

Title (en)  
REFRIGERATOR

Title (de)  
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Title (fr)  
RÉFRIGÉRATEUR

Publication  
**EP 3799615 A4 20210825 (EN)**

Application  
**EP 19855898 A 20190816**

Priority  
• JP 2018162562 A 20180831  
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Abstract (en)  
[origin: JP2020034248A] To conduct heat exchange between a refrigerant led out from an evaporator and a refrigerant led out from a condenser more efficiently to improve cooling efficiency of a cooling cycle in a cooling cycle mechanism of a refrigerator. SOLUTION: A refrigerator includes a cooling cycle mechanism which circulates a refrigerant to each device including a compressor, a condenser, and an evaporator. The refrigerator includes: a first pipeline which introduces the refrigerant led out from the condenser into the evaporator; and a second pipeline which introduces the refrigerant led out from the evaporator into the compressor. The first pipeline and the second pipeline respectively have heat exchange parts which are disposed in parallel to each other and in which the refrigerant flowing through the first pipeline and the refrigerant flowing through the second pipeline flow in parallel to each other. SELECTED DRAWING: Figure 5

IPC 8 full level  
**F25D 11/02** (2006.01); **F25B 40/02** (2006.01); **F25B 40/06** (2006.01)

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Citation (search report)  
• [XY] US 2342566 A 19440222  
• [X] US 3274797 A 19660927 - KRITZER RICHARD W  
• [X] US 2017074549 A1 20170316 - LILIE DIETMAR ERICH BERNHARD [BR], et al  
• [YA] GB 2180921 A 19870408 - SANYO ELECTRIC CO  
• [YA] JP 2001280802 A 20011010 - TOSHIBA CORP  
• [X] US 3128607 A 19640414 - KYLE WILLIAM K  
• [X] DE 60113072 T2 20060614 - ZIMMERMANN LARS CHRISTIAN WULF [DK]  
• See also references of WO 2020045868A1

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)  
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CN 112601921 A 20210402; CN 112601921 B 20221213; EP 3799615 A1 20210407; EP 3799615 A4 20210825; EP 3799615 B1 20230809; JP 2020034248 A 20200305; KR 102693083 B1 20240812; KR 20200026670 A 20200311

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