

Title (en)

METHOD AND DEVICE FOR CONTACTLESS OPTICAL DETERMINATION OF THE 3-D POSITION OF AN OBJECT

Title (de)

VERFAHREN UND VORRICHTUNG ZUR BERÜHRUNGSLOSEN OPTISCHEN 3D-L AGEBESTIMMUNG EINES OBJEKTS

Title (fr)

PROCEDE ET DISPOSITIF POUR DETERMINER, OPTIQUEMENT ET SANS CONTACT, LA SITUATION TRIDIMENSIONNELLE D'UN OBJET

Publication

EP 1665162 A1 20060607 (DE)

Application

EP 04786848 A 20040923

Priority

- DE 2004002132 W 20040923
- DE 10345112 A 20030926

Abstract (en)

[origin: WO2005031647A1] The invention relates to a method and device for contactless optical determination of the 3D position of an object, i.e. the 3D position and 3D orientation of an object whose certain geometrical characteristics are known. The aim of said invention is to investigate complete 3D information on the studied object by simple means and at a high speed and accuracy of measurement. For this purpose, an object image is generated by means of a camera and the 3D position thereof based on the generated image is calculated by means of image information on the detected geometrical characteristics.

IPC 1-7

G06T 7/00

IPC 8 full level

G01B 11/03 (2006.01); **G06T 7/00** (2006.01)

CPC (source: EP US)

G06T 7/73 (2016.12 - EP US)

Citation (search report)

See references of WO 2005031647A1

Citation (examination)

- DE 4113992 A1 19921105 - AMELING WALTER [DE], et al
- DE 19934864 A1 20010208 - BOSCH GMBH ROBERT [DE]
- HORAUD R.: "New methods for matching 3-D objects with single perspective views", IEEE TRANSACTIONS ON PATTERN ANALYSIS AND MACHINE INTELLIGENCE, IEEE SERVICE CENTER, LOS ALAMITOS, CA, US, vol. PAMI-9, no. 3, May 1987 (1987-05-01), pages 401 - 412, XP009058237

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2005031647 A1 20050407; CN 1856804 A 20061101; DE 102004046584 A1 20050519; EP 1665162 A1 20060607;
JP 2007533963 A 20071122; US 2007009149 A1 20070111; US 8064686 B2 20111122

DOCDB simple family (application)

DE 2004002132 W 20040923; CN 200480027782 A 20040923; DE 102004046584 A 20040923; EP 04786848 A 20040923;
JP 2006527269 A 20040923; US 38938106 A 20060324