

Title (en)  
FLARE SYSTEM USING PRODUCED WATER AND OZONE INJECTION

Title (de)  
FACKELSYSTEM MIT INJEKTION VON ERZEUGTEM WASSER UND OZON

Title (fr)  
SYSTÈME DE TORCHE UTILISANT DE L'EAU PRODUITE ET UNE INJECTION D'OZONE

Publication  
**EP 3897919 A4 20221019 (EN)**

Application  
**EP 19904140 A 20191223**

Priority  
• US 201862784525 P 20181223  
• US 2019068301 W 20191223

Abstract (en)  
[origin: WO2020139821A1] A system and apparatus for treating and disposing of produced water in conjunction with flared gas, thereby avoiding problems associated with injecting produced water back into subsurface strata. The system is installed at or near the wellhead where produced water being treated is at a higher temperatures. Produced water is treated with ozone injection in a scrubber with heat applied through a flare gas field burner, which uses field gas from oilfield operations. A wet scrubber unit with scrubber packing is used to clean emissions. A produced water pump is used to circulate produced water, and pump produced water through spray nozzles in the scrubber unit for use as the wet scrubbing agent. As produced water evaporates, evaporated salts and solids are continuously removed from the evaporator/scrubber unit by appropriate means, such as an auger system.

IPC 8 full level  
**B01D 47/06** (2006.01); **B01D 47/14** (2006.01); **C02F 1/12** (2006.01); **C10L 3/10** (2006.01); **E21B 41/00** (2006.01); **E21B 43/34** (2006.01)

CPC (source: EP)  
**B01D 47/06** (2013.01); **B01D 47/14** (2013.01); **C02F 1/02** (2013.01); **C02F 1/78** (2013.01); **C02F 2303/22** (2013.01)

Citation (search report)  
• [Y] US 2017320012 A1 20171109 - KANESHIRO HIROAKI [JP], et al  
• [Y] US 2004237782 A1 20041202 - DECKER SCOTT [US]  
• [Y] EP 2659947 A1 20131106 - LINDE AG [DE]  
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• See also references of WO 2020139821A1

Designated contracting state (EPC)  
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