United States Patent [19]

Massie et al.

[11] **Patent Number: 4,487,753**

[45] **Date of Patent: Dec. 11, 1984**

[54] **SULFUR PRODUCTION**

[75] Inventors: **Stephen N. Massie**, Palatine; **Allen R. Broyles**, Buffalo Grove, both of Ill.

[73] Assignee: **UOP Inc.**, Des Plaines, Ill.

[21] Appl. No.: **560,064**

[22] Filed: **Dec. 9, 1983**

[51] **Int. Cl.**[3] **C01B 17/05**

[52] **U.S. Cl.** ..... **423/573 R**; 423/573 G

[58] **Field of Search** ..... 423/573 G, 573 R, 574 L, 423/575

[56] **References Cited**

U.S. PATENT DOCUMENTS

3,034,865	5/1962	Urban	423/573 R
3,039,855	6/1962	Urban	423/573 R
3,095,276	6/1963	Urban	423/573 R
3,205,164	9/1965	Brown	208/236
3,423,180	1/1969	Hoekstra	423/573 R
3,956,473	5/1976	Mimoun et al.	423/573 R
3,972,988	8/1976	Urban	423/571
4,036,942	7/1977	Sibeud et al.	423/573 R
4,196,183	4/1980	Li	423/573 G
4,358,427	11/1982	Urban	423/230

Primary Examiner—Earl C. Thomas
Assistant Examiner—Jeffrey E. Russel
Attorney, Agent, or Firm—William H. Page, II; Louis A. Morris

[57] **ABSTRACT**

A process for producing liquid elemental sulfur from a CO_2-rich gaseous stream containing H_2S. The gas is contacted with at least a stoichiometric amount of gaseous oxygen in the presence of liquid water with a fixed bed comprising a catalyst selected from the group consisting of a transition metal phthalocyanine compound dispersed on a support at a specific pH and temperature. A preferred support is activated carbon.

8 Claims, No Drawings