

Title (en)
INSULATING SURFACE COATING ON HEAT EXCHANGERS FOR REDUCING THERMAL STRESSES

Title (de)
ISOLIERENDE OBERFLÄCHENBESCHICHTUNG AN WÄRMEÜBERTRAGERN ZUR VERMINDERUNG VON THERMISCHEN SPANNUNGEN

Title (fr)
REVÊTEMENT DE SURFACE ISOLANT SUR ÉCHANGEURS DE CHALEUR, PERMETTANT DE RÉDUIRE DES CONTRAINTES THERMIQUES

Publication
EP 3746728 A1 20201209 (DE)

Application
EP 19701151 A 20190117

Priority
• EP 18020042 A 20180130
• EP 2019025016 W 20190117

Abstract (en)
[origin: WO2019149446A1] The invention relates to a plate heat exchanger (10) having a plate heat exchanger block (11), which has a plurality of partitions (4, 5) arranged parallel to one another in the form of separating plates which form a plurality of heat exchange passages (1a, 1b) for fluids which are to be brought into indirect heat exchange relationship with one another. The heat exchange passages are closed off from the outside by lateral strips (8), and each heat exchange passage (1a, 1b) has an inlet (9) for inflow of a fluid and an outlet (19) for outflow of the fluid. According to the invention, one or more partitions (4, 5) and/or one or more heat-conducting elements (2, 3) in each case have a coating (41) made of a heat-insulating material. The invention further relates to a method for producing a polymer laminate and to a method for joining prefabricated polymer components to each other.

IPC 8 full level
F28D 9/00 (2006.01); **F28D 21/00** (2006.01); **F28F 13/18** (2006.01)

CPC (source: EP US)
F25J 3/04945 (2013.01 - EP); **F25J 5/002** (2013.01 - EP); **F28D 9/0062** (2013.01 - EP); **F28D 9/0068** (2013.01 - EP); **F28F 3/08** (2013.01 - US); **F28F 13/18** (2013.01 - EP); **F28F 21/089** (2013.01 - US); **F28D 2021/0033** (2013.01 - EP); **F28F 2245/06** (2013.01 - US); **F28F 2270/00** (2013.01 - EP)

Citation (search report)
See references of WO 2019149446A1

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)
WO 2019149446 A1 20190808; CN 111684230 A 20200918; CN 111684230 B 20221101; EP 3746728 A1 20201209; EP 3746728 B1 20221012; ES 2930008 T3 20221205; JP 2021512267 A 20210513; US 2020400392 A1 20201224

DOCDB simple family (application)
EP 2019025016 W 20190117; CN 201980008194 A 20190117; EP 19701151 A 20190117; ES 19701151 T 20190117; JP 2020539046 A 20190117; US 201916962027 A 20190117