

Title (en)

COMPRESSED GAS SYSTEM EMPLOYING HYDRAULIC MOTOR FOR ENERGY CAPTURE

Title (de)

DRUCKGASSYSTEM MIT EINEM HYDRAULIKMOTOR ZUR ENERGIEAUFNAHME

Title (fr)

SYSTÈME DE GAZ COMPRIMÉ UTILISANT UN MOTEUR HYDRAULIQUE POUR LA CAPTURE D'ÉNERGIE

Publication

EP 2836709 A4 20160323 (EN)

Application

EP 13760765 A 20130314

Priority

- US 201261612196 P 20120316
- US 201261623491 P 20120412
- US 2013031742 W 20130314

Abstract (en)

[origin: WO2013138667A1] Various techniques may be employed alone or in combination to allow efficient storage and recovery of energy from compressed gas. In certain embodiments, a hydraulic motor may capture energy released by depressurization of a separated heat-exchange liquid that was pressurized during gas compression. Particular embodiments may be employed in conjunction with a heat engine. According to some embodiments, a compressed gas storage unit may include a gas-liquid interface between a liquid portion and a gas portion, with a hydraulic pump/motor capturing energy of liquid displaced by an inflow of compressed gas.

IPC 8 full level

F03G 7/00 (2006.01); **F01B 21/00** (2006.01); **F01K 23/12** (2006.01); **F01K 27/00** (2006.01); **F03B 13/00** (2006.01); **F03B 17/00** (2006.01); **F03D 9/00** (2016.01); **F04B 35/00** (2006.01)

CPC (source: CN EP)

F01B 21/00 (2013.01 - CN EP); **F01K 23/12** (2013.01 - EP); **F01K 27/005** (2013.01 - CN EP); **F04B 35/008** (2013.01 - CN EP)

Citation (search report)

- [A] US 2011094212 A1 20110428 - AST GABOR [DE], et al
- [A] US 2006218924 A1 20061005 - MITANI SHINICHI [JP]
- See references of WO 2013138667A1

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

DOCDB simple family (publication)

WO 2013138667 A1 20130919; CA 2867333 A1 20130919; CN 104285060 A 20150114; EP 2836709 A1 20150218; EP 2836709 A4 20160323

DOCDB simple family (application)

US 2013031742 W 20130314; CA 2867333 A 20130314; CN 201380023922 A 20130314; EP 13760765 A 20130314