

Title (en)
ACTIVE INFRARED LIGHT OBJECT DETECTOR

Publication
EP 0251371 A3 19881005 (DE)

Application
EP 87201088 A 19870610

Priority
NL 8601634 A 19860624

Abstract (en)
[origin: EP0251371A2] Figure 1 shows the infrared light object alarm described. 1 represents any signal generator. An infrared light source 3 is controlled by this signal via lead 2. As a result 3 radiates infrared light, which is modulated in one way or another by the said signal from 3. When infrared light is radiated it is reflected from all objects with a fairly definite shape such as object 5. The infrared light from 3 is incident as a light beam 4 on object 5, is reflected and is then incident as a light beam 6 on the input of the infrared light receiver 7. In the invention, not a single beam of light but a three-dimensional bundle of rays of any angle is radiated from 3. Thus the room concerned is filled as far as possible with the infrared light radiated from 3. The receiver 7, in Figure 1, receives the total infrared light reflection of the objects which reflect the infrared light in the room concerned back to the receiver 7. At the output of the demodulator 8, an electric signal will be produced, the level of which will be a measure of the total received, reflected, demodulated infrared light emitted from 3 into a particular room. With a level detector after the demodulator 8 in Figure 1, it is possible to distinguish between a situation in which the active infrared light object alarm triggers and one in which it should not trigger. This means that the active infrared light object alarm can be set for every situation in a room for which it is not required to trigger. If then an object is introduced into the room in question, the total reflected, demodulated infrared light increases in intensity at the infrared light receiver 7. This means that, at the output of the demodulator 8, in Figure 1, there will be a larger signal, the amplitude of which is proportional to the intensity of the demodulated light entering the infrared light receiver stage 7. The level detector 9 can be adjusted so that an electrical signal change occurs at 10. This means that one or more objects are present in the room in which 3 is radiating the infrared light, thus causing an electrical signal change at 10. The circuit works always in such a way that the output signal of the demodulator 8 provides a measure of the total demodulated reflected infrared light received from the room in question at 7. <IMAGE>

IPC 1-7
G08B 13/18

IPC 8 full level
G08B 13/187 (2006.01)

CPC (source: EP)
G08B 13/187 (2013.01)

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CN102938656A

Designated contracting state (EPC)
AT BE CH DE ES FR GB GR IT LI LU NL SE

DOCDB simple family (publication)
EP 0251371 A2 19880107; EP 0251371 A3 19881005; NL 8601634 A 19880118

DOCDB simple family (application)
EP 87201088 A 19870610; NL 8601634 A 19860624