

Title (en)  
AIR CONDITIONER

Title (de)  
KLIMAAANLAGE

Title (fr)  
CLIMATISEUR

Publication  
**EP 3951303 A1 20220209 (EN)**

Application  
**EP 20777690 A 20200131**

Priority  
• JP 2019058395 A 20190326  
• JP 2020003638 W 20200131

Abstract (en)  
A heat exchanger (31) includes a plurality of flat tubes (40), a fin (50) that includes a plurality of notch portions (51) arranged side by side in a vertical direction, to which the plurality of flat tubes (40) are inserted, and includes intermediate regions (52) each formed between two of the notch portions (51) adjacent to each other in a vertical direction, and a connection region (53) connecting the intermediate regions (52) to each other, first bulging portions (54) at least partly positioned on the intermediate regions (52), and a second bulging portion (55) provided on the connection region (53) and blocking a gap (S) between the flat tubes (40) and the first bulging portions (54), wherein each first bulging portion (54) and the second bulging portion (55) are arranged to cause an air flow to pass through at least one of these portions in a ventilation direction.

IPC 8 full level  
**F28D 1/053** (2006.01); **F24F 1/0067** (2019.01); **F28F 1/02** (2006.01); **F28F 1/32** (2006.01)

CPC (source: EP US)  
**F24F 1/0067** (2019.01 - EP US); **F28D 1/0426** (2013.01 - EP); **F28D 1/0535** (2013.01 - US); **F28D 1/05383** (2013.01 - EP);  
**F28F 1/02** (2013.01 - US); **F28F 1/022** (2013.01 - EP); **F28F 1/32** (2013.01 - EP US); **F28F 1/325** (2013.01 - EP); **F28F 13/04** (2013.01 - EP);  
**F28F 13/06** (2013.01 - EP); **F28F 17/005** (2013.01 - EP); **F28F 2215/12** (2013.01 - EP)

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)  
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**EP 20777690 A 20200131**; AU 2020245687 A 20200131; CN 202080017287 A 20200131; JP 2019058395 A 20190326;  
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