

Title (en)

Device for cooling a conduit wall provided with at least one fin element

Title (de)

Vorrichtung zur Kühlung einer, einen Strömungskanal umgebenden Strömungskanalwand mit wenigstens einem Rippenelement

Title (fr)

Dispositif de refroidissement d'une paroi d'un conduit comprenant au moins une ailette

Publication

EP 1114976 A3 20011031 (DE)

Application

EP 00811044 A 20001107

Priority

DE 19963374 A 19991228

Abstract (en)

[origin: EP1114976A2] The arrangement has at least one rib element (5) inducing turbulence in a flowing medium in the flow channel whose size and shape are selected to achieve a defined coefficient of thermal transfer and a defined pressure loss as the medium flows over the rib element. The rib element has contours that increase its area facing the flow channel whilst substantially maintaining its original shape and/or size.

IPC 1-7

F28F 13/12; **F28F 1/40**; **F28F 3/02**

IPC 8 full level

F28F 1/40 (2006.01); **F28F 3/02** (2006.01); **F28F 13/12** (2006.01)

CPC (source: EP US)

F01D 5/187 (2013.01 - EP US); **F28F 1/40** (2013.01 - EP US); **F28F 3/02** (2013.01 - EP US); **F28F 13/12** (2013.01 - EP US); **F05D 2260/22141** (2013.01 - EP US); **F23R 2900/03045** (2013.01 - EP US); **Y10T 137/2093** (2015.04 - EP US)

Citation (search report)

- [XY] WO 9924772 A1 19990520 - RELTEC UK LIMITED [GB], et al
- [Y] DE 19526917 A1 19970123 - FIEBIG MARTIN PROF DR ING [DE]
- [X] EP 0845580 A2 19980603 - TOSHIBA KK [JP]
- [X] WO 9611372 A1 19960418 - AMERIGON INC [US]
- [Y] PATENT ABSTRACTS OF JAPAN vol. 008, no. 174 (M - 316) 10 August 1984 (1984-08-10)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 10 30 November 1995 (1995-11-30)

Cited by

EP2284363A1; ITMI20110788A1; EP1500895A3; EP2993403A1; EP3276128A1; US8511977B2; US10088163B2; US10443845B2; WO2014139738A1

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