

Title (en)

Cross flow heat exchanger for laundry drier with condenser

Title (de)

Kreuzstrom-Wärmetauscher für Kondensationswäschetrockner

Title (fr)

Echangeur de chaleur à courants croisés pour sèche-linge avec condenseur

Publication

EP 0982427 A1 20000301 (DE)

Application

EP 99114748 A 19990728

Priority

DE 19838525 A 19980825

Abstract (en)

The heat exchanger has parallel plates (14) with two plate parts (16, 18), each with integrally formed ribs (26) projecting from one side to form transverse cooling air channels (12). Moist or process air flows transverse to the cooling air through parallel channels (10) formed by annular recesses in each plate part. The plate parts are made from metal foil or thermoplastic film with high thermal conductivity and are sealed at the open ends in a holding frame. An independent claim is also included for the production of the plate parts (16, 18). The plastic film complete with ribs (26) is vacuum formed in a single operation. Metal foil is pre-formed with roof-shaped sections between recess-forming parts and the ribs are subsequently created from the roof sections by pushing the foil together until both parts of the roofs contact each other.

Abstract (de)

Ein Kreuzstrom-Wärmetauscher für Kondensationswäschetrockner setzt sich aus einer Vielzahl von horizontalen, übereinander angeordneten, stirnseitig zueinander festgelegten Platten (14) zusammen. Diese bestehen jeweils aus einem Paar von gleichgeformten Plattenteilen (16), die aus einer Folie von vorzugsweise 0,15 mm Dicke aus gut wärmeleitendem Metall oder aus thermoplastischem Kunststoff gefertigt sind. <IMAGE>

IPC 1-7

D06F 58/24; **F28F 21/06**

IPC 8 full level

D06F 58/24 (2006.01); **F28D 9/00** (2006.01)

CPC (source: EP US)

D06F 58/24 (2013.01 - EP US); **F28D 9/0037** (2013.01 - EP); **F28F 3/046** (2013.01 - EP); **F28F 21/065** (2013.01 - EP US)

Citation (search report)

- [AD] GB 2082741 A 19820310 - BOSCH SIEMENS HAUSGERAETE
- [A] FR 2486220 A1 19820108 - SUEDDEUTSCHE KUEHLER BEHR [DE]
- [A] DE 3929004 A1 19910307 - BEHR GMBH & CO [DE]
- [A] EP 0429953 A2 19910605 - BOSCH SIEMENS HAUSGERAETE [DE]

Cited by

DE102011081940A1; EP3447428A1; CN102505437A; JP2015509176A; FR3036179A1; EP1550835A3; EP2338842A3; DE102004055550A1; EP2614764A3; EP2306134A1; JP2014532852A; EP2776775A4; EP1391550A1; EP2778281A4; WO2021069386A1; WO2019038281A1; WO2016180942A1; US6769196B2; US9869052B2; WO2013070530A1; US8726507B2; DE202007007169U1; EP1550835A2; EP1992898A2; EP2565321A1

Designated contracting state (EPC)

DE IT

DOCDB simple family (publication)

EP 0982427 A1 20000301; **EP 0982427 B1 20030305**

DOCDB simple family (application)

EP 99114748 A 19990728