

Title (en)
Register sensor

Title (de)
Registersensor

Title (fr)
Capteur du registre

Publication
EP 1593508 B1 20120829 (DE)

Application
EP 05102757 A 20050407

Priority
DE 102004021597 A 20040503

Abstract (en)
[origin: EP1593508A2] The sensor (15) to detect register marks on materials for printing, at a multi-color printing machine, establishes the register position for printing an overlaid color in register. The sensor optically scans the material, to detect a deviation between two overlaid printed colors, with links to a computer. The sensor is composed of at least one photo diode with at least two quadrants. The rectangular evaluation surface of the diode is aligned at an angle to the edges of the material being printed.

IPC 8 full level
B41F 33/00 (2006.01); **B41F 33/14** (2006.01); **B65H 23/02** (2006.01)

CPC (source: EP US)
B41F 33/0081 (2013.01 - EP US)

Cited by
DE102009012436A1; DE202011050286U1; DE102012104584A1; WO2013178360A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1593508 A2 20051109; EP 1593508 A3 20060705; EP 1593508 B1 20120829; CN 100526072 C 20090812; CN 1693075 A 20051109; DE 102004021597 A1 20051208; DE 102004021597 B4 20170413; JP 2005319801 A 20051117; US 2005249380 A1 20051110; US 2010007690 A1 20100114; US 7637210 B2 20091229; US 8161876 B2 20120424

DOCDB simple family (application)
EP 05102757 A 20050407; CN 200510069684 A 20050508; DE 102004021597 A 20040503; JP 2005135143 A 20050506; US 12149105 A 20050503; US 56338409 A 20090921