

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 A2 20091202 (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

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CPC (source: EP US)

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