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ABSTRACT

A filter device (10) has a filter tank into which a contaminated fluid is introduced, a magnetic ball filter medium (33) using a large number of metal balls (35), magnets (45), and lift rods (50). The magnetic ball filter medium (33) is formed of an aggregate of a large number of spherical metal balls (35) of a magnetic material and is held in a filter medium storage portion (32) in a manner such that the metal balls (35) are movable relatively to one another. The magnets (45) are relatively movable with respect to the magnetic ball filter medium (33) between a first position and a second position. When in the first position, the magnets (45) apply a magnetic field to the metal balls (35), thereby causing the metal balls (35) magnetically to attract one another and so that the metal balls (35) are fixed to one another. When in the second position, the magnetic attraction between the metal balls (35) is canceled so that the metal balls (35) are movable. The magnets (45) are relatively moved between the first position and the second position by the lift rods (50).