

[54] **METHOD FOR CONTROLLING REMOVAL OF HYDROGEN SULFIDE FROM GASES**

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[58] Field of Search **423/573, 571, 224, 226, 423/228**

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[57] **ABSTRACT**

Hydrogen sulfide is removed from a gas stream in an oxidation-reduction system by contacting the gas stream with an aqueous chelated iron solution in which the iron is in the ferric state to absorb hydrogen sulfide and convert it to elemental sulfur. The solution is regenerated by aeration. A redox electrode is used to monitor the oxidation potential of the solution, and corrective action is taken, as required, to maintain the concentration of ferric iron in the solution so as to achieve efficient removal of hydrogen sulfide.

9 Claims, 2 Drawing Figures