

Title (en)
Flow deflector

Title (de)
Strömungsleiteinrichtung

Title (fr)
Déflecteur d'écoulement

Publication
EP 2725219 A1 20140430 (EN)

Application
EP 12382412 A 20121025

Priority
EP 12382412 A 20121025

Abstract (en)
The present invention is a flow deflector suitable for a heat exchanger of the type consisting of at least one core made up of tubes forming a bundle arranged inside a shell and at least one baffle. The deflector according to the invention is an easily manufactured part independent from the construction of the bundle of tubes and of the baffle which allows modifying the coolant fluid or liquid flow path with greater freedom than that achieved by combining internal openings in the baffle or baffles. Another object of this invention is the heat exchanger obtained using the deflector for optimising coolant liquid flow path. The application of the invention in heat exchangers for EGR (Exhaust Gas Recirculation) systems is of special interest.

IPC 8 full level
F02M 25/07 (2006.01); **F28D 7/16** (2006.01); **F28F 9/22** (2006.01)

CPC (source: EP US)
F02M 26/32 (2016.02 - EP US); **F28D 7/1692** (2013.01 - EP US); **F28F 9/22** (2013.01 - EP US); **F28F 13/06** (2013.01 - EP US); **F28D 21/0003** (2013.01 - EP US); **F28D 2021/008** (2013.01 - EP US); **F28F 2009/226** (2013.01 - EP US); **F28F 2009/228** (2013.01 - EP US); **F28F 2235/00** (2013.01 - EP US); **F28F 2275/085** (2013.01 - EP US)

Citation (search report)

- [A] JP 2008196319 A 20080828 - TOKYO RADIATOR SEIZO KK
- [A] WO 2012115799 A1 20120830 - INT ENGINE INTELLECTUAL PROP [US], et al
- [A] US 2011005708 A1 20110113 - SETO TAKAHIRO [JP], et al
- [A] FR 2871560 A1 20051216 - VALEO CLIMATISATION SA [FR]
- [A] JP 2002318095 A 20021031 - FURUKAWA ELECTRIC CO LTD
- [A] JP 2000018877 A 20000118 - TOYO RADIATOR CO LTD
- [A] DE 2251866 A1 19740425 - BALCKE MASCHBAU AG

Cited by
EP3828406A1; US11131276B2; US10126074B2; WO2018206108A1; WO2016012621A1

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 2725219 A1 20140430; CN 104956060 A 20150930; CN 104956060 B 20170912; EP 2912296 A1 20150902; EP 2912296 B1 20170419; US 2015260466 A1 20150917; WO 2014064225 A1 20140501

DOCDB simple family (application)
EP 12382412 A 20121025; CN 201380056116 A 20131024; EP 13780173 A 20131024; EP 2013072336 W 20131024; US 201314438501 A 20131024