

Title (en)  
COMMUNICATION AND PROCESS SEQUENCING ARCHITECTURE, SYSTEM, AND METHOD FOR HARDWARE-IN-THE-LOOP SIMULATION

Title (de)  
KOMMUNIKATIONS- UND PROZESSESEQUENZIERUNGSSYSTEM, SYSTEM UND VERFAHREN ZUR HARDWARE-IN-THE-LOOP-SIMULATION

Title (fr)  
ARCHITECTURE DE COMMUNICATION ET DE SÉQUENCEMENT DE PROCESSUS, SYSTÈME ET PROCÉDÉ POUR SIMULATION AVEC MATÉRIEL DANS LA BOUCLE

Publication  
**EP 2548125 A4 20131225 (EN)**

Application  
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Priority  
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Abstract (en)  
[origin: WO2011115590A1] An embedded system simulation architecture includes a target system and a host system providing a graphical simulation environment. The target system includes a transmission module and a reception module operating in a recurrent target-side communication loop. The host system includes a transmission module and a reception module operating in a recurrent host-side communication loop. The host-side communication loop is synchronized to the target-side communication loop by way of packet reception from the target system. Absent such packet reception, the host system remains in a host-side wait state. The target-side communication loop can be synchronized to the host-side communication loop by way of packet reception from the host system. Absent such packet reception, the target system can remain in a target-side wait state. The host system can include a trigger module configured to send a dummy packet to the target system to initiate simulation operations in response to user input.

IPC 8 full level  
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CPC (source: EP)  
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Citation (search report)

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- [YA] MCNINCH ET AL: "AN EXPERIMENTAL MOBILE ROBOT PLATFORM FOR AUTONOMOUS SYSTEMS RESEARCH AND EDUCATION", ROBOTICS AND APPLICATIONS - IASTED INTERNATIONAL CONFERENCE,, 1 January 2009 (2009-01-01), pages 412 - 418, XP009174228
- [YA] ALEXANDER BEHRENS ET AL: "MATLAB Meets LEGO Mindstormsâ A Freshman Introduction Course Into Practical Engineering", IEEE TRANSACTIONS ON EDUCATION, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 53, no. 2, 18 August 2009 (2009-08-18), pages 306 - 317, XP011295123, ISSN: 0018-9359
- See references of WO 2011115590A1

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