

Title (en)

OPTICAL CODE SCANNER WITH AUTOMATIC FOCUSING

Title (de)

OPTISCHER CODESCANNER MIT AUTOMATISCHER FOKUSSIERUNG

Title (fr)

LECTEUR DE CODE OPTIQUE À MISE AU POINT AUTOMATIQUE

Publication

EP 2218033 A1 20100818 (EN)

Application

EP 07844971 A 20071108

Priority

US 2007084043 W 20071108

Abstract (en)

[origin: WO2009061317A1] A code scanner, which illuminates a scanned code from a distance, includes a liquid lens which focuses the reflected image of the code on an image sensor. The scanner includes a range detector, preferably laser-based, which determines the distance to the scanned code, and the liquid lens is controlled to focus at the detected distance. A source of illumination is uncontrolled to maintain its intensity substantially constant, regardless of the distance of the scanned code. This can be achieved by controlling the intensity of illumination (directly), or the dispersal angle of illumination in relationship to the distance.

IPC 8 full level

G02B 3/14 (2006.01); **G02B 26/02** (2006.01); **G06K 7/10** (2006.01)

CPC (source: EP)

G02B 3/14 (2013.01); **G06K 7/10732** (2013.01); **G06K 7/10811** (2013.01); **G06K 2207/1013** (2013.01)

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 LV MC MT NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2009061317 A1 20090514; CN 101855639 A 20101006; EP 2218033 A1 20100818; EP 2218033 A4 20101229; JP 2011504247 A 20110203

DOCDB simple family (application)

US 2007084043 W 20071108; CN 200780101467 A 20071108; EP 07844971 A 20071108; JP 2010533055 A 20071108