Title (en)

FERROHYDROSTATIC SEPARATOR

Publication

EP 0362380 A4 19901227 (DE)

Application

EP 88904708 A 19880217

Priority

SU 8800038 W 19880217

Abstract (en)

[origin: WO8907489A1] A ferrohydrostatic separator comprises a magnetic system (1) with two poles (N-S), the profile of which is designed so as to form a magnetic field of an intensity (H) varying over the height of the magnetic gap from the maximum value at the lower part of the poles to the minimum value at their upper part, a reservoir (2) made of a non-magnetic material and filled with a ferromagnetic liquid (3), as well as a device (4) for feeding the mechanical mixture of non-magnetic materials and a device (5) for removing the separated particles of the mechanical mixture. In the gap (N-S) between the poles are placed elements of ferromagnetic material forming local magnetic fields inside the column of the ferromagnetic liquid (3). The vector of the magnetic force (F1x?) of each of the local magnetic fields is directed at an angle to the velocity vector (V) of particle movement in the mechanical mixture.

IPC 1-7

B03C 1/30

IPC 8 full level

B03C 1/02 (2006.01); **B03C 1/32** (2006.01)

CPC (source: EP)

B03C 1/32 (2013.01)

Citation (search report)

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- See references of WO 8907489A1

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