

Title (en)

POSITION DETERMINATION IN OPTICAL INTERFACE SYSTEMS

Title (de)

POSITIONSBESTIMMUNG IN OPTISCHEN SCHNITTSTELLENSYSTEMEN

Title (fr)

DÉTERMINATION DE POSITION DANS LES SYSTÈMES D'INTERFACE OPTIQUES

Publication

EP 2126673 A4 20150304 (EN)

Application

EP 07858984 A 20071207

Priority

- IB 2007003815 W 20071207
- US 87359406 P 20061208

Abstract (en)

[origin: WO2008068607A2] An optical interface system, such as a touch pad or a touch screen, includes an optical waveguide (P) having a first surface adapted to be engaged by an object in a point-of-touch (O) so as to reflect/scatter radiation into the waveguide (P). The system includes at least one emitter (E1) for injecting radiation into the waveguide (P) and at least one detector (D1, D2) for detecting injected radiation that has been reflected/scattered by the object. The emitter(s) and detector(s) form part of at least one range-finder of the system for determining the distance to the point-of-touch by comparing emitted and detected radiation. The system further includes means (C) for determining the position of the point-of-touch (O) on the waveguide (P). Such determining means (C) may operate on a plurality of distances determined by a plurality of range-finders or on at least one distance determined by a range-finder and a direction/angle for the emitted radiation and/or the detected radiation in a plane parallel to the first surface of the waveguide.

IPC 8 full level

G06F 3/041 (2006.01); **G06F 3/042** (2006.01)

CPC (source: EP US)

G06F 3/0418 (2013.01 - EP US); **G06F 3/0421** (2013.01 - EP); **G06F 3/0423** (2013.01 - EP US); **G06F 2203/04109** (2013.01 - EP)

Citation (search report)

- [I] WO 2005026938 A2 20050324 - O PEN APS [DK], et al
- [A] US 2003092448 A1 20030515 - FORSTROM HOWARD SCOTT [US], et al
- [A] US 5961959 A 19991005 - GERS-BARLAG HEINRICH [DE], et al
- See references of WO 2008068607A2

Citation (examination)

- US 5691959 A 19971125 - KRIEWALL JAMES A [US], et al
- EP 2005282 A1 20081224 - FLATFROG LAB AB [SE]

Designated contracting state (EPC)

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DOCDB simple family (publication)

WO 2008068607 A2 20080612; WO 2008068607 A3 20080807; EP 2126673 A2 20091202; EP 2126673 A4 20150304

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