

Title (en)
HELICAL INSERT FOR SHELL AND TUBE HEAT EXCHANGER BACKGROUND

Title (de)
SCHRAUBENFÖRMIGER EINSATZ FÜR ROHRWÄRMETAUSCHER

Title (fr)
INSERT HÉLICOÏDAL POUR ÉCHANGEUR DE CHALEUR À CALANDRE

Publication
EP 3682181 A1 20200722 (EN)

Application
EP 18779518 A 20180911

Priority
• US 201762557828 P 20170913
• US 2018050409 W 20180911

Abstract (en)
[origin: WO2019055390A1] A heat transfer tube includes a tube having an internal tube wall, and a tube element extending along a tube length and radially inwardly from the internal tube wall. The tube element has a radial element height less than a hydraulic radius of the tube, and the radial element height is greater than a base element width at the internal tube wall. A tube and shell heat exchanger includes a heat exchanger tube extending through a housing and having a heat transfer medium flowing therethrough. The heat exchanger tube includes a tube having an internal tube wall and tube element extending along a tube length and radially inwardly from the internal tube wall. The tube element has a radial element height less than a hydraulic radius of the tube, and the radial element height is greater than a base element width at the internal tube wall.

IPC 8 full level
F28F 13/12 (2006.01)

CPC (source: EP US)
F28F 13/12 (2013.01 - EP US)

Citation (search report)
See references of WO 2019055390A1

Designated contracting state (EPC)
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Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2019055390 A1 20190321; CN 111065880 A 20200424; EP 3682181 A1 20200722; US 2020271402 A1 20200827

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US 2018050409 W 20180911; CN 201880059622 A 20180911; EP 18779518 A 20180911; US 201816647167 A 20180911