



APPARATUS FOR DETERMINING IF THE DURATION OF A POWER FAILURE
EXCEEDED PREDETERMINED LIMITS

ABSTRACT

In an electronics instrument subject to power line interruptions and having a standby power supply(115), an external
5 timer (R1,C1) is used to time a predetermined brief period (e.g. 15 seconds to 1 minute). If the timer (101) has not yet expired when standby power is once again developed, then a controller (100) will cause a real time clock (101) to start timing, using the currently held
10 time of day. If the timer (R1,C1) has expired when standby power is once again developed, the controller (100) will cause (210) the time of day clock (101) to indicate that its time is no longer accurate. Moreover, if the timer has expired, then the controller will not cause (220) the receiver to be turned on. If the timer has not expired, then the controller will determine (250) if the receiver was turned on
15 when the AC power line failure occurred, and if so, the controller will cause the receiver to turn on. If the receiver was turned off (250) when the AC power line failure occurred, then the controller will cause (220) the receiver to remain in standby mode. If, however, a reset was caused by an extremely fast phenomenon, such as a kine
20 arc, then the receiver would not have had time to store status bytes. Upon waking up, the receiver would note that it was inoperative for only a short time, and that certain functions, such as degaussing need not be performed.

Fig 1