

Title (en)
METHOD FOR PRODUCING INFRARED-PHOTOSENSITIVE MATRIX CELLS ADHERING TO AN OPTICALLY TRANSPARENT SUBSTRATE BY MOLECULAR ADHESION, AND RELATED SENSOR

Title (de)
VERFAHREN ZUM HERSTELLEN VON INFRAROT-LICHTEMPFINDLICHEN MATRIXZELLEN, DIE DURCH MOLEKULARE ADHÄSION AN EINEM OPTISCH TRANSPARENTEN SUBSTRAT HAFTEN, UND DIESBEZÜGLICHER SENSOR

Title (fr)
PROCEDE DE FABRICATION DE CELLULES MATRICIELLES PHOTOSENSIBLES DANS L'INFRAROUGE COLLEES PAR ADHESION MOLECULAIRE SUR SUBSTRAT OPTIQUEMENT TRANSPARENT ET CAPTEUR ASSOCIE

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Abstract (en)
[origin: WO2010061151A2] The invention relates to a method for producing an infrared radiation sensor, said sensor comprising an infrared photodiode array formed in a first material and a reading circuit formed in a second material, said method comprising the steps of: sticking, through molecular adhesion, a first material side surface (1) onto an optically transparent crystalline material side surface (5) having infrared radiation and a coefficient of thermal expansion similar to that of the second material, give or take 20%; thinning the body of the first material side surface so that the latter is less than 25 µm; producing infrared-sensitive photodiodes (9) onto the thus-thinned first material side surface; depositing contact ball bearings (11) onto the infrared photodiodes; and mounting the reading circuit (13) onto the first material side surface through flip chip technology.

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