

Title (en)  
HYDRA-MECHANICAL DUAL ENGINE

Title (de)  
HYDRAMECHANISCHER DOPPELMOTOR

Title (fr)  
DOUBLE MOTEUR HYDROMÉCANIQUE

Publication  
**EP 4065817 A1 20221005 (EN)**

Application  
**EP 19839661 A 20191129**

Priority  
IB 2019060178 W 20191129

Abstract (en)  
[origin: WO2021105745A1] The Hydro-Mechanical Dual Engine is an aggregate engine where the piston movement is generated using either the internal combustion process, or electric power. The transmission of energy and the conversion of the straight piston movement into the rotational motion of the engine two main shafts are accomplished through a hydraulic-mechanical system. The movement of the pistons and sliding lids is accomplished thanks to the mechanical coupling system. The latter is designed to ensure the proper synchronization and positioning of lids and pistons and maximizes oil efficiency. The engine has the ability to fully function as an electric motor. The mechanical linkage system is not mechanically coupled to the engine shafts, allowing the latter to rotate freely and independently of the pistons and receive accumulating rotational speeds.

IPC 8 full level  
**F01B 1/08** (2006.01); **F02B 71/04** (2006.01)

CPC (source: EP)  
**F01B 1/08** (2013.01); **F02B 71/045** (2013.01)

Citation (search report)  
See references of WO 2021105745A1

Designated contracting state (EPC)  
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Designated extension state (EPC)  
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