

Title (en)

DEVICE FOR ENRICHING WATER WITH CO<sub>2</sub> GAS IN ORDER TO GENERATE CARBONATED WATER.

Title (de)

VORRICHTUNG ZUM ANREICHERN VON WASSER MIT CO<sub>2</sub>-GAS ZUR ERZEUGUNG VON KARBONISERTEM WASSER.

Title (fr)

PROCEDE POUR ENRICHIR DE L'EAU EN GAZ CARBONIQUE AFIN DE PRODUIRE DE L'EAU GAZEIFIEE.

Publication

**EP 0609423 A1 19940810 (DE)**

Application

**EP 93919161 A 19930825**

Priority

- DE 4228776 A 19920828
- EP 9302279 W 19930825

Abstract (en)

[origin: US5399300A] A carbonator having a cooling system which is controlled by a controller responsive to input signals generated by an ambient temperature sensor, an ice thickness sensor and a water level sensor. After an initial ice build up following first turn-on of the system and depending on the ambient temperature sensed by the temperature sensor, the cooling system will turn on for a predetermined ON period followed by a predetermined OFF period. These ON and OFF periods are variable as a function of ambient temperature as sensed by the temperature sensor and will recycle in absence of any carbonated water removed. If, however, water removal takes place, the OFF period is interrupted and system turn-on will occur the next time a signal from the ice sensor is received and the ON and OFF cycle as determined by the system controller will resume unless it is again interrupted by another water removal signal from the water level sensor.

Abstract (fr)

L'invention concerne un dispositif permettant de préparer de l'eau réfrigérée gazéifiée dans un réservoir qui est alimenté par des conduites de refroidissement d'un circuit de refroidissement afin de refroidir son contenu et afin de former une enveloppe de glace dans la zone de ses parois. Ce dispositif comprend un détecteur de température ambiante servant à détecter la température régnant autour du réservoir et un circuit de commande pour le circuit de refroidissement, qui est connecté de manière à ce que des phases d'arrêt relativement longues du circuit de refroidissement soient maintenues lorsque la température ambiante est très réduite.

IPC 1-7

**B67D 1/08; F25D 31/00**

IPC 8 full level

**A23L 2/00** (2006.01); **B01F 1/00** (2006.01); **B01F 3/04** (2006.01); **B01F 15/00** (2006.01); **B01F 15/06** (2006.01); **B67D 1/00** (2006.01); **B67D 1/08** (2006.01); **F25D 11/00** (2006.01); **F25D 31/00** (2006.01)

CPC (source: EP US)

**B01F 23/2362** (2022.01 - EP US); **B01F 35/2115** (2022.01 - EP US); **B01F 35/213** (2022.01 - EP US); **B01F 35/92** (2022.01 - EP US); **B67D 1/0047** (2013.01 - EP US); **B67D 1/0057** (2013.01 - EP US); **B67D 1/0067** (2013.01 - EP US); **B67D 1/0857** (2013.01 - EP US); **F25D 31/006** (2013.01 - EP US); **B01F 2035/98** (2022.01 - EP US); **Y10S 261/07** (2013.01 - EP US)

Citation (search report)

See references of WO 9405590A1

Designated contracting state (EPC)

AT CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)

**US 5399300 A 19950321**; AT E163630 T1 19980315; AU 4952693 A 19940329; CA 2122052 A1 19940317; CA 2122052 C 19970107; DE 4228776 A1 19940303; DE 59308213 D1 19980409; EP 0609423 A1 19940810; EP 0609423 B1 19980304; JP 3391792 B2 20030331; JP H07503220 A 19950406; WO 9405590 A1 19940317; ZA 936293 B 19950208

DOCDB simple family (application)

**US 23396794 A 19940428**; AT 93919161 T 19930825; AU 4952693 A 19930825; CA 2122052 A 19930825; DE 4228776 A 19920828; DE 59308213 T 19930825; EP 9302279 W 19930825; EP 93919161 A 19930825; JP 50682594 A 19930825; ZA 936293 A 19930827