

Title (en)

METHOD FOR SEPARATING A DEFINED MINERAL PHASE OF VALUE FROM A GROUND ORE

Title (de)

VERFAHREN ZUR ABTRENNUNG EINER DEFINIERTEN MINERALISCHEN WERTSTOFFPHASE AUS EINEM GEMAHLENEN ERZ

Title (fr)

PROCÉDÉ DE SÉPARATION D'UNE PHASE DE MATIÈRE MINÉRALE DÉFINIE D'UN MINÉRAI BROyé

Publication

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Application

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Abstract (en)

[origin: WO2015091324A1] The invention relates to a method for separating a defined mineral phase of value (2) from a ground ore (4) having several chemical phases and being present in a heterogeneous particle size distribution, comprising the following steps: - classifying (6) the ore according to a defined particle diameter into at least two fractions, a first fraction (8) having particles essentially larger than the defined particle diameter and a second fraction (10) comprising particles essentially smaller than the defined particle diameter, and the defined mineral particles of value (2) being present in both fractions (8, 10), - floating (11) the first fraction having the greater particle diameters and selecting the defined mineral particles of value (2) in a flotation concentrate (12), - selectively admixing the defined mineral particles of value (2) in the fraction (10) having the smaller particle diameters with magnetizable particles (14), - applying a magnetic separation process to the second fraction (10) having smaller particle diameters and separating a concentrate (16) with an enrichment of the defined mineral phase of value (2).

IPC 8 full level

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Citation (opposition)

Opponent : BASF SE

- WO 2010066770 A1 20100617 - BASF SE [DE], et al
- WO 2012072615 A1 20120607 - BASF SE [DE], et al
- WO 2012162614 A1 20121129 - CIDRA CORPORATE SERVICES INC [US], et al
- WO 2009101070 A2 20090820 - SIEMENS AG [DE], et al
- WO 2012175308 A1 20121227 - SIEMENS AG [DE], et al
- US 4192738 A 19800311 - COLOMBO ARTHUR F [US], et al

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