

Title (en)  
COMPRESSED AIR ENERGY STORAGE SYSTEM WITH A HEAT MAINTENANCE SYSTEM

Title (de)  
DRUCKLUFTENERGIESPEICHERANLAGE MIT WARMHALTESYSTEM

Title (fr)  
INSTALLATION DE STOCKAGE D'ENERGIE PAR AIR COMPRIME AVEC SYSTEME DE MAINTIEN DE TEMPERATURE

Publication  
**EP 1485591 A1 20041215 (DE)**

Application  
**EP 03714943 A 20030310**

Priority  
• CH 18542002 A 20021105  
• EP 0350046 W 20030310  
• US 36562402 P 20020320

Abstract (en)  
[origin: WO03078812A1] The invention relates to a compressed air energy storage system comprises a cavern (1) for stored compressed air and a system for providing compressed air for power transmission (3, 5). Said system contains a heat exchanger (7) and a first valve arrangement (8) which guides the flow of compressed air from the heat exchanger and to the power transmission (3, 5). The invention also relates to a system for maintaining the heat of the power transmission (3, 5) when the compressed air energy storage system is in standby mode, comprising a heat exchanger (2) and/or one electric supplementary air heater (11) and a second valve arrangement (10, 13) which guides the flow of air for heat maintenance. Said system for heat maintenance of the power transmission (3, 5) allows improved temperature control and avoids problems which are connected to a heat maintenance system which contains a gasification burner.

IPC 1-7  
**F02C 6/16**; **F02C 7/08**

IPC 8 full level  
**F02C 6/16** (2006.01); **F02C 7/08** (2006.01)

CPC (source: EP)  
**F02C 6/16** (2013.01); **F02C 7/08** (2013.01); **Y02E 60/16** (2013.01)

Citation (search report)  
See references of WO 03078812A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**WO 03078812 A1 20030925**; AU 2003219149 A1 20030929; EP 1485591 A1 20041215

DOCDB simple family (application)  
**EP 0350046 W 20030310**; AU 2003219149 A 20030310; EP 03714943 A 20030310