

Title (en)
AIR AND WATER PURIFICATION USING CONTINUOUS BREAKPOINT HALOGENATION AND PEROXYGENATION

Title (de)
LUFT- UND WASSERREINIGUNG DURCH KONTINUIERLICHE HALOGENIERUNG UND OXIDATION MIT PERSAUERSTOFF-VERBINDUNGEN

Title (fr)
PURIFICATION DE L'AIR ET DE L'EAU PAR HALOGENATION ET PEROXYGENATION AU POINT CRITIQUE CONTINUES

Publication
EP 1332112 A2 20030806 (EN)

Application
EP 01992498 A 20011106

Priority

- US 0143720 W 20011106
- US 70742100 A 20001106
- US 70742200 A 20001106

Abstract (en)
[origin: WO0235908A2] A process for optimizing the rate of oxidation using a combination of halogen, e.g. chlorine donors and peroxygen, e.g. potassium monopersulfate. The peroxygen compound elevates the oxidation-reduction potential of the body of water being treated. Simultaneously, a halogen donor is added to the body of water to maintain a ppm level of free halogen sufficient to insure sanitization. The amount of free halogen is reduced and the ORP effective range expanded to 700 mV-850 mV by addition of an effective amount of a coagulating agent. The feed rates and concentrations of both oxidizers are optimized so as to achieve and maintain the targeted parameters. A high level of oxidation is maintained which removes by-products from the water and surrounding air.

IPC 1-7
C02F 1/00; C02F 1/76; C02F 1/72; C02F 103/42

IPC 8 full level
C02F 1/00 (2006.01); **C02F 1/76** (2006.01); **C02F 1/52** (2006.01); **C02F 1/72** (2006.01)

CPC (source: EP)
C02F 1/008 (2013.01); **C02F 1/76** (2013.01); **C02F 1/52** (2013.01); **C02F 1/722** (2013.01); **C02F 2103/42** (2013.01); **C02F 2209/003** (2013.01);
C02F 2209/02 (2013.01); **C02F 2209/04** (2013.01); **C02F 2209/06** (2013.01)

Citation (search report)
See references of WO 0235908A2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0235908 A2 20020510; WO 0235908 A3 20020829; AU 1670502 A 20020515; CA 2428058 A1 20020510; EP 1332112 A2 20030806

DOCDB simple family (application)
US 0143720 W 20011106; AU 1670502 A 20011106; CA 2428058 A 20011106; EP 01992498 A 20011106