

Title (en)
THERMAL ENERGY STORAGE SYSTEM

Title (de)
WÄRMEENERGIESPEICHERSYSTEM

Title (fr)
SYSTÈME DE STOCKAGE D'ÉNERGIE THERMIQUE

Publication
EP 3933176 A1 20220105 (EN)

Application
EP 20183437 A 20200701

Priority
EP 20183437 A 20200701

Abstract (en)
A thermal energy storage system is provided. The system comprises an energy storage device (20) configured to store thermal energy, a charging flow path (41) configured to guide a heat transfer medium from a heat source (30) to the energy storage device (20) in order to transfer thermal energy from the heat source (30) to the energy storage device (20), and a discharging flow path (42) configured to guide the heat transfer medium from the energy storage device (20) to a heat consumer (50) in order to transfer thermal energy from the energy storage device (20) to the heat consumer (50). A blower (11) of the system (10) is configured to convey the heat transfer medium in the charging flow path (41) and/or the discharging flow path (42). The thermal energy storage system (10) further comprises a blower driving turbine (60) a rotational output of which is coupled to the blower (11) to provide rotational mechanical energy to the blower (11) so as to drive the blower (11).

IPC 8 full level
F01K 3/18 (2006.01)

CPC (source: EP)
F01K 3/18 (2013.01)

Citation (applicant)
EP 3102796 A1 20161214 - SIEMENS AG [DE]

Citation (search report)
• [XA] US 2016177822 A1 20160623 - HOWES JONATHAN SEBASTIAN [GB], et al
• [A] US 2020165967 A1 20200528 - KERTH JASON M [US]
• [A] US 2018179917 A1 20180628 - APTE RAJ [US], et al
• [A] CN 103410616 B 20151021

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 3933176 A1 20220105; WO 2022002688 A1 20220106

DOCDB simple family (application)
EP 20183437 A 20200701; EP 2021066940 W 20210622