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Wiewiorowski et al.

[45] **Date of Patent:** **May 19, 1992**[54] **SPENT ALKYLATION ACID TREATMENT PROCESS**[75] **Inventors:** Tadeusz K. Wiewiorowski; Vivian C. Astley, both of New Orleans; Jody J. Taravella; Michael A. Murray, both of Harvey, all of La.[73] **Assignee:** Freeport-McMoRan Resource Partners, New Orleans, La.[21] **Appl. No.:** 336,791[22] **Filed:** Apr. 12, 1989[51] **Int. Cl.⁵** C01B 17/90[52] **U.S. Cl.** 423/531; 423/522;

423/525; 423/528; 423/540

[58] **Field of Search** 208/13; 423/525, 528, 423/531, 540[56] **References Cited****U.S. PATENT DOCUMENTS**

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OTHER PUBLICATIONSFasullo, *Sulfuric Acid, Use and Handling*, McGraw Hill Book Co., 1965, pp. 123-124, 141-144.*Primary Examiner*—Wayne Langel*Assistant Examiner*—Stephen G. Kalinchak*Attorney, Agent, or Firm*—Fisher, Christen & Sabol[57] **ABSTRACT**

An improved process for treating spent alkylation acid to recover a sulfuric acid product suitable for use in wet process phosphoric plants particularly those which recover uranium as a byproduct. The process utilizes heat and agitation to polymerize the liquid, soluble organic impurities normally contained in spent alkylation acid to insoluble, carbonaceous solids. The carbonaceous solids formed are relatively inert in acidic environments, easy to handle and have valuable cation exchange and impurity scavenging properties.

51 Claims, 2 Drawing Sheets