

Title (en)

MAGNETIC SEPARATION OF SUBSTANCES ON THE BASIS OF THE DIFFERENT SURFACE CHARGES THEREOF

Title (de)

MAGNETISCHE TRENNUNG VON SUBSTANZEN BASIEREND AUF IHREN UNTERSCHIEDLICHEN OBERFLÄCHENLADUNGEN

Title (fr)

SEPARATION MAGNETIQUE DE SUBSTANCES SUR LA BASE DE LEURS CHARGES SUPERFICIELLES DIFFERENTES

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Abstract (en)

[origin: WO2009065802A2] The invention relates to a method for separating at least one first material from a mixture containing said at least one first material and at least one second material. Said method comprises the following steps: (A) a suspension of the mixture containing at least one first material and at least one second material and at least one magnetic particle is produced in a suitable suspending agent; (B) the pH of the suspension obtained in step (A) is adjusted to a value at which the at least one first material and the at least one magnetic particle have opposite surface charges such that the same agglomerate; (C) the agglomerate obtained in step (B) is separated by applying a magnetic field; and (D) the agglomerate separated in step (C) is split by adjusting the pH to a value at which the at least one first material and the at least one magnetic particle have identical surface charges in order to obtain the at least one first material.

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