Title (en)

INFRARED LIGHT SENSOR HAVING A HIGH SIGNAL VOLTAGE AND A HIGH SIGNAL/NOISE RATIO

Title (de)

INFRAROTLICHTSENSOR MIT HOHER SIGNALSPANNUNG UND HOHEM SIGNAL- RAUSCH-VERHÄLTNIS

Title (fr)

CAPTEUR DE LUMIÈRE INFRAROUGE AVEC TENSION DE SIGNAL ÉLEVÉE ET RAPPORT SIGNAL-BRUIT ÉLEVÉ

Publication

EP 2419702 A1 20120222 (DE)

Application

EP 10714629 A 20100416

Priority

- EP 2010055062 W 20100416
- DE 102009017845 A 20090417

Abstract (en)

[origin: WO2010119131A1] The invention relates to an infrared light sensor for an infrared light detector (1), comprising a substrate membrane section (2) and at least two sensor chips (7 to 10), which are fastened lying next to each other on the substrate membrane section (2) and each comprise a layer element (11), which is produced from pyroelectrically sensitive material and is electrically contacted by a base electrode (12) and a head electrode (13) and is arranged in such a way that there is a voltage difference in each case between the head electrode (13) and the base electrode (12) of each layer element (11) when the layer elements (11) are irradiated with infrared light, and a coupling line (14 to 16) in each case for two adjacently arranged sensor chips (7 to 10), by means of which coupling line the head electrode (13) of the one sensor chip (7 to 9) and the base electrode (12) of the other sensor chip (8 to 10) are coupled to each other in an electrically conductive manner so that the layer elements (11) of the sensor chips (7 to 10) are connected in a series circuit, which has one of the base electrodes (17) at one end thereof and one of the head electrodes (18) at the other end thereof, at which a total voltage difference of the series circuit can be tapped as the sum of the individual voltage differences of the layer elements (11).

IPC 8 full level

G01J 5/34 (2006.01); **G01J 5/08** (2006.01)

CPC (source: EP KR US)

G01J 5/08 (2013.01 - EP KR US); **G01J 5/0846** (2013.01 - EP KR US); **G01J 5/34** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2010119131A1

Citation (examination)

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