

Title (en)  
ELECTRO-HYDRAULIC CONTROL CIRCUIT OF A HYDRAULIC ACTUATOR FOR AN ELECTRIFIED WORK VEHICLE

Title (de)  
ELEKTROHYDRAULISCHE STEUERSCHALTUNG EINES HYDRAULISCHEN AKTUATORS FÜR EIN ELEKTRIFIZIERTES ARBEITSFAHRZEUG

Title (fr)  
CIRCUIT DE COMMANDE ÉLECTROHYDRAULIQUE D'UN ACTIONNEUR HYDRAULIQUE POUR UN VÉHICULE DE TRAVAIL ÉLECTRIFIÉ

Publication  
**EP 4119731 A1 20230118 (EN)**

Application  
**EP 22184195 A 20220711**

Priority  
IT 202100018941 A 20210716

Abstract (en)  
Electro-hydraulic circuit (HC) comprising a fixed displacement hydraulic pump (P) and an electric motor (M) arranged to drive the hydraulic pump in rotation, a recovery tank (T) arranged to collect hydraulic oil, an actuator (BUCKET , BOOM, AUX) hydraulic arranged to move a work member (B, T) and be powered by the electro-hydraulic circuit, an directional open center electro-valve (V1, V2, V3) operatively interposed between said hydraulic pump and said actuator and defining a rest condition in which it isolates the hydraulic actuator by connecting the hydraulic pump with the recovery tank, and an overpressure valve (SV) interposed between the electro-hydraulic valve and the recovery tank and configured for open when a first predetermined pressure threshold is exceeded. The electric motor (M) is configured to deactivate when the electro-valve is in rest condition. In addition, a pressure sensor (PS) is associated with a portion of the circuit between the hydraulic pump and the electro-valve to keep the aforementioned portion of the hydraulic circuit pressurized.

IPC 8 full level  
**E02F 9/22** (2006.01); **E02F 9/20** (2006.01); **F15B 7/00** (2006.01)

CPC (source: EP)  
**E02F 9/207** (2013.01); **E02F 9/2228** (2013.01); **E02F 9/2282** (2013.01); **F15B 21/087** (2013.01); **F15B 2211/20515** (2013.01); **F15B 2211/20538** (2013.01); **F15B 2211/3116** (2013.01); **F15B 2211/327** (2013.01); **F15B 2211/329** (2013.01); **F15B 2211/45** (2013.01); **F15B 2211/50518** (2013.01); **F15B 2211/50554** (2013.01); **F15B 2211/5156** (2013.01); **F15B 2211/555** (2013.01); **F15B 2211/6309** (2013.01); **F15B 2211/6346** (2013.01); **F15B 2211/6355** (2013.01); **F15B 2211/6651** (2013.01); **F15B 2211/88** (2013.01)

Citation (search report)  
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• [A] JP H11336703 A 19991207 - YUSHIN SEIKI KOGYO KK  
• [A] US 8899035 B2 20141202 - NISHIKAWA HIROYASU [JP], et al  
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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

Designated validation state (EPC)  
KH MA MD TN

DOCDB simple family (publication)  
**EP 4119731 A1 20230118; EP 4119731 B1 20240911; IT 202100018941 A1 20230116**

DOCDB simple family (application)  
**EP 22184195 A 20220711; IT 202100018941 A 20210716**