

Title (en)
DISPOSITION OF HEAT PUMPS

Publication
EP 0056780 A3 19820825 (DE)

Application
EP 82730005 A 19820119

Priority
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• DE 3106152 A 19810216

Abstract (en)
[origin: EP0056780A2] In the circulation circuit of the working fluid of a first heat pump (1, 5, 6, 8, 10) there is arranged a second heat pump (11 to 14) so that it produces directly a cooling of the fluid. With this arrangement, owing to the second heat pump, the over cooling enthalpy is used and the heat thus obtained, brought to a higher temperature level, may be dissipated as useful heat in addition to the heat provided by the first heat pump.

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IPC 8 full level
F24J 3/00 (2006.01); **F25B 7/00** (2006.01); **F25B 29/00** (2006.01); **F25B 1/04** (2006.01); **F25B 9/00** (2006.01); **F25B 40/02** (2006.01);
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F25B 2400/0751 (2013.01 - EP); **F25B 2400/13** (2013.01 - EP)

Citation (search report)
• DE 2516560 A1 19751030 - PROJECTUS IND PRODUKTER AB
• FR 2268232 A1 19751114 - PROJECTUS IND PRODUKTER AB [SE]
• CH 225518 A 19430215 - ESCHER WYSS MASCHF AG [CH]
• DE 2922119 A1 19801211 - KMN BERATUNG BERATUNGSBUERO FU
• DE 2520226 A1 19761125 - HEEREN GERHARD
• CH 234315 A 19440930 - ESCHER WYSS MASCHF AG [CH]
• US 3733845 A 19730522 - LIEBERMAN D
• DE 330378 C 19201213 - EDMUND ALTENKIRCH
• GB 494996 A 19381104 - TEVES KG ALFRED
• US 2919558 A 19600105 - LAUER RODNEY F
• US 3852974 A 19741210 - BROWN T
• US 2717765 A 19550913 - LAWLER JR PAUL
• US 4028079 A 19770607 - SCHEIBEL EDWARD G
• US 4000626 A 19770104 - WEBBER ROBERT C
• US 4227380 A 19801014 - LAUCKS F MICHAEL, et al
• DE 2907982 A1 19800911 - LUSH LAWRENCE E
• US 2782350 A 19570219 - CLARK ADNA R

Cited by
EP2211125A1; CN105229380A; CN106524539A; US10274207B2; US7908881B2; WO2014184184A1; WO2006099378A1; WO2013088356A1;
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