a better understanding of the invention, reference may be made to the following detailed description taken in conjunction with the accompanying drawing, in which:

FIGURE 1 is a front view of the present invention shown in elevation;

FIGURE 2 is a top plan view of FIGURE 1 showing the straps removed; and

FIGURE 3 is a diagrammatic wiring diagram of the invention.

Referring now more in detail to the drawing, a wrist alaram clock 10 made in accordance with the present invention is shown to include an elongated watch frame 12 containing conventional alarm setting means (not shown). A pair of straps 14 providing means for securing watch frame 12 to the wrist and a pair of spaced apart openings through watch frame 12 receive a battery 18. Batteries 18 are in series connection with each other and the wires 20 are received within openings 22 of frame 12 and are connected to the alarm timing mechanism (not shown) within the interior of watch frame 12. Wires 20 are electrically connected to heating element 24 which is encased within porcelain 25, and a knurled knob 26 extending from the bottom of watch frame 12 provides a means for setting the dial *h* and 28 to one of the numerical characters 30 on the dial of the watch, to close the circuit of batteries 18 with heating element 24.

To operate wrist alarm clock 10, the person operating

it sets the dial hand 28 to whichever numerical character 30 he desires, representing the hour at which he wishes to be awakened. When the dial hand reaches the predetermined hour, the series electrical circuit with batteries 18 and heating element 24 is closed and thus the heat created by the electric flow through heating element 24 radiates through and to the skin of the wrist of the wearer and imparts a hot sensation to the nerves of the skin for a short period of time.

It shall be noted that the heat and the length of time that it is applied to the wrist cannot cause injury to the wearer.

It shall further be noted that the entire device shall be so designed as to be placed within the case of the watch frame and thus all parts will be enclosed within watch frame 12.

While various changes may be made in the detail construction, it shall be understood that such changes be within the spirit and scope of the present invention as defined by the appended claims.

What I claim as new and desire to protect by Letters Patent of the United States is:

1. A wrist alarm clock comprising, in combination, an elongated watch frame, a pair of batteries carried by said frame providing a means for giving current to a heating element carried by said watch frame and a timer carried within said watch frame providing means for closing the electrical circuit.

2. The combination according to claim 1 wherein said batteries each are received within elongated slots of said watch frame, and the wires from said batteries are received within openings adjacent to the adjustment knob for the alarm system of said clock within said watch frame.

3. The combination according to claim 2 wherein a heating element is in series with said batteries which are wired in series to provide maximum current, and said heating element within procelain material is secured to the back of said clock.

4. The combination according to claim 3 wherein the dial hand of the alarm section of said clock when reaching the hour indicated on the face of the alarm section of said clock will complete the series circuit containing said heating element and current through said heating element heats said heating element and said heat is transferred through said porcelain to the skin of the wrist of the wearer and thus the wearer feels a sensation of heat through the nerves of the skin of the wrist and the amount of heat is controlled by the current rate of said batteries of said clock to prevent injury to the wrist of the wearer.

5. The combination according to claim 4 wherein said porcelain covered heating element is adhered to the back of said watch frame by heat resistant adhesive means and said heating element is centered at the back of said watch frame to provide maximum contact with the wrist.

No references cited.

LEO SMILOW, *Primary Examiner.*