Title (en)

HEAT TRANSFER TUBE

Title (de)

WÄRMEÜBERTRAGUNGSROHR

Title (fr)

TUBE DE TRANSFERT THERMIQUE

Publication

EP 3995773 A1 20220511 (EN)

Application

EP 21207242 A 20211109

Priority

US 202063198724 P 20201109

Abstract (en)

A finned tube (100) (e.g., for use in a flooded and falling film evaporator) is provided. The finned tube (100) includes a tube body (110) with an interior surface (110) and an exterior surface (111). The finned tube (100) may include a plurality of adjacent helical fins (120) (e.g., continuously or intermittently) protruding circumferentially around the exterior surface (111) of the tube body (110). At least one channel (130) is disposed between the plurality of adjacent helical fins (120). Each respective helical fin (120) includes at least one sidewall (122) and a fin top (121). Each channel (130) includes at least one channel enhancement (131) impressed radially into and transversely through at intervals around the circumference of the exterior surface (111) of the tube body (110). The finned tube (100) may also include at least one top enhancement (124) and/or sidewall enhancement (123) impressed radially into and transversely through at intervals around the circumference of the exterior surface (111) of the tube body (110).

IPC 8 full level

F28F 1/00 (2006.01)

CPC (source: CN EP US)

B21D 53/022 (2013.01 - CN); **F25B 39/02** (2013.01 - CN); **F28F 1/26** (2013.01 - CN); **F28F 1/36** (2013.01 - US); **F28F 1/422** (2013.01 - EP US); **F28F 1/426** (2013.01 - US); **F28F 13/187** (2013.01 - EP US); F28F 2001/428 (2013.01 - EP); F28F 2215/10 (2013.01 - US); F28F 2255/16 (2013.01 - CN)

Citation (search report)

- [XI] EP 2917675 B1 20190501 - WIELAND WERKE AG [DE]
- [XI] US 2003024121 A1 20030206 - BEUTLER ANDREAS [DE], et al
- [A] US 5775411 A 19980707 - SCHUEZ GERHARD [DE], et al
- [A] US 4796693 A 19890110 - KASTNER HANS-WERNER [DE], et al

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3995773 A1 20220511; CN 114459271 A 20220510; US 2022146214 A1 20220512

DOCDB simple family (application)

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