

Title (en)
Tubular heat exchanger

Title (de)
Röhrenwärmetauscher

Title (fr)
Echangeur thermique tubulaire

Publication
EP 2299227 B1 20180919 (DE)

Application
EP 10171888 A 20100804

Priority
DE 102009040558 A 20090908

Abstract (en)
[origin: EP2299227A2] The heat exchanger (W) has a jacket tube (1) with an inner tube, where the inner tube and/or the jacket tube are formed as a swirl tube with multi-start spirals (D1, D2) that run like a thread at an angle to a tube axis (x). A crossed and twisted tube with crossing spirals is provided as the inner tube and/or the jacket tube, where the crossing spirals are symmetrical to the tube axis and have an angle of incidence (alpha) between 67 degrees and 72 degrees to the tube axis and an angle of twist (beta) between 18 degrees and 23 degrees perpendicular to the tube axis.

IPC 8 full level
F28D 7/10 (2006.01); **F28F 1/36** (2006.01); **F28F 1/40** (2006.01); **F28F 1/42** (2006.01); **F28F 13/12** (2006.01)

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