

Title (en)

THERMAL SENSOR AND METHOD FOR PRODUCING A THERMAL SENSOR

Title (de)

THERMOSENSOR UND VERFAHREN ZUR HERSTELLUNG EINES THERMOSENSORS

Title (fr)

CAPTEUR THERMIQUE ET PROCÉDÉ DE FABRICATION D'UN CAPTEUR THERMIQUE

Publication

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Application

EP 14755094 A 20140825

Priority

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- EP 2014067986 W 20140825

Abstract (en)

[origin: WO2015028419A1] The present invention relates to a thermal sensor and a method for producing a thermal sensor of this type having a low signal-to-noise ratio at relatively high signal strengths. To this end, a thermoelectric generator is combined with a field effect transistor and a diode. Owing to its integrated diode and the barrier effect associated therewith, the thermal sensor is suitable for the economical and efficient design of imaging sensor arrays for converting thermal radiation into electrical signals.

IPC 8 full level

G01J 5/12 (2006.01); **G01J 5/14** (2006.01)

CPC (source: EP US)

G01J 5/12 (2013.01 - EP US); **G01J 5/14** (2013.01 - EP US); **G01J 5/20** (2013.01 - EP); **G01J 2005/0077** (2013.01 - US); **G01J 2005/106** (2013.01 - US); **G01J 2005/123** (2013.01 - US)

Citation (search report)

See references of WO 2015028419A1

Citation (examination)

MULLER M ET AL: "A thermoelectric infrared radiation sensor with monolithically integrated amplifier stage and temperature sensor", SENSORS AND ACTUATORS A: PHYSICAL, ELSEVIER BV, NL, vol. 54, no. 1-3, 1 June 1996 (1996-06-01), pages 601 - 605, XP004077932, ISSN: 0924-4247, DOI: 10.1016/S0924-4247(97)80022-2

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