

ABSTRACT

MAGNETIC SEPARATOR

5 A magnetic separator includes two parallel and spaced magnetic rods. Each magnetic rod includes a non-magnetic tubular body with a longitudinal axis and a chamber, a plurality of magnetic members nested in the chamber, and a plurality of spacers made of high magnetic permeability materials and respectively disposed between the adjacent magnetic members. The magnetic members in each magnetic rod are
10 disposed with like poles adjacent each other. Poles of the magnetic members in one magnetic rod are opposite to poles of the nearest adjacent magnetic members in another magnetic rod. The width of each magnetic member in the longitudinal axis of the tubular body is larger than that of each spacer so that a matrix type magnetic flux lines can be formed by the grate magnetic separator.

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FIG. 1