

Title (en)  
Intrusion detector.

Title (de)  
Intrusionsdetektor.

Title (fr)  
Détecteur d'intrusion.

Publication  
**EP 0476397 B1 19931208 (DE)**

Application  
**EP 91114646 A 19910830**

Priority  
CH 286290 A 19900905

Abstract (en)  
[origin: EP0476397A1] In a combined infrared/ultrasonic intrusion detector, which simultaneously detects the body radiation and the movement of an intruder in order to raise the alarm, an attempt to render the infrared part of the detector ineffective by mounting a radiation screen in front of the radiation entry window (9) is detected by providing to the side of the window (9) an ultrasonic emitter (10) and an ultrasonic receiver (11), by means of which an ultrasound field is built up in front of the window (9). An interference signal is triggered in the event of a change in sound pressure or sound propagation time. This also makes it possible to recognise screens which are transparent to other radiations, for example light or microwaves, and cannot be detected therewith. In order to prevent the mounting of a screen such as a foil or spray layer directly on the window (9), the window (9) is mounted in a recess (8) on the front side (7) of the housing (1) and covered approximately in the plane of the front side (7) with a cover (14) which has very fine openings and is transparent both to ultrasound and to infrared radiation. An ultrasonic component (10) is located inside the recess (8), while another ultrasonic component (11) is located outside thereof, so that the cover (14) is transirradiated by ultrasound and it is possible to recognise a change in the permeability of the cover (14). <IMAGE>

IPC 1-7  
**G08B 29/04**

IPC 8 full level  
**G08B 29/04** (2006.01)

CPC (source: EP)  
**G08B 29/046** (2013.01)

Cited by  
DE102009047531A1; EP4174814A1; EP2136342A1; EP1061489A1; GB2257822A; US7852210B2; US8150202B2; US6297745B1

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