

Title (en)

METHOD FOR INCREASING EFFICIENCY IN THE ORE SEPARATING PROCESS BY MEANS OF HYDROPHOBIC MAGNETIC PARTICLES BY APPLYING TARGETED MECHANICAL ENERGY

Title (de)

VERFAHREN ZUR EFFIZIENZSTEIGERUNG BEIM ERZTRENNUNGSPROZESS MITTELS HYDROPHOBER MAGNETISCHER PARTIKEL DURCH GEZIELTEN EINTRAG MECHANISCHER ENERGIE

Title (fr)

PROCÉDÉ PERMETTANT D'AUGMENTER LE RENDEMENT LORS D'UN PROCESSUS DE SÉPARATION DE MINERAIS AU MOYEN DE PARTICULES MAGNÉTIQUES HYDROPHOBES PAR L'APPORT CIBLÉ D'ÉNERGIE MÉCANIQUE

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Abstract (en)

[origin: WO2011058039A1] The invention relates to a method for separating out at least one first material from a mixture comprising said at least one first material and at least one second material, comprising the following steps (A) bringing the mixture comprising at least one first material and at least one second material into contact with at least one magnetic particle, in the presence of at least one dispersion agent, so that the at least one first material and the at least one magnetic particle build up, (B) optionally adding further dispersion agents to the dispersion obtained in step (A), (C) separating out the agglomerated product from step (A) or (B) from the mixture by applying a magnetic field, (D) and splitting the separated agglomerated product from step (C) in order to separately obtain the at least one first material and the at least one magnetic particle, wherein at least 10 kW/m³ of energy is introduced into the dispersion in step (A).

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