

Title (en)

Production of hydrogen sulfide from sulfur dioxide obtained from flue gas.

Title (de)

Produktion von Schwefelwasserstoff aus Schwefeldioxyd haltigem Abgas.

Title (fr)

Production d'hydrogène sulfuré à partir d'anhydride sulfureux obtenu des gaz de carneau.

Publication

EP 0000251 A1 19790110 (EN)

Application

EP 78300044 A 19780614

Priority

US 80704477 A 19770616

Abstract (en)

[origin: US4141961A] {PG,1 This invention is a process for producing gaseous hydrogen sulfide in concentrated form from sulfur dioxide obtained from a dilute gas source by (1) reacting the SO₂ with Na₂CO₃ to form Na₂SO₃, (2) reducing the Na₂SO₃ to Na₂S, (3) reacting the Na₂S with NaHCO₃ to form H₂S and Na₂CO₃, (4) recycling part of the Na₂CO₃ to the SO₂ reaction step, (5) reacting the remainder of the Na₂CO₃ with CO₂ and H₂O to form NaHCO₃ and (6) recycling the NaHCO₃ to the H₂S formation reaction.

IPC 1-7

B01D 53/34; **C01B 17/16**

IPC 8 full level

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CPC (source: EP US)

B01D 53/501 (2013.01 - EP US); **B01D 53/60** (2013.01 - EP US); **C01B 17/164** (2013.01 - EP US)

Citation (search report)

- [X] FR 2162630 A1 19730720 - NORTH AMERICAN ROCKWELL
- [A] US 3966418 A 19760629 - FREVEL LUDO K, et al
- [A] GB 1411330 A 19751022 - TSUKISHIMA KIKAI CO

Cited by

EP0246403A1

Designated contracting state (EPC)

BE DE FR GB NL SE

DOCDB simple family (publication)

EP 0000251 A1 19790110; **EP 0000251 B1 19820728**; CA 1090534 A 19801202; DE 2861967 D1 19820916; IT 1159729 B 19870304; IT 7868405 A0 19780616; JP S546897 A 19790119; US 4141961 A 19790227; ZA 783400 B 19790627

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EP 78300044 A 19780614; CA 305452 A 19780614; DE 2861967 T 19780614; IT 6840578 A 19780616; JP 7227678 A 19780616; US 80704477 A 19770616; ZA 783400 A 19780613