

Title (en)

Process and apparatus to reduce acid polluting emissions from industrial units

Title (de)

Verfahren und Vorrichtung zum Reduzieren der sauren Schadstoffemissionen von Industrieanlagen

Title (fr)

Procédé et équipement pour la réduction des émissions polluantes de type acides provenant d'installations industrielles

Publication

EP 1233235 A3 20021113 (DE)

Application

EP 02003515 A 20020215

Priority

- GR 2001100091 A 20010219
- GR 2001100092 A 20010219

Abstract (en)

[origin: EP1233235A2] A process neutralizes Sulfur trioxide gas emissions arising from the combustion of heavy oil. Prior to the combustion process, an emulsion is prepared of fuel oil and a magnesium agent or a magnesium compound, and introduced to the burner. The magnesium agent is in aqueous solution introduced to the heavy oil under pressure and then introduced to the burner as an aerosol in a ring arrangement forming an umbrella profile. The magnesium is introduced as magnesium nitrate or magnesium acetate. An Independent claim is included for a suitable burner assembly with a dosing unit valve (10) and emulsion feed (8) discharging to a burner inlet (9) from an emulsion reservoir (5). The burner further has a compressed air fed system to a jet. The magnesium agent is held ready as a solution in a tank (5).

IPC 1-7

F23K 5/12; **F23K 5/10**; **C10L 1/32**; **F23J 7/00**; **F23J 15/00**

IPC 8 full level

C10L 1/32 (2006.01); **F23K 5/10** (2006.01); **F23K 5/12** (2006.01)

CPC (source: EP US)

C10L 1/328 (2013.01 - EP US); **F23K 5/10** (2013.01 - EP US); **F23K 5/12** (2013.01 - EP US); **F23K 2300/20** (2020.05 - EP US)

Citation (search report)

- [XY] EP 0958853 A1 19991124 - MARELLI ERNESTO [IT]
- [Y] US 4354762 A 19821019 - CANTONI ANGELO
- [Y] US 4214435 A 19800729 - CAMPBELL THOMAS C [US]
- [X] DE 2757419 A1 19780727 - SEATRAN LINES INC
- [X] DE 4103859 A1 19911002 - INTEVEP SA [VE]
- [X] US 5964906 A 19991012 - LAYRISSE IGNACIO A [VE], et al
- [X] GB 1191464 A 19700513 - MAINGEOT RAYMOND [BE]
- [X] EP 0268094 A2 19880525 - KRC UMWELTTECHNIK GMBH [DE]
- [X] US 4722287 A 19880202 - ANDERSON DAVID K [US], et al

Cited by

EP3030335A1

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