

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 A4 20210224 (EN)

Application
EP 18802642 A 20180417

Priority
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Abstract (en)
[origin: EP3626979A1] 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.

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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);
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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)

Citation (search report)
• [X] CN 204646814 U 20150916 - METALLURG ENGINEERING TECHNOLOGY BEIJING CO LTD
• [X] US 2015204354 A1 20150723 - KRITTIAN LUKAS [DE]
• [I] DE 202014006861 U1 20141201 - HOHENLOHER SPEZIAL MASCHB GMBH & CO KG [DE]
• See also references of WO 2018210084A1

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Designated contracting state (EPC)
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EP 3626979 A1 20200325; **EP 3626979 A4 20210224**; AU 2018268620 A1 20181220; AU 2018268620 B2 20200611;
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