

Title (en)
Thermo electric energy storage system

Title (de)
Thermoelektrisches Stromspeichersystem

Title (fr)
Système de stockage d'énergie thermo-électrique

Publication
EP 2441926 A1 20120418 (EN)

Application
EP 10187581 A 20101014

Priority
EP 10187581 A 20101014

Abstract (en)
Steam bled from a turbine 14 of a power plant 12 is used to heat, through a split stream heat exchanger 20, an energy storage system 10 with a low temperature storage 26, an intermediate thermal storage 24 and a high temperature storage 22. A further split stream heat exchanger 30 is used to efficiently heat the working fluid of a heat engine cycle 29 for generating electricity. During times when the load on the power plant 12 is low, surplus heat from the turbine 14 may be stored in the energy storage system 10. The stored heat may be used to generate electricity for compensating load peaks on the power plant 12. For example, the heat engine cycle 29 may drive an additional generator 40.

IPC 8 full level
F01K 3/12 (2006.01); **F01K 25/10** (2006.01)

CPC (source: EP)
F01K 3/12 (2013.01); **F01K 25/103** (2013.01)

Citation (applicant)
US 4428190 A 19840131 - BRONICKI LUCIEN Y [IL]

Citation (search report)
[A] GB 1524236 A 19780906 - EXXON RESEARCH ENGINEERING CO

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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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
EP 2441926 A1 20120418; WO 2012049092 A1 20120419

DOCDB simple family (application)
EP 10187581 A 20101014; EP 2011067573 W 20111007