

Title (en)

SYSTEM AND METHOD FOR CARRYING OUT AND VISUALLY DISPLAYING SIMULATIONS IN AN AUGMENTED REALITY

Title (de)

SYSTEM UND VERFAHREN ZUR DURCHFÜHRUNG UND VISUALISIERUNG VON SIMULATIONEN IN EINER ERWEITERTEN REALITÄT

Title (fr)

SYSTEME ET PROCEDE POUR METTRE EN OEUVRE ET VISUALISER DES SIMULATIONS DANS UNE REALITE ETENDUE

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2005045729A1] The invention relates to a system and method inside an augmented reality (AR) system for visually displaying simulation results in a mixed virtual-real environment. The system and method permit one or more users to carry out simulation processes in the context of a real environment, particularly in the field of industrial automation systems and to visually display their static and dynamic results in the context of the real environment. Processes running in the real environment are detected and synchronized with the simulation. A control unit enables a reciprocal influencing of real processes with the simulation. In addition, the user can control the execution of the simulation via a user interface.

IPC 8 full level

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Citation (search report)

See references of WO 2005045729A1

Citation (examination)

- INNOCENTI M ET AL: "A synthetic environment for simulation and visualization of dynamic systems", AMERICAN CONTROL CONFERENCE, 1999. PROCEEDINGS OF THE 1999 SAN DIEGO, CA, USA 2-4 JUNE 1999, PISCATAWAY, NJ, USA,IEEE, US, vol. 3, 2 June 1999 (1999-06-02), pages 1769 - 1773, XP010344647, ISBN: 978-0-7803-4990-2, DOI: 10.1109/ACC.1999.786144
- VIJAIMUKUND RAGHAVAN ET AL: "Interactive Evaluation of Assembly Sequences Using Augmented Reality", IEEE TRANSACTIONS ON ROBOTICS AND AUTOMATION, IEEE INC, NEW YORK, US, vol. 15, no. 3, 1 June 1999 (1999-06-01), XP011053407, ISSN: 1042-296X
- DIXON K ET AL: "RAVE: a real and virtual environment for multiple mobile robot systems", INTELLIGENT ROBOTS AND SYSTEMS, 1999. IROS '99. PROCEEDINGS. 1999 IEEE /RSJ INTERNATIONAL CONFERENCE ON KYONGJU, SOUTH KOREA 17-21 OCT. 1999, PISCATAWAY, NJ, USA,IEEE, US, vol. 3, 17 October 1999 (1999-10-17), pages 1360 - 1367, XP010362379, ISBN: 978-0-7803-5184-4, DOI: 10.1109/IROS.1999.811669

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