

Title (en)

PROCESS FOR THE SEPARATION OF SULPHUR DIOXIDE FROM A GAS STREAM AND INSTALLATION FOR CARRYING OUT THE PROCESS

Publication

EP 0000515 B1 19811202 (DE)

Application

EP 78100389 A 19780713

Priority

CH 906377 A 19770721

Abstract (en)

[origin: ES471907A1] A process is described for separating SO₂ from a current of gas containing the same, at least intermittently, in a concentration which is impermissibly high for discharge into the ambient atmosphere, with attendant production of sulfuric acid by the nitrogen oxide process, in which latter process the SO₂-containing gas initially flows through a denitration zone, or first through a pretreatment zone forming a first sector of an SO₂-processing zone and then through the denitration zone, thereafter through the main sector of the SO₂-processing zone, and subsequently through a nitrogen oxide absorption zone, in the course of which flow it is brought into contact in at least one of the two sectors of the SO₂-processing zone with dilute acid having a H₂SO₄-concentration of less than 70% by weight (55 DEG Be) which acid is circulated through the sector concerned of this latter zone, while in the absorption zone the nitrogen oxides released in the denitration zone are absorbed by sulfuric acid, and nitrose-containing acid having a H₂SO₄-concentration of 70 to 80% by weight (55 DEG to 63.5 DEG Be) is drawn off from the absorption zone and fed into the denitration zone, which process further comprises (a) measuring the content of NO in the current of gas at a point in the absorption zone or downstream of the absorption zone or simultaneously at points both in the absorption zone and downstream thereof, and (b) introducing a nitrogen-oxygen compound, or a substance which contains such a compound, into the dilute acid cycle of at least one of the two sectors of the SO₂-processing zone when a specific limit value of the NO-content or of the steepness of an increase per unit of time of the NO content in the current of gas at the NO-control point or points is exceeded. A plant for carrying out this process in practice is also described.

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IPC 8 full level

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