Title (en)

CARBON DIOXIDE TREATMENT OF ATMOSPHERIC COOLING WATER

Title (de)

KOHLENDIOXIDBEHANDLUNG VON ATMOSPHÄRISCH GEKÜHLTEM KÜHLWASSER

Title (fr)

TRAITEMENT AU DIOXYDE DE CARBONE DES EAUX DE REFROIDISSEMENT ATMOSPHERIQUE

Publication

EP 1152985 A1 20011114 (FR)

Application

EP 00981459 A 20001122

Priority

- FR 0003252 W 20001122
- FR 9914732 A 19991123

Abstract (en)

[origin: FR2801300A1] To process water, which has an atmospheric cooling for refrigeration and other water-cooling applications, it travels in a closed loop as a semi-open circuit. A unit (2) for atmospheric cooling uses forced atmospheric air or natural convection. The assembly also has a bleed unit (D) and a water feed (E). Carbon dioxide is fed into the circulation loop, at least at one point or at the water feed, or into the feed circuit for the introduction. The water contains no chemical additive to control the scaling. The carbon dioxide is fed in at the outlet of the water circulation pump (5,7,8), and at a point in the process where the water pressure is at least 1 bar. The carbon dioxide is fed in as a gas, and at least part of the carbon dioxide gas is a mixture of it with an inert gas. The carbon dioxide can also be fed in as a liquid. The water is also treated in a stage using a mineral acid. The water is cooled within the circulation loop by an atmospheric refrigeration system or an aerotherm exchanger.

IPC 1-7

C02F 5/00

IPC 8 full level

C02F 5/00 (2006.01); **C02F 5/08** (2006.01); **C02F 5/12** (2006.01)

CPC (source: EP)

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