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(54) Title: IMPROVED SELF-CLEANING FILTER

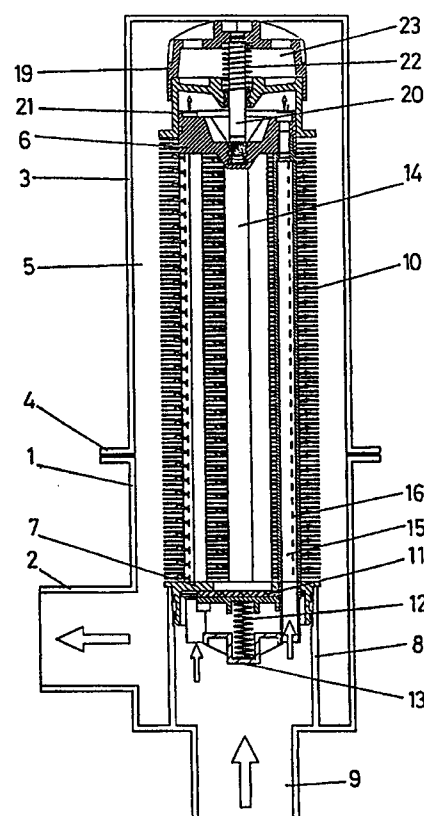
(54) Título: FILTRO AUTOLIMPIANTE PERFECCIONADO

(57) Abstract

Improved self-cleaning filter comprised of a body (1) with an inlet (2) for the water towards an enveloping chamber (5), a filtering element based on a plurality of grooved discs (10), an axial passage (14) inside said discs and an axial outlet (9) for cleaned water. The filtering element (10) is terminated at its lower end by a valve plate (11) which closes the axial passage (14) in the return of water during the washing, thereby forcing the water to pass through side collectors (15) which not affected by the valve plate (11) and wherein are provided water outlet gates (16) which are oriented obliquely in the lateral direction in order to rotate the discs (10) during the cleaning operation, said gates being also oblique in the vertical direction in order to favour the spacing between discs (10), said gates being arranged helically (15); the tower (6) supporting the discs is terminated by a retractable piston (21).

(57) Resumen

Filtro autolimpiante perfeccionado, compuesto por una carcasa (1) con una entrada (2) para el agua hacia una cámara envolvente (5), un elemento filtrante a base de una pluralidad de discos ranurados (10), un paso axial (14) en el seno de dichos discos y una salida axial (9) para el agua limpia. El elemento filtrante (10) se remata por su extremidad inferior en una clapeta (11) que cierra el paso axial (14) en el retroceso del agua durante el lavado, obligándola a pasar por colectores laterales (15), no afectados por la clapeta (11) y en los que se establecen ventanas (16) de salida del agua orientadas oblicuamente en sentido lateral para hacer girar a los discos (10) durante la limpieza, oblicuas también en sentido vertical para favorecer del distanciamiento entre discos (10) y distribuidas helicoidalmente (15), rematándose la torre (6) soporte de dichos discos en un pistón retráctil (21).



INTERNATIONAL SEARCH REPORT

International application No.
PCT/ES 98/00218

A. CLASSIFICATION OF SUBJECT

IPC6 B01D29/68, 29/46

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC6 B01D29/68, 29/46, 29/11, 29/15, 29/17, 29/70, 25/16

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPODOC, CIBEPAT, WPI, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 347477 A1 (DRORI, MORDEKI) 27 December 1989 (27.12.89), column 17, lines 49 - column 18, lines 38; figures 3-6B.	1
A	US 4123356 A (SUGIMOTO ET AL.) 31 October 1978 (31.10.78), column 4, lines 16-37; figures	1,6
A	US 4552655 A (GRANOT) 12 November 1985 (12.11.85), column 3, lines 9-column 4, lines 43; figures	1,6
A	US 4707259 A (DOUCET) 17 November 1987 (17.11.87), column 4, lines 24-column 5, lines 17; figures	1



Further documents are listed in the continuation of Box C.



See patent family annex.

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"&" document member of the same patent family

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