

Title (en)  
HIGH GRADIENT MAGNETIC SEPARATOR

Title (de)  
HOCHGRADIENTEN-MAGNETABSCHEIDER

Title (fr)  
SEPARATEUR MAGNETIQUE A GRADIENT ELEVE

Publication  
**EP 1198296 B1 20030827 (DE)**

Application  
**EP 00944019 A 20000708**

Priority  
• DE 19934427 A 19990722  
• EP 0006498 W 20000708

Abstract (en)  
[origin: DE19934427C1] The magnetic separator has a zone in which materials are separated. The assembly comprises a matrix plane of parallel magnetizable wires arranged at different levels, each level separated by a passage with non-magnetizable walls. A fluid containing magnetizable particles flows through the passage in which the fluid is exposed to the influence of a magnetic field at right angles to the planes formed by the wires and passages. The magnetic separator has a zone in which materials are separated. The assembly comprises a matrix plane of parallel magnetizable wires arranged at different levels, each level separated by a passage with non-magnetizable walls. A fluid containing magnetizable particles flows through the passage in which the fluid is exposed to the influence of a magnetic field at right angles to the planes formed by the wires and passages. The passages are especially of either round or elliptical cross-section. Certain parts of the passages incorporate separation panels which are parallel to the planes and are at right angles to the outer magnetic fields. The panels are aligned in the direction of flow and are located prior to the emergence of the fluid from the magnetic field.

IPC 1-7  
**B03C 1/033**; **B03C 1/034**

IPC 8 full level  
**B03C 1/033** (2006.01); **B03C 1/034** (2006.01); **B03C 1/035** (2006.01)

CPC (source: EP US)  
**B03C 1/035** (2013.01 - EP US)

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