

ABSTRACT

MAGNETIC SEPARATION APPARATUS

5 It is possible to eliminate the problems of adsorption /separation efficiency and collection efficiency of magnetic flocs in a conventional magnetic separation apparatus, and to remove the magnetic flocs contained in raw water with high efficiency. In a magnetic separation apparatus, plurality of magnetic disks (36) are arranged so that they are substantially half sunk in the raw water in a separation tank
10 (32). A water inlet is provided at a lower end of the separation tank (32) in order to feed the raw water as an upward flow to the separation tank (32). Flow dividing members (46) are provided directly underneath the respective magnetic disks (36), which divide the flow of the raw water supplied from the feed-water inlet in right and left directions with respect to surfaces of the magnetic disks (36) and in a thickness
15 direction of the magnetic disks (36). A pair of troughs (40) are provided on opposing sides of the separation tank (32) parallel to the rotation axis, where treated water after removing the magnetic flocs (F) in the raw water by the magnetic disks overflows.

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Figure 3