

Title (en)

OPTICAL ARRANGEMENT FOR AN INFRARED INTRUSION DETECTOR

Publication

EP 0050751 B1 19870107 (DE)

Application

EP 81107844 A 19811002

Priority

CH 792580 A 19801024

Abstract (en)

[origin: US4429224A] The optical arrangement for an infrared intrusion detector containing a plurality of separate radiation receiving regions or fields of view is provided with a first focussing optic or optical system, for instance a Fresnel lens which receives with its entire surface or area the infrared radiation which arrives from all of the receiving regions and delivers such received radiation to a multiplicity of further focussing means, for instance to individual reflectors. These reflectors are correlated in each instance to one of the receiving regions or fields of view and focus the radiation arriving from such receiving region upon a sensor element. In this way there is attained the beneficial result of optimum utilization of the infrared radiation which is available and the sensitivity of the infrared intrusion detector can be increased. The dimensions of the optical arrangement and the intrusion detector can be maintained small and relatively imperceptible.

IPC 1-7

G08B 13/18

IPC 8 full level

G01V 8/14 (2006.01); **G08B 13/18** (2006.01); **G08B 13/191** (2006.01); **G08B 13/193** (2006.01)

CPC (source: EP US)

G08B 13/193 (2013.01 - EP US); **Y10S 250/01** (2013.01 - EP US)

Citation (examination)

- EP 0014825 A2 19800903 - HEIMANN GMBH [DE]
- GB 2012045 A 19790718 - CARBOCRAFT LTD
- US 3703718 A 19721121 - BERMAN HERBERT L
- US 3760399 A 19730918 - SCHWARZ F
- US 3829693 A 19740813 - SCHWARZ F
- US 4081680 A 19780328 - KELLER HANSJURG
- US 4166955 A 19790904 - KELLER HANSJURG [CH]
- US 4179691 A 19791218 - KELLER HANSJURG [CH]

Cited by

US5929445A; US4644164A; US4679218A; GB2165639A; EP0218055A1; US4752769A; GB2213927A; DE9314604U1; EP1767415A1; GB2198842A; GB2198842B; WO9811521A1; US6921900B2; US6690018B1; US7053374B2; US6239437B1

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