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Morgan et al.

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(54) **SYSTEM AND METHOD INCLUDING MULTI-CIRCUIT SOLUTION EXTRACTION FOR RECOVERY OF METAL VALUES FROM METAL-BEARING MATERIALS**

(58) **Field of Classification Search**
None
See application file for complete search history.

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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This patent is subject to a terminal disclaimer.

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Related U.S. Application Data

(60) Continuation of application No. 17/366,653, filed on Jul. 2, 2021, now Pat. No. 11,584,974, which is a (Continued)

(57) **ABSTRACT**

The present disclosure relates to a metal recovery process comprising a solvent extraction process. In an exemplary embodiment, the solution extraction system comprises a plant with a first and second circuit. A high-grade pregnant leach solution (“HGPLS”) is provided to the first and second circuit, and a low-grade pregnant leach solution (“LGPLS”) is provided to the second circuit. The first circuit produces a rich electrolyte, which can be forwarded to a primary metal recovery, and a low-grade raffinate, which can be forwarded to a secondary metal recovery process. The second circuit produces a rich electrolyte, which can also be forwarded to the primary metal recovery process. The first and second circuits are in fluid communication with each other.

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(52) **U.S. Cl.**
CPC **C22B 3/02** (2013.01); **B01D 11/028** (2013.01); **B01D 11/0488** (2013.01); **C22B 3/20** (2013.01);
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11 Claims, 8 Drawing Sheets

