

Title (en)

SPATIAL AUGMENTED REALITY METHOD, DEVICE AND SYSTEM

Title (de)

VERFAHREN, VORRICHTUNG UND SYSTEM FÜR RÄUMLICHE ERWEITERTE REALITÄT

Title (fr)

PROCÉDÉ, DISPOSITIF ET SYSTÈME DE RÉALITÉ AUGMENTÉE SPATIALE

Publication

**EP 3535643 A1 20190911 (EN)**

Application

**EP 16794972 A 20161104**

Priority

EP 2016076714 W 20161104

Abstract (en)

[origin: WO2018082782A1] Method for detecting an interaction between a user and a three-dimensional physical object (24, 26) in a three-dimensional spatial user interface (100), the method comprising inputting into an electronic control unit (30) model object data at least comprising first spatial coordinates of a model of at least a part of an object surface relative to a coordinate system (x1, y1, z1; x2, y2, z2) of the object (24, 26), detecting, by means of a tracking system, the spatial position and orientation of the physical object (24, 26) relative to a coordinate system (x, y, z) of the spatial user interface (100), wherein the tracking system comprises a plurality of cameras (32a, 32b, 32c, 32d) and the electronic control unit (30) which is connected to the cameras (32a, 32b, 32c, 32d), calculating second spatial coordinates of the part of the object surface relative to the coordinate system (x, y, z) of the spatial user interface (100), detecting, by means of the tracking system, spatial coordinates of a hand held input device (28) manageable by the user relative to the coordinate system (x, y, z) of the spatial user interface (100), and detecting a selection of the part of the object surface by detecting that a spatial distance between the input device (28) and the part of the object surface is smaller than a predetermined value based on the second spatial coordinates of the part of the object surface and the spatial coordinates of the input device (28).

IPC 8 full level

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