

Title (en)

FLOTATION ADJUVANT AND METHOD FOR THE FLOTATION OF NON-SULPHIDIC ORES

Publication

**EP 0108914 B1 19880601 (DE)**

Application

**EP 83109992 A 19831006**

Priority

DE 3238060 A 19821014

Abstract (en)

[origin: US4457850A] Flotation aids and a process for the flotation of non-sulfidic minerals. The flotation aids have the formula <IMAGE> I wherein R represents an aliphatic, cyclic, or alicyclic C<sub>7</sub>-C<sub>23</sub> radical, optionally substituted with one or more hydroxyl, sulfhydryl, carbonyl, ether, or thioether groups; X<sup>n+</sup> is hydrogen or a water-solubilizing, salt-forming cation; and n is the valence of X. The invention also relates to ore suspensions and mineral concentrates in association with the above flotation aids.

IPC 1-7

**B03D 1/00**

IPC 8 full level

**B03D 1/00** (2006.01); **B03D 1/004** (2006.01); **B03D 1/008** (2006.01); **B03D 1/02** (2006.01)

CPC (source: EP US)

**B03D 1/008** (2013.01 - EP US); **B03D 1/012** (2013.01 - EP US); **B03D 1/02** (2013.01 - EP US); **B03D 1/021** (2013.01 - EP US);  
**B03D 2201/02** (2013.01 - EP US); **B03D 2203/04** (2013.01 - EP US)

Cited by

AT397048B; US5441156A; US5540336A; EP0201815A3; WO9221443A1; WO9115298A1; WO9306935A1; WO9118674A1

Designated contracting state (EPC)

AT DE FR IT SE

DOCDB simple family (publication)

**EP 0108914 A2 19840523**; **EP 0108914 A3 19860813**; **EP 0108914 B1 19880601**; AT E34675 T1 19880615; CA 1207092 A 19860702;  
DE 3238060 A1 19840419; DE 3376804 D1 19880707; FI 73369 B 19870630; FI 73369 C 19871009; FI 833363 A0 19830920;  
FI 833363 A 19840415; MX 7649 E 19900604; US 4457850 A 19840703; ZA 837643 B 19840725

DOCDB simple family (application)

**EP 83109992 A 19831006**; AT 83109992 T 19831006; CA 438960 A 19831013; DE 3238060 A 19821014; DE 3376804 T 19831006;  
FI 833363 A 19830920; MX 1083783 U 19831014; US 49228083 A 19830506; ZA 837643 A 19831013