

Title (en)
EVAPORATOR AND REFRIGERATION CYCLE DEVICE EQUIPPED WITH SAME

Title (de)
VERDAMPFER UND KÄLTEKREISLAUFVORRICHTUNG DAMIT

Title (fr)
ÉVAPORATEUR ET DISPOSITIF À CYCLE FRIGORIFIQUE DOTÉ DUDIT ÉVAPORATEUR

Publication
EP 4040084 A1 20220810 (EN)

Application
EP 20871516 A 20200929

Priority
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• JP 2020036920 W 20200929

Abstract (en)
There is provided an evaporator of a refrigeration cycle apparatus in which a non-azeotropic refrigerant mixture is enclosed, the evaporator improving frost proof performance and heat exchange performance. If the opening side of a cutout is present on the windward side of an airflow, a difference between an air temperature and an evaporator surface temperature is large, which improves heat exchange performance but easily causes frost. Conversely, if the opening side of the cutout is present on the leeward side, frost proof performance is improved but heat exchange performance is degraded. In particular, since a non-azeotropic refrigerant mixture is used as a refrigerant, the refrigerant temperature tends to decrease on the inlet side of the evaporator due to a temperature gradient, and frost is easily generated. However, since a first heat exchange section (23a) in which the opening side of the cutout is positioned on the leeward side in the airflow direction is formed, it is possible to improve frost proof performance by providing the first heat exchange section (23a) at least on the inlet side of the evaporator.

IPC 8 full level
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