

Title (en)  
Device for the optical recognition of documents

Title (de)  
Einrichtung zum optischen Erkennen von Dokumenten

Title (fr)  
Dispositif pour la reconnaissance optique de documents

Publication  
**EP 0537431 B1 19970528 (DE)**

Application  
**EP 92113171 A 19920803**

Priority  
CH 300591 A 19911014

Abstract (en)  
[origin: EP0537431A1] A device for the optical recognition of documents (1) extends over the entire width of a transport plane (3). Regularly arranged photoelectric elements (4) whose optical axes determine a single sensor plane (5) aligned at right angles to the transport plane (3) of the document (1) receive light (7) altered by the document (1), a region (8), determined by the sensor plane (5), on the document (1) being illuminated by means of at least one luminous row (9; 10) inclined to the sensor plane (5). The adjacent light sources in each of the luminous rows (9; 10) are arranged at a regular source spacing (A) which is smaller than the sensor spacing (S) between two adjacent photoelectric elements (4). The light sources are set up to generate short light pulses, the light originating from a narrow spectral range. Each of the light sources belongs to one of a plurality of colour groups, the light sources of the same colour group having the same narrow spectral range. The photoelectric elements (4) convert the light (7) into electrical sensor signals. An optical means (21) determines the acceptance angle (  $\alpha$  ) of the photoelectric elements (4), which average the light (7) from mutually overlapping sections (29). <IMAGE>

IPC 1-7  
**G07D 7/00**; **G06K 7/10**

IPC 8 full level  
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CPC (source: EP US)  
**G07D 7/1205** (2017.04 - EP US); **G07D 7/121** (2013.01 - EP US); **G07D 7/20** (2013.01 - EP US)

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EP0622762A3; EP1894724A3; DE10005514A1; US5918960A; CN110458998A; CN101976477A; EP1587030A4; DE102007037923A1; DE19930651A1; DE19930651C2; US5915518A; EP1894724A2; US7969565B2; US8421046B2; US6819409B1; EP0926635A1; WO0010138A1; WO9701155A1; WO0062237A3; EP1337977B1; WO2008067889A1; WO9519019A3

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