

Title (en)

A MASSIVE ENERGY STORAGE SYSTEM WITH VERTICAL OR NEARLY VERTICAL MOVEMENT OF HEAVY MASS

Title (de)

MASSIVENERGIESPEICHERUNGSSYSTEM MIT VERTIKALER ODER NAHEZU VERTIKALER BEWEGUNG VON SCHWERER MASSE

Title (fr)

SYSTÈME DE STOCKAGE D'ÉNERGIE MASSIVE À MOUVEMENT VERTICAL OU QUASI-VERTICAL DE MASSE LOURDE

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Application

EP 17874263 A 20170726

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Abstract (en)

[origin: WO2018094448A1] This invention discloses a massive energy storage with vertical or nearly vertical movement of heavy mass placed in a container. It is based on the working mechanism of either one of two linear machines, each of which contains two sets of conductors, named as set-S and set-R conductors. The set-S conductors act as stationary conductors while the set-R conductors act as moving conductors. Interleaved magnetic structure could be adopted to provide alternative design. A nearly-closed magnetic path is designed to enhance the coupling between the magnetic field produced by the stationary conductors and moving conductors. Accompanying platforms for parking containers are also adopted. Due to the adoption of vertical or nearly vertical movement of heavy mass, minimum loss due to friction could be achieved. Such designed energy storage system can be constructed on land or along the slope of a mountain/mound or on/in sea/river to achieve massive energy storage.

IPC 8 full level

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Citation (search report)

- [X] WO 02076782 A2 20021003 - POWELL JAMES RUSSELL [US]
- [A] US 2011285147 A1 20111124 - FYKE AARON D [US], et al
- See references of WO 2018094448A1

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