

Title (en)  
GEOTHERMAL COLUMN

Title (de)  
GEOTHERMISCHE SÄULE

Title (fr)  
COLONNE GÉOTHERMIQUE

Publication  
**EP 2635856 A1 20130911 (EN)**

Application  
**EP 11838386 A 20110803**

Priority  
• US 41005010 P 20101104  
• US 2011046397 W 20110803

Abstract (en)  
[origin: WO2012060912A1] An improved heat transfer column for geothermal heating and cooling in which refrigerant lines are wound in a spiral fashion about a vertically oriented support. The spiral tubing is surrounded by a flexible, semi-flexible, or rigid liner which is filled with water, the liner being positioned within a cavity in an earth mass. During operation, water within the tube rises and/or by convection and transfers heat evenly to the water within the liner for subsequent transfer to the earth mass. This heat is subsequently extracted from or rejected into the earth mass during a heat transfer cycle, and means is provided for transfer of a portion of the heat in the water to the ambient atmosphere.

IPC 8 full level  
**F24J 3/08** (2006.01); **F25B 30/06** (2006.01)

CPC (source: EP US)  
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