

Title (en)
QUICK COUPLING DEVICE

Title (de)
SCHNELLKUPPLUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE COUPLAGE RAPIDE

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Application
EP 22838132 A 20220707

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Abstract (en)
[origin: WO2023282838A1] A quick coupling device (1) for quick coupling of an implement (3) to an operating arm (2) of a working machine, said device comprising: a frame (40) having a first and a second shaft (15a, 15b), each shaft being connectable to the operating arm; a first and a second locking pin (14a, 14b) extending outwards from the frame along a common transverse axis, each locking pin being engageable with a pair of front coupler hooks of the implement for mechanically locking of a longitudinal position thereof during engagement; a first and a second hydraulic locking piston (5a, 5b) outwardly movable in opposite directions from a cylinder housing (8) along an axis parallel with said transverse axis, each locking piston is provided with a locking end having a locking wedge surface (9) being engageable with a pair of rear locking brackets of the implement for mechanically locking the longitudinal position thereof during engagement; a first and a second electric position sensor (71, 72) being disposed within the hydraulic cylinder housing, and being configured to generate a first and a second position signal respectively indicative of the position of the first and second hydraulic locking piston respectively relative to the hydraulic cylinder housing; and a control unit being configured to receive the first and the second position signal, and based on the these signals the control unit is configured to generate: at least one unlocked mode signal indicative of the quick coupling device being in an unlocked mode relative to an engageable implement, at least one locked mode signal indicative of the quick coupling device being in a locked mode relative to an engageable implement, and at least one maintenance mode signal indicative of it being in a maintenance mode relative to an engageable implement. The invention also concerns a working machine comprising a quick coupling device (1).

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