

Title (en)
AN ENERGY EFFICIENT CRANE, AND A METHOD OF THE CRANE

Title (de)
ENERGIEEFFIZIENTER KRAN UND VERFAHREN DES KRANS

Title (fr)
GRUE ÉCONOME EN ÉNERGIE ET PROCÉDÉ DE LA GRUE

Publication
EP 4086216 C0 20231129 (EN)

Application
EP 21172008 A 20210504

Priority
EP 21172008 A 20210504

Abstract (en)
[origin: EP4086216A1] A crane (2) mounted on a vehicle (4), comprising a crane boom system, comprising crane components (6) that includes a crane tip (8); hydraulic actuators (10) which are arranged to apply movements to the crane boom system in response to received driving instructions (14); a sensor system (16); a control interface (20) arranged to receive a set of operating instructions, defining wanted movements of the crane components, and a crane controller (24) configured to generate driving instructions (14) to be applied by the hydraulic actuators. The crane controller (24) estimates a pressure level of a required working pressure of the hydraulic pump (12) and a required flow level of each of the hydraulic actuators for the wanted movements of the crane components (6), based on the generated sensor signals (18) and/or predetermined operation conditions, and estimates a waste contribution measure for the wanted movements of the crane components (6). If the estimated waste contribution measure is larger than a predetermined level, the crane controller (24) generates an energy consumption status signal (30) indicating that the present crane operations are inefficient.

IPC 8 full level
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