

Title (en)

DEVICE FOR ENRICHING WATER WITH CO₂ GAS IN ORDER TO GENERATE CARBONATED WATER.

Title (de)

VORRICHTUNG ZUM ANREICHERN VON WASSER MIT CO₂-GAS ZUR ERZEUGUNG VON KARBONISIERTEM WASSER.

Title (fr)

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

Publication

EP 0610483 A1 19940817 (DE)

Application

EP 93919164 A 19930825

Priority

- DE 4228771 A 19920828
- EP 9302282 W 19930825

Abstract (en)

[origin: US5443763A] Apparatus including a circulating pump inside a carbonator tank which blends CO₂ with still water and which is started and stopped for predetermined time periods in repetitive cycles having an on/off ratio ranging between 1:10 and 1:20. A timing circuit controls the operating and non operating times of the circulating pump so that sufficient carbonation of the water with CO₂ gas is achieved along with the formation of an ice bank on the cooled wall of the storage tank. During intervening periods when the circulating pump is not operating, the carbonated water arranges itself in layers according to its density so that the relatively warmer water sinks while the colder water together with any ice particles or small pieces of ice floating therein join together, becoming fixed to the ice bank in the upper portion of the carbonator. During the next operating cycle of the circulating pump, these particles are frozen together and become relatively harmless to the extent that the shutoff valve and output carbonated water line remains unobstructed. Whenever carbonated water is removed from the storage tank or fresh water is supplied to the storage tank, the circulating pump is again started for an additional on-period time interval which is greater than the normal on-period.

Abstract (fr)

L'invention concerne un dispositif pour enrichir de l'eau en gaz carbonique afin de produire de l'eau gazéifiée dans un réservoir, notamment dans un gazéificateur qui est pourvu de conduites de refroidissement d'un circuit de refroidissement, destinées à refroidir son contenu et à former une enveloppe de glace dans la zone de ses parois. La pompe de circulation est mise en marche et arrêtée par un circuit de synchronisation.

IPC 1-7

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IPC 8 full level

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