

Title (en)
Double-pipe heat exchanger

Title (de)
Doppelrohr-Wärmetauscher

Title (fr)
Échangeur thermique à double tuyau

Publication
EP 2354743 A3 20121031 (EN)

Application
EP 11150467 A 20110110

Priority
KR 20100004010 A 20100115

Abstract (en)
[origin: US2011174469A1] A double-pipe heat exchanger is provided. The double-pipe heat exchanger may include a first heat exchange tube having a first hollow portion, and a second heat exchange tube disposed inside the first heat exchange tube, so as to be co-axial with the first heat exchange tube and having a spiral part in which multiple ridges and grooves are formed at an inner surface of the spiral part.

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

CPC (source: EP US)
F28D 7/106 (2013.01 - EP US); **F28F 1/08** (2013.01 - EP US); **F28F 1/426** (2013.01 - EP US); **F28F 2210/06** (2013.01 - EP US)

Citation (search report)

- [X] US 2007187067 A1 20070816 - HORIGUCHI KEN [JP], et al
- [X] DE 102006061048 A1 20070726 - DENSO CORP [JP], et al
- [XA] US 2009159248 A1 20090625 - MIMITZ SR TIMOTHY E [US], et al
- [X] DE 3317986 A1 19841122 - KABELMETAL ELECTRO GMBH [DE]
- [X] EP 0108525 A1 19840516 - THERMODYNETICS INC [US]

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)
US 2011174469 A1 20110721; CN 102128554 A 20110720; EP 2354743 A2 20110810; EP 2354743 A3 20121031; KR 101620106 B1 20160513; KR 20110083996 A 20110721

DOCDB simple family (application)
US 98749611 A 20110110; CN 201110022486 A 20110117; EP 11150467 A 20110110; KR 20100004010 A 20100115