Title (en)
Method and assembly for storing energy

Title (de)
Verfahren und Anordnung zur Speicherung von Energie

Title (fr)
Procédé et agencement pour l'accumulation d'énergie

Publication
EP 2634383 B1 20160427 (DE)

Application
EP 13156878 A 20130227

Priority
- DE 102012101701 A 20120301
- DE 102012104185 A 20120514
- DE 102012104416 A 20120522

Abstract (en)
[origin: EP2634383A1] The method involves removing energy in which liquid air is taken and regasifying energy out of a storage tank (7). The pressure of air is increased by a pump and temperature of air is increased to ambient temperature by thermal compression. The produced compressed air is driven by a main turbine (12). The temperature level of liquid air extracted from the storage tank for condensation with low temperature refrigerant on lowest level is exploited in single-or multi-stage Rankine process. The energy generated during Rankine process is merged with the energy generated by main turbine. An independent claim is included for an arrangement for storing energy in form of air.

IPC 8 full level
F01K 3/00 (2006.01); **F01K 23/10** (2006.01); **F01K 25/10** (2006.01); **F02C 6/16** (2006.01); **F02C 6/18** (2006.01); **F25J 1/00** (2006.01); **F25J 1/02** (2006.01)

CPC (source: EP)
F01K 3/00 (2013.01); **F01K 23/10** (2013.01); **F01K 25/10** (2013.01); **F25J 1/0012** (2013.01); **F25J 1/0037** (2013.01); **F25J 1/004** (2013.01); **F25J 1/0201** (2013.01); **F25J 1/0228** (2013.01); **F25J 1/0242** (2013.01); **F25J 1/0251** (2013.01); F25J 2230/40 (2013.01); F25J 2240/42 (2013.01)

Cited by
CN114033515A; CN114991896A; CN112963207A; FR3117164A1; CN115492651A; CN109630220A; CN113958374A; CN105888742A; CN108979762A; CN103527274A; CN109579432A; EP2930318A1; CN106414914A; CZ308811B6; US11421560B2; US10473029B2; WO2015105670A1; WO2022117407A1; WO2015154862A1; US11073080B2; US11674439B2; US11221177B2; US11686527B2; US10738696B2

Designated contracting state (EPC)
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DOCDB simple family (publication)
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