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(54) **METHOD FOR RECOVERY OF METALS FROM METAL-CONTAINING MATERIALS USING MEDIUM TEMPERATURE PRESSURE LEACHING**

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(52) **U.S. Cl.** ..... **423/28**; 423/20; 423/21.1; 423/22; 423/49; 423/53; 423/109; 423/150.1; 241/23; 75/743; 75/744

(58) **Field of Classification Search** ..... 423/28, 423/21.5, 22, 49, 53, 20, 109, 150.1, DIG. 15, 423/21.1; 241/23; 75/743, 744  
See application file for complete search history.

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(57) **ABSTRACT**

The present invention relates generally to a process for recovering copper and other metal values from metal-containing materials using controlled, super-fine grinding and medium temperature pressure leaching. Processes embodying aspects of the present invention may be beneficial for recovering a variety of metals such as copper, gold, silver, nickel, cobalt, molybdenum, rhenium, zinc, uranium, and platinum group metals, from metal-bearing materials, and find particular utility in connection with the extraction of copper from copper sulfide ores and concentrates.

**15 Claims, 2 Drawing Sheets**