

Title (en)  
AUTOMATIC-PRESSURE-MATCHING ENERGY UTILIZATION SYSTEM

Title (de)  
ENERGIENUTZUNGSSYSTEM MIT AUTOMATISCHEM DRUCKABGLEICH

Title (fr)  
SYSTÈME D'UTILISATION D'ÉNERGIE MIS EN CORRESPONDANCE AVEC UNE PRESSION AUTOMATIQUE

Publication  
**EP 3626979 A1 20200325 (EN)**

Application  
**EP 18802642 A 20180417**

Priority  
• CN 201710343343 A 20170516  
• CN 2018083257 W 20180417

Abstract (en)  
A pressure self-matching energy utilization system includes a synchronous motor (1), a control valve (2), a working pump (3), an energy accumulator (4) and a pressure actuation element (5) and corresponding oil pipe connection. A main outlet (OUT) of the synchronous motor is connected to a load keeping cavity of the pressure actuation element. A first inlet (IN1) of the synchronous motor is connected to an oil port of the energy accumulator via a first switch valve (K1) of the control valve. A second inlet (IN2) of the synchronous motor is connected to an output port of the working pump via a second switch valve (K2) of the control valve. The system can automatically match the output pressure of the working pump and the output pressure of the energy accumulator based on the magnitude of external load, to achieve the purpose of fully using the pressure energy recycled in the energy accumulator.

IPC 8 full level  
**F15B 21/14** (2006.01); **F15B 1/02** (2006.01)

CPC (source: CN EP)  
**E02F 9/2217** (2013.01 - EP); **E02F 9/2296** (2013.01 - EP); **F15B 1/024** (2013.01 - CN EP); **F15B 11/032** (2013.01 - EP); **F15B 21/14** (2013.01 - CN EP); **F15B 2211/20538** (2013.01 - CN EP); **F15B 2211/20546** (2013.01 - CN EP); **F15B 2211/212** (2013.01 - EP); **F15B 2211/214** (2013.01 - EP); **F15B 2211/7053** (2013.01 - EP); **F15B 2211/7058** (2013.01 - EP); **F15B 2211/7128** (2013.01 - EP); **F15B 2211/761** (2013.01 - EP); **F15B 2211/88** (2013.01 - EP)

Cited by  
CN111720369A

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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

DOCDB simple family (publication)  
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