

METHOD FOR THE CATALYTIC REMOVAL OF CARBON DIOXIDE AND SULPHUR DIOXIDE FROM WASTE GASES

Abstract

The present invention relates to a method for the catalytic removal of sulphur dioxide and carbon dioxide from waste gases in a reactor charged with an activated carbon catalyst, characterised by the following steps:

- saturating the activated carbon with SO_2 ,
- saturating or partially saturating the waste gases with water,
- introducing the exhaust gases into the reactor,
- catalytically converting the SO_2 into H_2SO_4 and, in parallel with this, catalytically converting CO_2 into C and O_2 and into sulphur-carbon compounds on the same catalyst,
- washing out the catalyst and discharging the H_2SO_4 as a liquid and the C as a solid and/or bound to sulphur compounds.

(Fig. 1)