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(54) Title: REMOVING WATER-SOLUBLE HEAVY METAL-SULFUR COMPLEX FROM PROCESS SOLUTION

(57) Abstract: Methods for removing a soluble heavy metal-sulfur complex from a process solution comprise contacting the process solution with an oxidant to oxidize the heavy metal-sulfur complex and form an oxidized complex precipitate, or with an acid to acidify the heavy metal-sulfur complex and form an acidified complex precipitate, and removing the precipitate from the process solution to provide a heavy metal-reduced solution. The method is advantageous for removing heavy metals such as mercury, cadmium, barium, iron, vanadium and/or manganese from process solutions, for example originating from natural gas production, petroleum production, water treatment or mining.

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