

Title (en)  
FLOODED EVAPORATOR

Title (de)  
ÜBERFLUTETER VERDAMPFER

Title (fr)  
EVAPORATEUR NOYE

Publication  
**EP 1870647 A1 20071226 (EN)**

Application  
**EP 05728451 A 20050406**

Priority  
JP 2005006747 W 20050406

Abstract (en)  
A flooded evaporator is provided which can remove floating mist more exactly resulting in that the refrigerant mist is prevented from being sucked into the compressor, and with which heat transfer between the medium to be cooled and refrigerant liquid is improved. The evaporator is composed such that; a tubular housing (3) is provided to erect from a horizontal cylindrical container (1) which forms a heat exchanging section with a heat exchanger(2) accommodated therein, an inner tube(12) for upwardly guiding refrigerant vapor generated in the heat exchanging section is provided, the inner tube (2) is covered by a loose cover(13) so that refrigerant vapor containing refrigerant mist flowed up in the inner tube(12) impinges against the loose cover (13) to be deflected downward to flow out from the inner tube(12), a space(17) is secured in the tubular housing(3) to allow refrigerant mist to fall down utilizing gravitational attraction, a demister(16) is provided in the tubular housing(3) above the space(17), the clearance area between the inner tube(12) and loose cover(13) is smaller than the clearance area between the outer periphery of the loose cover(13) and inner periphery of the tubular housing(3), and circulation paths(20) of refrigerant liquid are formed in the container(1).

IPC 8 full level  
**F25B 39/02** (2006.01)

CPC (source: EP US)  
**F25B 39/02** (2013.01 - EP US); **F28D 9/0006** (2013.01 - EP US); **F28D 21/0017** (2013.01 - EP US); **F25B 2339/0242** (2013.01 - EP US); **F25B 2500/28** (2013.01 - EP US)

Cited by  
CN110947192A; CN102022866A; EP2673576A4; EP3637022A1; US11828500B2; WO2012051994A3; WO2020074637A1

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