

Title (en)

SYSTEM FOR DECONTAMINATING WATER AND GENERATING WATER VAPOR

Title (de)

SYSTEM ZUR DEKONTAMINIERUNG VON WASSER UND ERZEUGUNG VON WASSERDAMPF

Title (fr)

SYSTÈME DE DÉCONTAMINATION DE L'EAU ET DE PRODUCTION DE VAPEUR D'EAU

Publication

EP 4168363 A4 20240724 (EN)

Application

EP 21838907 A 20210617

Priority

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- US 2021037802 W 20210617

Abstract (en)

[origin: WO2022010630A1] A system and method for decontaminating a fluid and recovered vapor, particularly processing and recycling water used in an oil zone steam process, utilizing a vaporizer-desalination unit to separate a contaminated water flow into a contaminated disposal flow and a clean water vapor flow. The contaminated water flow is recovered after separation from a combined oil and water flow from an oil well. The clean water vapor flow is preferably passed through a steam generator to produce the steam used in the oil zone steam process. The steam is injected into the oil zone of a designated well and then extracted as the combined oil and water flow. Once primed with sufficient external water, the system and method is designed to operate continuously with minimal replenishment because of the water/vapor/steam cycle.

IPC 8 full level

C02F 9/00 (2023.01); **B01D 1/22** (2006.01); **B01D 1/26** (2006.01); **B01D 3/08** (2006.01); **C02F 1/00** (2023.01); **C02F 1/04** (2023.01); **C02F 3/30** (2023.01); **C02F 1/20** (2023.01); **C02F 1/38** (2023.01); **C02F 1/40** (2023.01); **C02F 101/32** (2006.01); **C02F 103/08** (2006.01)

CPC (source: EP IL)

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Citation (search report)

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- See also references of WO 2022010630A1

Designated contracting state (EPC)

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