

Title (en)

PROCESS FOR EXTRACTING ALUMINA FROM BAUXITE.

Title (de)

VERFAHREN ZUR EXTRAKTION VON ALUMINIUMOXID AUS BAUXIT.

Title (fr)

PROCEDE D'EXTRACTION D'ALUMINE DE LA BAUXITE.

Publication

EP 0651728 A1 19950510 (EN)

Application

EP 93915547 A 19930722

Priority

- AU 9300369 W 19930722
- AU PL375492 A 19920724

Abstract (en)

[origin: WO9402416A1] A process for extracting alumina from bauxite comprising the steps of concentratring a portion of spent caustic liquor (18), combining said concentrated spent caustic liquor with a bauxite slurry (3) to provide a final alumina to caustic ratio (A/C) of greater than 0.7 in the slurry/liquor mixture, heating the mixture by means of a heat exchanger (5), subjecting the mixture to digestion in a tank (7) at a temperature below that at which reversion of dissolved gibbsite to boehmite may occur to thereby extract alumina from the gibbsite bauxite in the slurry, separating the high alumina pregnant liquor (9) from the boehmite containing residue in a pressure decanter (8), mixing the residue with the remaining portion of unconcentrated spent caustic liquor (18) and subjecting the mixture to high temperature digestion in a tank (11) to extract the remaining alumina from the residue, subjecting the digested mixture to flash cooling in flash tanks (13), and separating the alumina rich liquors from the high alumina pregnant liquor and from the digested mixture in an atmospheric separator (14) or a pressure decanter (17).

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