

Title (en)
METHOD FOR TEMPERATURE COMPENSATION IN AN IMAGE SENSOR

Title (de)
VERFAHREN ZUR TEMPERATURKORREKTUR IN EINEMBILDSSENSOR

Title (fr)
PROCEDE DE COMPENSATION EN TEMPERATURE D'UN DETECTEUR D'IMAGE

Publication
EP 1243131 A1 20020925 (FR)

Application
EP 00990831 A 20001228

Priority
• FR 0003716 W 20001228
• FR 9916591 A 19991228

Abstract (en)
[origin: WO0149023A1] The invention concerns a method for temperature compensation in an image sensor comprising photosensitive points (O1 to O6, R1 to R9) sensitive to room temperature, each connected to a line conductor (Y1 to Y3) and a column conductor (W1, W2, Z1 to Z3). Each of the photosensitive points is connected by one of its conductors to a reading circuit (30a, 30b). The photosensitive points are divided into sensing photosensitive points (R1 to R9) designed to be exposed to a light information translating the image to be detected, the reading circuits (30b) associated with said photosensitive points delivering each a measurement voltage representing the image to be detected and into blind photosensitive points (O1 to O6) protected from the light information, the reading circuits (30a) associated with said blind sensitive points delivering each a darkness voltage enabling temperature compensation. When an image is detected, the method consists in collecting darkness voltages derived from one or several detected images and in using the average correction value to generate a correction voltage (VDR) to be applied, when a subsequent image is detected, to the reading circuits (30b) associated with the sensing photosensitive points (R1 to R9) so that they deliver a substantially temperature-independent measurement voltage. The invention is particularly applicable to radiological image detectors.

IPC 1-7
H04N 5/217

IPC 8 full level
H04N 5/217 (2006.01); **H04N 5/32** (2006.01); **H04N 5/335** (2006.01); **H04N 5/359** (2011.01); **H04N 5/361** (2011.01); **H04N 5/365** (2011.01); **H04N 5/374** (2011.01)

CPC (source: EP US)
H04N 25/626 (2023.01 - EP US); **H04N 25/63** (2023.01 - EP US); **H04N 25/673** (2023.01 - EP US); **H04N 25/76** (2023.01 - EP US)

Citation (search report)
See references of WO 0149023A1

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0149023 A1 20010705; AU 3029601 A 20010709; CA 2395566 A1 20010705; CA 2395566 C 20081118; EP 1243131 A1 20020925; FR 2803081 A1 20010629; FR 2803081 B1 20021206; JP 2003529972 A 20031007; US 2002190216 A1 20021219; US 6737654 B2 20040518

DOCDB simple family (application)
FR 0003716 W 20001228; AU 3029601 A 20001228; CA 2395566 A 20001228; EP 00990831 A 20001228; FR 9916591 A 19991228; JP 2001549008 A 20001228; US 14945102 A 20020627