

Title (en)

# INFRARED INTRUSION DETECTOR CIRCUIT

Publication

**EP 0218011 B1 19901114 (DE)**

Application

**EP 86108701 A 19860626**

Priority

DE 3528646 A 19850809

Abstract (en)

[origin: US4795905A] A circuit layout operating in the current mode for an infrared room surveillance detector includes a high impedance operational amplifier connected directly to a pyroelement used as an infrared sensor. This results in a high sensitivity detector circuit with a low noise component in the detector output signal and maintaining a high impedance detector circuit. The detector circuit has a constant amplification over a relatively broad frequency range. The reaction resistor of the operational amplifier is chosen to have a high impedance, preferably in a range higher than 10<sup>11</sup> Ohm. It is advantageous to take the reference voltage required for the evaluation of the detector output signal from the operational amplifier, so that aside from the simplified circuit layout, no further structural parts capable of increasing the interference sensitivity of the detector circuit are required. To further increase the electromagnetic compatibility, the threshold value comparator stage may also be located in the detector housing.

IPC 1-7

**G01J 5/34; G08B 13/18**

IPC 8 full level

**G01J 5/34** (2006.01); **G08B 13/18** (2006.01); **G08B 13/191** (2006.01)

CPC (source: EP US)

**G08B 13/191** (2013.01 - EP US); **Y10S 250/01** (2013.01 - EP US)

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DOCDB simple family (publication)

**DE 3528646 A1 19870219; DE 3528646 C2 19940407; DE 3528646 C3 19940407**; DE 3675621 D1 19901220; EP 0218011 A1 19870415;  
EP 0218011 B1 19901114; US 4795905 A 19890103

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