

Publication

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Application

EP 92904085 A 19911213

Priority

- US 9109371 W 19911213
- US 62826490 A 19901217

Abstract (en)

[origin: WO9211091A1] Dialkylated aryl monosulfonic acids or salts thereof or their mixture are useful as collectors in the flotation of minerals, particularly oxide minerals. Collector compositions comprising these salts and oleic acid are particularly useful in hard water. Collector compositions comprising these salts and sulfide collectors such as xanthates are useful in flotations conducted at natural pH of the slurry.

IPC 1-7

B03D 1/012

IPC 8 full level

B03D 1/004 (2006.01); **B03D 1/012** (2006.01)

CPC (source: EP)

B03D 1/012 (2013.01); **B03D 2201/02** (2013.01); **B03D 2203/02** (2013.01); **B03D 2203/025** (2013.01)

Citation (search report)

- [XA] US 2547148 A 19510403 - BATES WILLIAM A
- See references of WO 9211091A1

Cited by

CN109317314A; CN101972708A; EP2715055A4; WO2016162344A1

Designated contracting state (EPC)

SE

DOCDB simple family (publication)

WO 9211091 A1 19920709; AU 653772 B2 19941013; AU 9176891 A 19920722; BR 9107245 A 19931123; CA 2098574 A1 19920618; EP 0562040 A1 19930929; EP 0562040 A4 19940209; EP 0562040 B1 19970723; FI 932773 A0 19930616; FI 932773 A 19930723

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US 9109371 W 19911213; AU 9176891 A 19911213; BR 9107245 A 19911213; CA 2098574 A 19911213; EP 92904085 A 19911213; FI 932773 A 19930616