

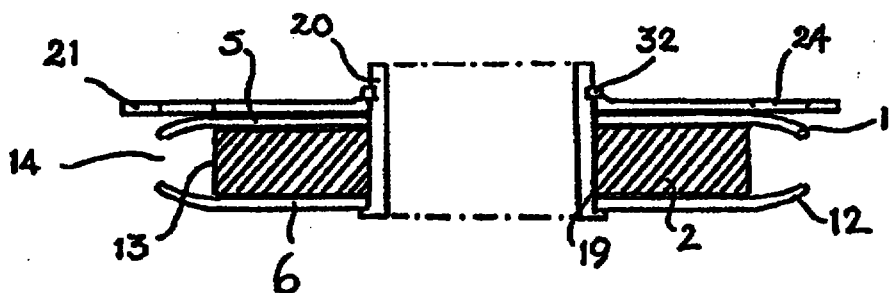
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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| (51) International Patent Classification <sup>6</sup> :<br>B03C 1/033, B01D 35/06                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | A1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | (11) International Publication Number: <b>WO 97/04873</b><br>(43) International Publication Date: 13 February 1997 (13.02.97) |
| (21) International Application Number: <b>PCT/GB96/01773</b><br>(22) International Filing Date: <b>24 July 1996 (24.07.96)</b><br>(30) Priority Data:<br><b>9515352.4</b> <b>26 July 1995 (26.07.95)</b> <b>GB</b><br>(71) Applicant (for all designated States except US): <b>MARLOWE, John [GB/GB]; 3 Dominic Road, Childwall, Liverpool L16 1JY (GB).</b><br>(72) Inventor; and<br>(75) Inventor/Applicant (for US only): <b>HALL, Harold [GB/GB]; Flat 2, 31 South Drive, Liverpool L15 8JJ (GB).</b><br>(74) Common Representative: <b>MARLOWE, John; 3 Dominic Road, Childwall, Liverpool L16 1JY (GB).</b> | (81) Designated States: <b>AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CI, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</b><br><br><b>Published</b><br><b>With international search report.</b> |                                                                                                                               |

(54) Title: A MAGNETIC FILTER DEVICE



## (57) Abstract

A magnetic filter device for filtering ferromagnetic material from a fluid in which said material is suspended, has a pair of annular plates (5, 6) attached to either side of an annular magnet (2) of smaller diameter. Pairs of pole pieces (11, 12) radially disposed on the plates (5, 6) are aligned so as to generate fields of magnetic flux which promote the collection and retention of ferromagnetic material between the pairs of polepieces (11, 12).