Title (en)

DIRECT RADIOGRAPHIC IMAGING PANEL WITH AN IMAGING PROPERTY REVERSIBLY ADJUSTABLE WITH AN EXTERNAL ENERGY SOURCE IN CLINICAL USE OF THE PANEL

Title (de)

DIREKT-RÖNTGENABBILDUNGSTAFEL MIT EINER ABBILDUNGSEIGENSCHAFT, DIE UMKEHRBAR MIT EINER EXTERNEN ENERGIEQUELLE BEI DER KLINISCHEN BENUTZUNG DER TAFEL EINSTELLBAR IST

Title (fr)

PANNEAU D'IMAGERIE RADIOGRAPHIQUE DIRECTE A IMAGERIE INVERSEMENT REGLABLE AVEC UNE SOURCE D'ENERGIE EXTERNE EN APPLICATION CLINIQUE DUDIT PANNEAU

Publication

EP 1342105 A4 20050907 (EN)

Application

EP 01998089 A 20011109

Priority

- US 0149959 W 20011109
- US 24764000 P 20001110

Abstract (en)

[origin: WO02061456A2] A panel for radiation detection has an integrated array of x-ray sensors, each of which includes a charge storage capacitor, a radiation sensitive layer over the charge storage capacitor, and a control layer over the radiation sensitive layer. The control layer's electrical conductivity can be changed reversibly in the field, after the panel is manufactured and without disassembly of the panel, to make the time constant of the layer T=(1/y)K epsilon 0 change between high and low values in the range of, e.g., 0.03 and 20 seconds, wherein y is the conductivity and K is the dielectric constant of the control layer, and epsilon 0 is the permittivity of free space. The conductivity, and thus the time constant of the control layer, are controllable via the application of electromagnetic energy, preferably infrared radiation. Preferably, the radiation detection layer is a photoconductor and the control layer is an organic photoconductor (OPC).

[origin: WO02061456A2] A radiation detection panel has an integrated array of x-ray sensors, each of which includes a charge storage capacitor (14), a radiation sensitive layer (50) over the charge storage capacitor (14), and a control layer (52) over the radiation sensitive layer (50). The electrical conductivity of the control layer (52) can be changed reversibly in the field, after the panel is manufactured and without disassembly of the panel, to make the time constant of the layer t = (1/g)ke change between high and low values in the range of, e.g., 0.03 and 20 seconds, where g is the conductivity and k is the dielectric constant of the control layer, and e is the permittivity of free space. The conductivity, and thus the time constant of the control layer (52), are controllable via the application of electromagnetic energy, preferably infrared radiation. Preferably, the radiation sensitive layer (50) is a photoconductor and the control layer (52) is an organic photoconductor "OPC".

IPC 1-7

G01T 1/24; H01L 31/115; H01L 27/146

IPC 8 full level

H01L 27/146 (2006.01); **H01L 31/115** (2006.01)

CPC (source: EP)

H01L 27/14676 (2013.01)

Citation (search report)

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Designated contracting state (EPC)

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DOCDB simple family (application)

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