

Title (en)

Method of preparing high purity gold from precious metal bearing nitrate solutions

Title (de)

Verfahren zur Herstellung von Gold hoher Reinheit aus nitrathaltigen Edelmetall-Lösungen

Title (fr)

Procédé pour obtenir de l'or de pureté élevée à partir de solutions de nitrates des métaux précieux

Publication

**EP 1061144 B1 20031029 (DE)**

Application

**EP 00111133 A 20000524**

Priority

DE 19928028 A 19990618

Abstract (en)

[origin: DE19928028C1] High purity gold recovery from nitrate solution involves nitrate decomposition and gold recovery from the resulting highly acidic solution by ferric ion addition. High purity gold is recovered from nitrate-containing precious metal solution by: (a) nitrate decomposition to obtain a solution with  $\sim 4$  mol/l  $H^{+}$  ion concentration; and (b) gold ion reduction by addition of an acidic  $Fe^{2+}$  solution having a  $\sim 4$  mol/l  $H^{+}$  ion concentration. Preferred Features: Step (a) is carried out using formic or ascorbic acid at 80-90 deg C, and step (b) is carried out under potential control at 60 deg C.

IPC 1-7

**C22B 11/00**; **C22B 3/44**; **C22B 3/46**; **B22F 9/24**

IPC 8 full level

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