

Title (en)
ELECTRICAL ALARM CIRCUITS AND SYSTEMS

Publication
EP 0005046 B1 19820217 (EN)

Application
EP 79300631 A 19790417

Priority
GB 1507078 A 19780417

Abstract (en)
[origin: EP0005046A1] Intrusion-detection units (1) which are linked in an alarm system to a central control unit (3) by cable (2), each include a coder circuit (8) responsive to opening of intrusion- and tamper-alarm contacts (5, 6) to change the magnitudes of current flow in respective alarm and tamper signalling lines (14, 15) of the cable (2). Current is supplied to the tamper-signalling line (15) in the circuit (8) via the collector-emitter path of a transistor (16) from the positive supply-line (10) of the cable (2), until the alarm-contacts (5) in its collector circuit open, whereupon current supply of the same magnitude is continued to that line (15) via the base-emitter path from the alarm-signalling line (14). The increase in current in the latter line (14) is detected, to indicate the alarm condition, in a decoder circuit (9) of the control unit (3) by operational amplifiers (36, 40) that respond to the consequent tendency for change in potential of the line (14). The decoder circuit (9) also includes operational amplifiers (22, 23) to detect change in current magnitude in the tamper-signalling line (15) for indicating the tamper condition, such change occurring upon opening of the tamper-contacts (6) of any coder circuit (8) or any breaking or shorting together of the lines (10, 11, 14, 15) of the cable (2). Opening of the tamper-contacts (6) interrupts a current-supply path that is connected to the tamper-signalling line (15) in parallel with the collector-emitter path of the coder-circuit transistor (16), or alternatively interrupts the emitter circuit of that transistor (16). A resistor (20) is connected across the supply-lines (10, 11) to increase current supply to the tamper-line (5) via a diode (21) if the negative supply-line (11) is broken.

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G08B 25/00

IPC 8 full level
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Cited by
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