

Title (en)

SYSTEM AND METHOD FOR PRECISE REAL-TIME CONTROL OF POSITION AND ORIENTATION OF TOOLING

Title (de)

SYSTEM UND VERFAHREN FÜR PRÄZISE ECHTZEITSTEUERUNG DER POSITION UND AUSRICHTUNG VON WERKZEUGEN

Title (fr)

SYSTÈME ET PROCÉDÉ DE COMMANDE PRÉCISE EN TEMPS RÉEL DE POSITION ET D'ORIENTATION D'OUTILLAGE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2009026641A1] A platform (204) supporting a raisable and pivotable robotic arm having a coarse positioning robotic arm (206) and at least one fine positioning robotic arm (210) is provided. The robotic arm is provided with apparatus for precise real-time measurement and control of the approximate position and orientation of the end (209) of the coarse positioning robotic arm relative to the position of a base (102). The base (102) has a distance sensor (107) with angle encoders arranged to send a beam to a target orientation sensor (105) located on said end (209) of the coarse positioning robotic arm (206), to measure and output spatial orientation data pertaining to the end (209). The target orientation sensor (103) outputs orientation data being a measurement of orientation of the end (209). Processor circuitry (100) derives data from the distance sensor (107) and the target orientation sensor (105), and uses this data in control of the approximate position of the end (209) by controlling the position of the coarse positioning robotic arm (206), and to control the position and orientation of the fine positioning robotic arm (210).

IPC 8 full level

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Citation (search report)

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