Title (en)
METHOD AND DEVICE FOR REMOVING SULPHUR DIOXIDE FROM A DRY GAS STREAM

Title (de)
VERFAHREN UND VORRICHTUNG ZUM ENTFERNEN VON SCHWEFELDIOXID AUS EINEM TROCKENEN GASSTROM

Title (fr)
PROCEDE ET DISPOSITIF PERMETTANT D'ELIMINER LE DIOXYDE DE SOUFRE D'UN FLUX DE GAZ SEC

Publication
EP 1924338 A1 20080528 (DE)

Application
EP 06778382 A 20060828

Priority
• EP 2006065731 W 20060828
• DE 102005041794 A 20050902

Abstract (en)
[origin: WO2007025948A1] The invention relates to a method for removing sulphur dioxide from a dry gas stream which comprises the following steps: (a) admixing a liquid comprising hydrogen peroxide into the gas stream, where sulphuric acid forms from the hydrogen peroxide and the sulphur dioxide, and (b) condensing, absorbing or aerosol-precipitating the sulphuric acid formed. The admixed liquid comprising hydrogen peroxide is mixed with the dry gas stream in less than 0.3 s so that the admixed liquid is essentially homogeneously distributed in the gas stream. In addition, the invention relates to a device for removing sulphur dioxide from a dry gas stream which comprises at least one atomizer nozzle for adding the liquid comprising hydrogen peroxide and a filter or aerosol precipitator arranged in the direction of flow of the gas stream behind the at least one atomizer nozzle, where in each case at least one atomizer nozzle is arranged on a cross sectional area of from 300 to 350 cm^2.

IPC 8 full level
B01D 53/50 (2006.01)

CPC (source: EP US)
B01D 53/1481 (2013.01 - EP US); **B01D 53/507** (2013.01 - EP US); B01D 2251/106 (2013.01 - EP US); B01D 2251/506 (2013.01 - EP US); B01D 2257/302 (2013.01 - EP US); B01D 2259/10 (2013.01 - EP US); B01D 2259/12 (2013.01 - EP US); Y02A 50/20 (2017.12 - EP US)

Citation (search report)
See references of WO 2007025948A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
DE 102005041794 A1 20070308; CA 2623104 A1 20070308; CN 101277749 A 20081001; EP 1924338 A1 20080528; US 2008199379 A1 20080821; WO 2007025948 A1 20070308; ZA 200802805 B 20091028

DOCDB simple family (application)
DE 102005041794 A 20050902; CA 2623104 A 20060828; CN 200680036568 A 20060828; EP 06778382 A 20060828; EP 2006065731 W 20060828; US 6538906 A 20060828; ZA 200802805 A 20080331