

Title (en)

A METHOD AND AN APPARATUS FOR THE REDUNDANT OPTICAL MEASUREMENT AND/OR CALIBRATION OF A POSITION OF AN OBJECT IN SPACE

Title (de)

VERFAHREN UND VORRICHTUNG ZUR REDUNDANTEN OPTISCHEN MESSUNG UND/ODER KALIBRIERUNG EINER POSITION EINES OBJEKTS IM RAUM

Title (fr)

PROCÉDÉ ET APPAREIL POUR MESURE OPTIQUE REDONDANTE ET/OU ÉTALONNAGE DE POSITION D'OBJET DANS L'ESPACE

Publication

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Application

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Abstract (en)

[origin: WO2014139487A1] The invention concerns a method and an apparatus for the redundant optical measurement and/or optical calibration of a position of an object in space by means of at least one laser tracker placed on the measured or calibrated object and/or on a frame of the object and at least one reflector of a laser beam placed on the measured or calibrated object and/or on a frame of the object, whereas this method lies in that the laser tracker is set to at least one position on the frame in which it measures a position of at least three laser reflectors of laser beams on the frame, subsequently a calibration of the position of these laser reflectors of laser beams on the frame is performed, then the laser tracker is set to at least one position on the frame in which it measures the position of these at least three calibrated laser reflectors of laser beams on the frame and measures the position of at least three laser reflectors on the measured object and following these measurements the position of the measured object is determined, and/or the measured object on which the laser tracker is arranged is set to at least one position in space in which the laser tracker measures a position of at least three laser reflectors on a frame, on the base of these measurements a calibration of positions of laser reflectors on the frame is performed and, at the same time, the position of the measured object is determined. An apparatus for performing this method lies in comprising at least one laser tracker and at least three laser reflectors, whereas the laser reflectors are arranged in a triangle or a polygon. At least one laser tracker (4) is arranged on the linear guide (81) and/or at least one laser reflector (5) is arranged on the linear guide (82).

IPC 8 full level

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