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(12) **United States Patent**  
**Uhrie et al.**

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(54) **METHODS AND SYSTEMS FOR LEACHING A METAL-BEARING ORE FOR THE RECOVERY OF A METAL VALUE**

(58) **Field of Classification Search**  
USPC ..... 75/743, 722, 770; 266/101  
See application file for complete search history.

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This patent is subject to a terminal disclaimer.

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(63) Continuation of application No. 12/545,783, filed on Aug. 21, 2009, now Pat. No. 8,118,907.

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(51) **Int. Cl.**  
**C22B 3/18** (2006.01)  
**C22B 1/14** (2006.01)

(52) **U.S. Cl.**  
USPC ..... 75/722; 75/743; 75/770

(57) **ABSTRACT**

A system and method for recovering a metal value from a metal-bearing ore material are provided. A metal-bearing ore can be mixed with certain substances and to form an agglomerated ore. In an intermediate state, between agglomeration and heap formation, bacteria can be added to the metal-bearing ore material to produce an augmented ore. The augmented ore can then be formed into a heap.

**10 Claims, 5 Drawing Sheets**

