

Title (en)
COMPRESSOR-FREE COOLING SYSTEM POWERED BY HEAT SOURCE

Title (de)
VERDICHTERLOSES KÜHLSYSTEM MIT WÄRMEQUELLE

Title (fr)
SYSTÈME DE REFROIDISSEMENT SANS COMPRESSEUR ALIMENTÉ EN ÉNERGIE PAR UNE SOURCE DE CHALEUR

Publication
EP 2778568 A1 20140917 (EN)

Application
EP 11874754 A 20111104

Priority
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• CN 2011081806 W 20111104

Abstract (en)
A cooling system comprises a heat source (1), providing heat; a power generation device (2), heating a cooling medium (3) through the heat source (1) to increase the temperature and pressure of the cooling medium (3) and gasifying the same; a condenser (5), due to a pressure difference incurred in the power generation device (2), the liquid cooling medium (3) flowing from the power generation device (2) into the condenser (5), and the liquid cooling medium (3) decreasing; a throttle valve (7), making the liquid cooling medium (3) decrease the pressure thereof and absorb heat to be sprayed to an evaporator (8); the evaporator (8), the cooling medium (3) performing heat exchanges heat in the evaporator (8) with a refrigeration output (10); and a liquid medium reflux device (15), the liquid medium (3) accumulated at the bottom of the evaporator (8) flowing back freely to the power generation device (2) under the action of gravity. The evaporator (8), the liquid medium reflux device (15), and the power generation device (2) are arranged are vertically arranged in a descending order.

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Cited by
CN107883605A

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