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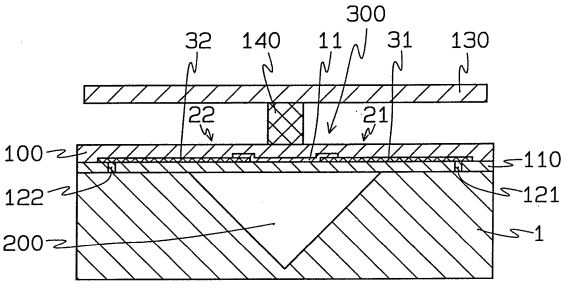
(54) Infrared focal plane array

(57) A two-dimensional infrared focal plane array comprising temperature detecting units in which one temperature detecting unit is arranged for each pixel in a two-dimensional arrangement on a semiconductor substrate, said temperature detecting unit being formed integrally with a thermal type light detector and a means for detecting a change in characteristic of said thermal type light detector, said change being caused by an incident infrared ray, wherein a temperature detecting portion which is supported by support legs comprising a high thermal resistance material capable of controlling a heat flow to said semiconductor substrate and which has a temperature detecting element, and an infrared ray absorbing portion are provided for each pixel on said semiconductor substrate, characterized in that said infrared ray absorbing portion is spliced by at least one splicing pillar with said temperature detecting portion, and said infrared ray absorbing portion comprises silicon dioxide or silicon nitride, or a laminate film of silicon dioxide and silicon nitride, and wherein the thermal resistance of the splicing pillar is smaller than the thermal resistance of the support legs.

FIG.1



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EUROPEAN SEARCH REPORT

Application Number
EP 07 11 0375

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	30 March 2011	Heising, Stephan

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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EUROPEAN SEARCH REPORT

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