

Title (en)
PNEUMATIC ICE MAKING DEVICE.

Title (de)
LUFTEISERZEUGUNGSEINRICHTUNG.

Title (fr)
DISPOSITIF PNEUMATIQUE DE PRODUCTION DE GLACE.

Publication
EP 0667499 A4 19951115 (EN)

Application
EP 93906784 A 19930317

Priority
• JP 9300316 W 19930317
• JP 31437292 A 19921030

Abstract (en)
[origin: EP0667499A1] A pneumatic ice making device in which a refrigerating cycle using air as a heating medium is formed by disposing in an air circulation path an air compressor, a compressed air cooling apparatus, an air expanding device and an ice making heat exchanger in the direction of air flow, said pneumatic ice making device being characterized in that a heat recovering heat exchanger is provided for heat exchanging the air before entering the air expanding device with the air that has passed through the ice making heat exchanger, that the air expanding device is provided with a rotor adapted to rotate by air flow through the path thereof and that the rotating shaft of this rotor is coupled via a one-way clutch to the rotating shaft of a power machine for driving the air compressor. <IMAGE>

IPC 1-7
F25C 3/02; **F25B 9/00**

IPC 8 full level
A63C 19/10 (2006.01); **F25B 9/00** (2006.01); **F25C 3/02** (2006.01)

CPC (source: EP)
A63C 19/10 (2013.01); **F25B 9/004** (2013.01); **F25C 3/02** (2013.01)

Citation (search report)
• [XAY] US 1440000 A 19221226 - BONINE CHARLES E
• [YA] US 4123003 A 19781031 - WINSTON THEODORE
• [XA] US 4295518 A 19811020 - RANNENBERG GEORGE C
• [XA] US 4185469 A 19800129 - ROGERS BRIAN H [GB], et al
• [XA] GB 890276 A 19620228 - NETZSCHKAU MASCHF NEMA
• [A] US 3868827 A 19750304 - LINHARDT HANS D, et al
• [A] GB 739949 A 19551102 - BATEMAN LTD E
• [A] US 3751935 A 19730814 - MACCRACKEN C, et al
• [A] US 3641782 A 19720215 - TIMMS RAYFORD W
• [A] FR 1372024 A 19640911 - BERTIN & CIE
• [A] GB 421431 A 19341220 - JAMES GOVAN
• See references of WO 9410515A1

Cited by
EP3637018A4; EP1106939A4; EP1176372A4; US9441542B2; US6397623B1; KR100654660B1; WO2021123484A1

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