

[54] **METHOD OF REMOVING HYDROGEN SULFIDE FROM GASES UTILIZING A POLYVALENT METAL CHELATE SOLUTION AND ELECTROLYTICALLY REGENERATING THE SOLUTION**

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[58] Field of Search 423/224, 226, 573.6, 423/573 R; 429/17, 27; 204/129-131

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[57] **ABSTRACT**

A process for the removal of H₂S from sour gas streams is disclosed, the process being characterized by the use of a washing or contacting solution containing oxidizing polyvalent metal chelates of specified aminocarboxylic acids, the electrolytic regeneration of spent solution, and the co-production of hydrogen. Provision is also made for selective absorption of CO₂.

7 Claims, 3 Drawing Figures

