

Title (en)

MOTOR COMPRESSOR-MOTOR ALTERNATOR UNIT WITH SUPPLEMENTARY COMPRESSED AIR INJECTION OPERATING IN MONO-AND MULTI-ENERGY

Title (de)

MOTORVERDICHTER-MOTORWECHSELSTROMGENERATOR-EINHEIT MIT ZUSÄTZLICHER DRUCKLUFTEINSPRITZUNG ZUM BETRIEB UNTER EINER ODER ZWEI ENERGIEQUELLEN

Title (fr)

GROUPE MOTOCOMPRESSEUR-MOTOALTERNATEUR A INJECTION D'AIR COMPRIME ADDITIONNEL FONCTIONNANT EN MONO ET PLURI ENERGIES

Publication

EP 1456537 A1 20040915 (FR)

Application

EP 02795340 A 20021025

Priority

- FR 0203667 W 20021025
- FR 0113798 A 20011025

Abstract (en)

[origin: WO03036088A1] The invention concerns a motor compressor-motor alternator unit with supplementary compressed air injection, comprising a high-pressure compressed air reservoir (25) and using a piston stroke control as well as an ambient heat energy recovery device whereof the pistons (1, 1A) have two stages, one for motor work and the other for compressor work, and whereof the motor flywheel (43) is equipped with means for providing an electric motor enabling to operate the unit in compressor mode by using a domestic power network, the unit being further equipped with a fossil-fuel thermal heater (29A) combined with a thermochemical heater. The invention is applicable to land vehicles, cars, buses, motorcycles, boats, emergency generators, stationary heat engines.

IPC 1-7

F04B 25/02; F01B 17/02; F02B 63/06; F02B 75/32

IPC 8 full level

F01B 9/02 (2006.01); **F01B 17/02** (2006.01); **F02B 63/06** (2006.01); **F02B 75/24** (2006.01); **F02B 75/32** (2006.01); **F04B 25/02** (2006.01);
F02B 75/02 (2006.01); **F02B 75/18** (2006.01)

CPC (source: EP US)

F01B 17/02 (2013.01 - EP US); **F01B 17/022** (2013.01 - EP US); **F02B 63/06** (2013.01 - EP US); **F02B 75/243** (2013.01 - EP US);
F02B 75/32 (2013.01 - EP US); **F04B 25/02** (2013.01 - EP US); **F02B 2075/026** (2013.01 - EP US); **F02B 2075/028** (2013.01 - EP US);
F02B 2075/1808 (2013.01 - EP US); **F02B 2275/36** (2013.01 - EP US)

Citation (search report)

See references of WO 03036088A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03036088 A1 20030501; EP 1456537 A1 20040915; FR 2831598 A1 20030502; JP 2005506489 A 20050303; PE 20050539 A1 20050706;
TW 200422510 A 20041101; US 2004261415 A1 20041230; WO 03036087 A2 20030501; WO 03036087 A3 20031002

DOCDB simple family (application)

FR 0203667 W 20021025; EP 02795340 A 20021025; FR 0113798 A 20011025; FR 0203666 W 20021025; JP 2003538570 A 20021025;
PE 2003001072 A 20031022; TW 92109439 A 20030423; US 83000504 A 20040423