

Title (en)

Tubular heat exchange battery for closed circuit evaporative cooling towers

Title (de)

Rohrwärmetauscherblock für geschlossenen Kreislauf in einem evaporativen Kühlturm

Title (fr)

Batterie d'échange de chaleur tubulaire pour circuit fermé de tour de refroidissement à évaporation

Publication

EP 1586841 A2 20051019 (EN)

Application

EP 04380078 A 20040401

Priority

ES 200300768 A 20030401

Abstract (en)

The inlet and outlet manifolds (4) are situated outside of the casing (1) and have a demountable character, such that by removing said manifolds (4), "in situ" cleaning and maintenance tasks of the tubular battery are possible, as well as the temporary closing off of any of said tubes (3) which is broken down, by closing the ends (10) thereof by means of respective caps, and the extraction of the broken down tubes, for the replacement thereof, through the side opposite to the manifolds (4) is also possible after the unwelding of the two connections and as a result of the existence of special crossbars (13-14) which, suitably fixing the tubes (13) inside the framework (16), are shaped and positioned so as to not constitute stops interfering in said transverse shifting of the tubes.

IPC 1-7

F28D 5/02

IPC 8 full level

F28D 5/02 (2006.01); **F28D 7/08** (2006.01); **F28F 9/013** (2006.01); **F28F 9/02** (2006.01)

CPC (source: EP ES)

F28C 1/00 (2013.01 - ES); **F28D 5/02** (2013.01 - EP); **F28D 7/08** (2013.01 - EP); **F28D 7/082** (2013.01 - EP); **F28D 7/085** (2013.01 - EP); **F28F 5/02** (2013.01 - ES); **F28F 9/013** (2013.01 - EP); **F28F 9/02** (2013.01 - ES); **F28F 9/0224** (2013.01 - EP); **F28F 2280/02** (2013.01 - EP)

Cited by

US2014090827A1; US9970716B2; CN108225055A; CN110470153A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL HR LT LV MK

DOCDB simple family (publication)

EP 1586841 A2 20051019; **EP 1586841 A3 20070530**; ES 2255345 A1 20060616; ES 2255345 B1 20070916

DOCDB simple family (application)

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