

Title (en)

DEVICE AND METHOD FOR MULTI-DIMENSIONAL LOCATION OF TARGET OBJECTS, IN PARTICULAR RFID TRANSPONDERS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR MEHRDIMENSIONALEN ORTUNG VON ZIELOBJEKTEN, INSBESONDERE RFID-TRANSPONDERN

Title (fr)

DISPOSITIF ET PROCÉDÉ DE REPÉRAGE MULTIDIMENSIONNEL D OBJETS CIBLES, NOTAMMENT DE TRANSPONDEURS RFID

Publication

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Application

**EP 07703667 A 20070105**

Priority

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Abstract (en)

[origin: WO2007085517A1] The present invention relates to a radio-based system for multi-dimensional location of a target object (2). A target object (2) may be, in particular, an RFID transponder. In this context, a base signal (4) is emitted by a base station (1) and is sent back by a back scatter transponder. A distance between the base station (1) and the transponder is determined by means of a frequency spacing  $\Delta F$  between two maximum values in the base band of the spectrum of a base signal (4), transmitted with a simultaneously received response signal (5) superimposed on it, from an antenna (3) of the base station (1). Phase evaluation is carried out in order to calculate a target deviation angle  $\alpha_{\text{SUB}}$ . Depending on the number and arrangement of the antennas (3) of the base station (1), a unidimensional, two-dimensional or three-dimensional locating process can be carried out.

IPC 8 full level

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CPC (source: EP US)

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