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ABSTRACT

INFRARED ABSORBER AND THERMAL SENSOR PRODUCED USING IT

The invention relates to an infrared absorber (2a), in particular for thermal sensors, which is applied in the form of a layer of one or more organic and/or inorganic compounds over a thermosensitive structure (4) located on or in a substrate (1), in order to convert incident infrared radiation into heat. According to a first aspect of the invention, the infrared absorber layer (2a) can have an ORMOCER as an essential constituent, which is additionally modified with organic and/or inorganic components. In addition, a dark, opaque dye can be introduced. According to a second aspect of the invention, the absorber layer (2a) can alternatively consist of a photoresist, which is present in a suspension with silicates and doped with a dark dye. In the case of a thermal sensor having an infrared absorber layer (2a) according to the invention, the latter can be applied to the substrate (1) containing the thermal sensor structures by means of a spin-coating method, and can be structured by conventional UV lithography and subsequently cured (Figure 4C).

FIGURE 1



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