

Title (en)
LINING DEVICE AND HEAT EXCHANGER

Title (de)
AUSKLEIDUNGSVORRICHTUNG UND WÄRMETAUSCHER

Title (fr)
DISPOSITIF DE REVÊTEMENT ET ÉCHANGEUR DE CHALEUR

Publication
EP 3333527 A1 20180613 (EN)

Application
EP 16202970 A 20161208

Priority
EP 16202970 A 20161208

Abstract (en)
A lining device (30) and a heat exchanger (2) including such a lining device (30) are provided. The lining device (30) is arranged for lining a porthole (8) in an end plate (4) of a heat exchanger (2) and it comprises a first part (32) and a second part (34). The first part (32) includes a tubular inner portion (42) having an inside (59) and being arranged to extend inside the porthole (8), and an outer portion (46) arranged to extend on an outside (O) of the end plate (4). The second part (34) includes a tubular inner portion (44) having an inside (61) and being arranged to extend inside the porthole (8), and an outer portion (48) arranged to extend on an inside (I) of the end plate (4). The lining device (30) is characterized in that it further comprises a tubular third part (36) having a wall thickness (t) and being arranged to extend inside the porthole (8). The third part (36) is arranged to engage with the tubular inner portions (42, 44) of the first and second parts (32, 34) to couple the first and second parts (32, 34). A first section (50) of the third part (36) is arranged to overlap an overlap section (52) of the tubular inner portion (42) of the first part (32) in a first overlap (54). Further, a second section (56) of the third part (36) is arranged to overlap an overlap section (58) of the tubular inner portion (44) of the second part (34) in a second overlap (60).

IPC 8 full level
F28D 9/00 (2006.01); **F28F 9/02** (2006.01); **F28F 19/00** (2006.01)

CPC (source: EP KR)
F28F 9/005 (2013.01 - KR); **F28F 9/0246** (2013.01 - EP KR); **F28F 9/0248** (2013.01 - EP); **F28F 19/002** (2013.01 - EP KR); **F28D 9/005** (2013.01 - EP); **F28F 2230/00** (2013.01 - EP KR)

Citation (applicant)
US 6775909 B2 20040817 - JOENSSON MATS [SE], et al

Citation (search report)
• [XYI] GB 2000267 A 19790104 - APV CO LTD
• [Y] WO 8704234 A1 19870716 - ALFA LAVAL THERMAL [SE]
• [A] WO 8403555 A1 19840913 - ALFA LAVAL AB [SE]
• [A] EP 2541181 A1 20130102 - ALFA LAVAL CORP AB [SE]
• [A] WO 9821539 A1 19980522 - ALFA LAVAL AB [SE], et al
• [A] WO 8400060 A1 19840105 - ALFA LAVAL THERMAL [SE]

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 3333527 A1 20180613; CN 110023704 A 20190716; JP 2020501102 A 20200116; KR 20190089973 A 20190731; WO 2018103986 A1 20180614

DOCDB simple family (application)
EP 16202970 A 20161208; CN 201780075994 A 20171108; EP 2017078609 W 20171108; JP 2019530657 A 20171108; KR 20197019112 A 20171108