

Title (en)
HEAT EXCHANGER TUBE

Title (de)
WÄRMETAUSCHERROHR

Title (fr)
TUBE D'ÉCHANGEUR DE CHALEUR

Publication
EP 4390292 A1 20240626 (EN)

Application
EP 22000266 A 20221222

Priority
EP 22000266 A 20221222

Abstract (en)
Heat exchanger tube with a tube axis, with a tube wall, with a tube outside and with a tube inside, continuously running, axially parallel or helically circling inner ribs being formed out of the tube wall on the tube inside, each inner rib having two rib flanks and a rib tip, a continuously extending groove being formed in each case between adjacent inner ribs. The internal tube surface can be described by the equation: $\Phi = e^2 / p d_i$ where: Φ is a dimensionless parameter, severity-factor, e is the height of the helical ribs, p is the helical pitch and d_i is the tube inside diameter, whereby N is the number of ribs counted in a cutting plane perpendicular to the tube axis. According to the invention the product ΦN^2 is greater than 16 and less than 70.

IPC 8 full level
F28F 1/42 (2006.01)

CPC (source: EP)
F28F 1/422 (2013.01)

Citation (applicant)

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- US 6018963 A 20000201 - ITOH MASAOKI [JP], et al
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- EP 2339283 B1 20160608 - WIELAND WERKE AG [DE]
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Citation (search report)

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Designated contracting state (EPC)
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