

Title (en)

THINNED IMAGE SENSOR HAVING TRENCH-ISOLATED CONTACT PADS

Title (de)

VERDÜNNTER BILDSSENSOR MIT GRABENISOLIERTEN KONTAKTSTELLEN

Title (fr)

CAPTEUR D'IMAGE AMINCI A PLOTS DE CONTACT ISOLES PAR TRANCHEE

Publication

EP 1964176 B8 20180404 (FR)

Application

EP 06807744 A 20061106

Priority

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Abstract (en)

[origin: WO2007071491A1] The invention relates to the fabrication of image sensors on a thinned substrate, and especially to colour image sensors. After the fabrication steps carried out on the front face of a silicon substrate and then the transfer of the front face onto a transfer substrate and the thinning of the silicon, the connection pads are produced via the rear face. A multiplicity of discrete contact holes are opened through the thinned silicon, at the location of a connection pad, the holes baring a first conducting layer (24) formed during the front face steps; aluminium (42) is deposited on the rear face, in contact with the silicon, the aluminium penetrating into the openings and coming into contact with the first layer; the aluminium is etched so as to define the connection pad; and finally a peripheral trench is opened right through the thickness of the silicon layer, this trench completely surrounding the connection pad.

IPC 8 full level

H01L 21/768 (2006.01); **H01L 23/48** (2006.01); **H01L 27/146** (2006.01); **H01L 31/0224** (2006.01)

CPC (source: EP KR US)

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C-Set (source: EP US)

1. **H01L 2224/48463 + H01L 2924/00014**
2. **H01L 2224/05624 + H01L 2924/00014**
3. **H01L 2924/10253 + H01L 2924/00**
4. **H01L 2924/00014 + H01L 2224/05556**
5. **H01L 2224/04042 + H01L 2924/00**
6. **H01L 2924/14 + H01L 2924/00**
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