

Title (en)

OPTICAL POSITIONING DEVICE USING TELECENTRIC IMAGING

Title (de)

OPTISCHE POSITIONIERUNGSEINRICHTUNG MIT TELEZENTRISCHER ABBILDUNG

Title (fr)

DISPOSITIF DE POSITIONNEMENT OPTIQUE UTILISANT L'IMAGERIE TELECENTRIQUE

Publication

**EP 1747551 A4 20071031 (EN)**

Application

**EP 05749412 A 20050518**

Priority

- US 2005017462 W 20050518
- US 57331604 P 20040521
- US 12485805 A 20050509

Abstract (en)

[origin: WO2005114643A2] One embodiment relates to an optical displacement sensor for sensing movement of a data input device across a surface by determining displacement of optical features in a succession of frames. The sensor includes at least an illuminator (306), telecentric imaging optics (for example, 502 or 504) on the object (scattering surface) side, and an array of photosensitive elements (302). The illuminator (306) is configured to illuminate a portion of the surface (402). The telecentric imaging optics (for example, 502 or 504) is configured to image the optical features emanating from the illuminated portion of the surface (402), and the array of photosensitive elements (302) is configured to detect intensity data relating to the optical features imaged by the telecentric imaging optics (for example, 502 or 504). Other embodiments are also disclosed.

IPC 8 full level

**G06F 3/0354** (2013.01); **G09G 3/32** (2006.01); **G06F 3/03** (2006.01); **G09G 5/08** (2006.01)

CPC (source: EP KR)

**G06F 3/03** (2013.01 - KR); **G06F 3/0317** (2013.01 - EP); **G06F 3/042** (2013.01 - KR)

Citation (search report)

- No further relevant documents disclosed
- See references of WO 2005114643A2

Citation (examination)

EP 1160538 A1 20011205 - MITUTOYO CORP [JP]

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**WO 2005114643 A2 20051201**; **WO 2005114643 A3 20061221**; EP 1747551 A2 20070131; EP 1747551 A4 20071031; JP 2008500664 A 20080110; JP 4565243 B2 20101020; KR 100879174 B1 20090116; KR 20070029750 A 20070314; TW 200606392 A 20060216; TW I272369 B 20070201

DOCDB simple family (application)

**US 2005017462 W 20050518**; EP 05749412 A 20050518; JP 2007527424 A 20050518; KR 20067026821 A 20061220; TW 94116500 A 20050520