

Title (en)

Thermoelectric heat pump, heat exchanger, household appliance and method for operating a household appliance

Title (de)

Thermoelektrische Wärmepumpe, Wärmetauscher, Haushaltsgerät und Verfahren zum Betreiben eines Haushaltsgeräts

Title (fr)

Pompe à chaleur thermo-électrique, échangeur thermique, appareil domestique et procédé pour commander un appareil domestique

Publication

EP 2578741 A1 20130410 (EN)

Application

EP 11183858 A 20111004

Priority

EP 11183858 A 20111004

Abstract (en)

There is disclosed a dishwasher (1) comprising a rinsing chamber (4) for cleaning dishes. For drying rinsed dishes by process air (48) the latter can be discharged from the rinsing chamber and can be dried and heated via a heat exchanger (16). Downstream of the heat exchanger the process air is supplied to the rinsing chamber. The heat exchanger (16) includes a thermoelectric heat pump (62,64) for cooling and drying the process air, wherein waste heat of the heat pump is discharged through a heat pipe (66,68).

IPC 8 full level

D06F 58/20 (2006.01); **A47L 15/00** (2006.01); **A47L 15/48** (2006.01); **F25B 21/02** (2006.01)

CPC (source: EP US)

A47L 15/0013 (2013.01 - EP US); **A47L 15/0047** (2013.01 - EP); **A47L 15/483** (2013.01 - EP); **A47L 15/486** (2013.01 - EP);
F25B 21/02 (2013.01 - EP); **A47L 2401/18** (2013.01 - EP); **A47L 2401/19** (2013.01 - EP); **A47L 2501/11** (2013.01 - EP);
D06F 58/206 (2013.01 - EP US); **F25B 2321/0252** (2013.01 - EP)

Citation (applicant)

- DE 102008043554 A1 20100512 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
- WO 2007138064 A1 20071206 - ARCELIK AS [TR], et al

Citation (search report)

- [X] DE 102004055926 A1 20060524 - BSH BOSCH SIEMENS HAUSGERAETE [DE]
- [XY] DE 202009005871 U1 20100916 - AUTOKUEHLER GMBH & CO KG [DE]
- [Y] US 5649372 A 19970722 - SOUZA WILLIAM J [US]
- [A] US 2006254623 A1 20061116 - CLASSEN EGBERT [DE], et al
- [A] US 2009049843 A1 20090226 - ALBAYRAK HASAN GOEKCER [DE], et al
- [A] US 2009044576 A1 20090219 - MOSCHUETZ HARALD [DE]
- [A] WO 2010003936 A1 20100114 - ARCELIK AS [TR], et al
- [A] WO 2010140334 A1 20101209 - PANASONIC CORP [JP], et al
- [A] DE 10334792 A1 20050224 - BSH BOSCH SIEMENS HAUSGERAETE [DE]

Cited by

US2015252517A1; US2019383528A1; US11649993B2; CN104894801A; EP3124682A1; US2015257627A1; KR20150108188A; CN106264409A;
US10039434B2; US1166618B2; US11672404B2

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 2578741 A1 20130410; EP 2578741 B1 20170412; DK 2578741 T3 20170703; PL 2578741 T3 20170831

DOCDB simple family (application)

EP 11183858 A 20111004; DK 11183858 T 20111004; PL 11183858 T 20111004