Title (en)
PROCESS FOR THE SELECTIVE SEPARATION OF A COPPER MOLYBDENUM ORE

Publication
EP 0229835 B1 19930616 (EN)

Application
EP 86905004 A 19860709

Priority
US 75318185 A 19850709

Abstract (en)
[origin: WO8700088A1] A process for separation of the mineral components of a copper/molybdenum sulfide ore by flotation including (a) crushing and grinding the ore to liberate the minerals; (b) in a primary flotation circuit, adding a molybdenum collector selected from the group of hydrocarbon oils, and a frother; (c) floating a primary (molybdenum) concentrate in the primary circuit in the absence of a copper collector; (d) directing the primary molybdenum concentrate to an upgrading separation circuit to produce a final molybdenum concentrate; and (e) directing the non-float of the primary circuit to a secondary scavenger circuit for recovery of copper and additional molybdenum with addition of a copper collector, the process being conducted at a natural pH essentially determined by the ore composition and the quality of the water used to form the pulp, without addition of substantial amounts of alkaline or acid pH modifiers sufficient to change the pH.

IPC 1-7
B03B 1/00; B03B 1/04; B03D 1/02; B03D 1/06; B03D 1/08

IPC 8 full level
B03B 1/00 (2006.01); **B03B 1/04** (2006.01); **B03D 1/02** (2006.01); **B03D 1/06** (2006.01); **B03D 1/08** (2006.01)

CPC (source: EP)
B03B 1/04 (2013.01); **B03D 1/02** (2013.01); **B03D 1/06** (2013.01)

Cited by
CN105665146A; CN107790291A; CN106238214A; CN104128263A; CN101927213A; CN102302981A; CN102228870A; CN102671769A

Designated contracting state (EPC)
AT BE CH DE FR GB IT LI LU NL SE

DOCDB simple family (publication)
WO 8700088 A1 19870115; AT E90592 T1 19930715; AU 5684090 A 19900927; AU 6191386 A 19870130; AU 629646 B2 19921008; BR 8606758 A 19871013; DE 3688591 D1 19930722; DE 3688591 T2 19930923; EP 0229835 A1 19870729; EP 0229835 A4 19891212; EP 0229835 B1 19930616; FI 80835 B 19900430; FI 80835 C 19900810; FI 870999 A0 19870306; FI 870999 A 19870306; JP S63500577 A 19880303

DOCDB simple family (application)
US 8601467 W 19860709; AT 86905004 T 19860709; AU 5684090 A 19900605; AU 6191386 A 19860709; BR 8606758 A 19860709; DE 3688591 T 19860709; EP 86905004 A 19860709; FI 870999 A 19870306; JP 50429086 A 19860709