

Title (en)

EVAPORATIVE COOLING TOWER ENHANCEMENT THROUGH COOLING RECOVERY

Title (de)

EFFIZIENTERER VERDUNSTUNGSKÜLTURM DURCH KÜHLUNGSRÜCKGEWINNUNG

Title (fr)

AMELIORATION DE TOURS DE REFROIDISSEMENT PAR EVAPORATION PAR RECUPERATION DE REFROIDISSEMENT

Publication

EP 2279386 A1 20110202 (EN)

Application

EP 09733147 A 20090418

Priority

- US 2009041056 W 20090418
- US 4603608 P 20080418

Abstract (en)

[origin: WO2009129517A1] A method of enhancing evaporative cooling towers of various types. Such cooling towers have a flow of water, an air intake stream of ambient air and an air exhaust such that the flow of water is cooled by ambient air from the air intake and evaporating a portion of that water flow into the ambient air, and the air discharge stream for the ambient air and a portion of evaporated water from the water flow. The method provides a closed cycle coolant channel having a heated heat discharge portion and a cooled heat sink, placing the cooled portion at the air intake, placing the heated portion in the flow of the air at the air exhaust. The ambient air flow at the intake is cooled by the closed cycle coolant channel, reducing its wet bulb temperature and increasing the capability of the cooling tower to cool the flow of water.

IPC 8 full level

F28C 1/00 (2006.01)

CPC (source: EP US)

F28C 1/06 (2013.01 - EP US); **F28C 1/14** (2013.01 - EP US); **F28D 15/0266** (2013.01 - EP US); **Y02B 30/70** (2013.01 - EP)

Citation (search report)

See references of WO 2009129517A1

Designated contracting state (EPC)

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 SE SI SK TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2009129517 A1 20091022; AU 2009237550 A1 20091022; CN 102057243 A 20110511; EP 2279386 A1 20110202; IL 208764 A0 20101230; KR 20110021783 A 20110304; RU 2010143983 A 20120527; US 2011174003 A1 20110721

DOCDB simple family (application)

US 2009041056 W 20090418; AU 2009237550 A 20090418; CN 200980121448 A 20090418; EP 09733147 A 20090418; IL 20876410 A 20101017; KR 20107025818 A 20090418; RU 2010143983 A 20090418; US 98852009 A 20090418