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(57) Abstract: A unitary multi-function control module for a reverse osmosis water purification system provides all of the necessary flow control functions in a single removable and easily replaceable unit. The module connects directly with a unitary injection molded manifold, provides all of the interconnections between the manifold and the supply, permeate, and brine flow paths, and houses the supply flow shutoff valve, the RO membrane flow control, and the permeate back flow check valve.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/23559

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 B01D61/08 B01D61/10 B01D61/12 B01D65/00 C02F1/44
C02F1/28

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)

IPC 7 B01D C02F

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 practical, search terms used)

WPI Data, PAJ, EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 045 197 A (B.D.BURROWS) 3 September 1991 (1991-09-03) claims; figures ---	1-15
Y	US 5 128 035 A (R.A.CLACK ET AL) 7 July 1992 (1992-07-07) claims; figures ---	1-15
A	US 5 122 265 A (H.F.MORA ET AL) 16 June 1992 (1992-06-16) claims; figures ---	1-15
A	US 5 891 334 A (R.R.GUNDRUM ET AL) 6 April 1999 (1999-04-06) cited in the application claim; figures --- -/-	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

* & * document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 662 793 A (R.W.BEALL, JR.) 2 September 1997 (1997-09-02) claims; figures -----	1

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 01/23559

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
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