

Title (en)

COLOUR IMAGE CHARGE-COUPLED SENSOR

Title (de)

FARBBIILDSSENSOR IN LADUNGSVERSCHIEBETECHNIK

Title (fr)

CAPTEUR D'IMAGES EN COULEURS A COUPLAGE DE CHARGE

Publication

EP 0948817 A1 19991013 (DE)

Application

EP 97951903 A 19971115

Priority

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- EP 9706380 W 19971115

Abstract (en)

[origin: WO9822982A1] An optical sensor consists of an arrangement of picture elements (pixels). An optoelectronic converter (11), is a storage device (8) and a transport device (12) are associated to each picture element. The object of the invention is to design such a sensor device so that it becomes suitable for processing colours without losing its lateral resolution. For that purpose, at least one semiconductor layer (2, 3, 4) to which an external electric voltage (9) can be applied is arranged upstream of each picture element, in the light incidence direction. The absorption and/or collecting properties of the semiconductor layers (2, 3, 4) can be varied in such a way that when different external electric voltages (9) are applied to the component, charge carriers generated by radiation of different wavelengths are collected.

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