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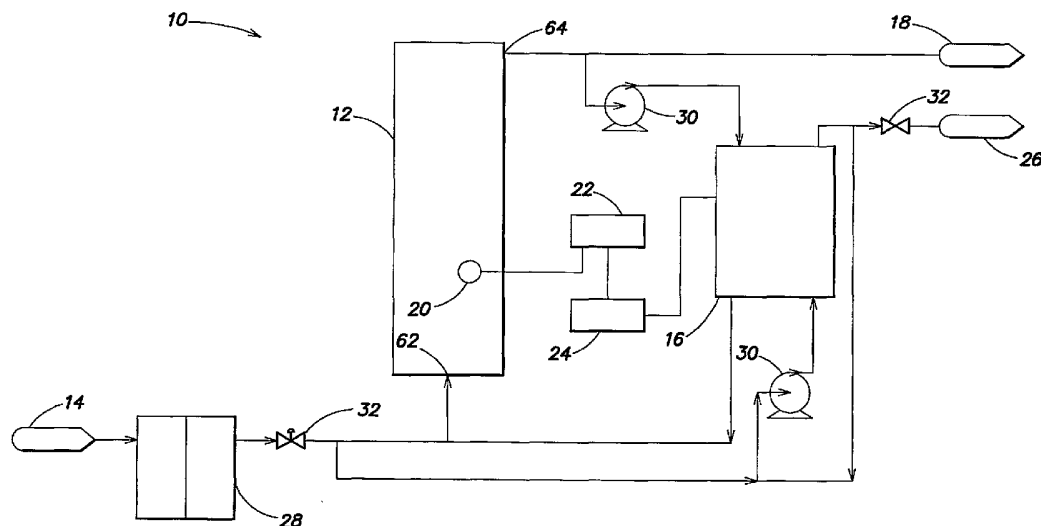
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[Continued on next page]

(54) Title: WATER TREATMENT SYSTEM AND METHOD



(57) Abstract: A water treatment system provides treated water to a point of use by removing at least a portion of any hardness-causing species contained in water from a water source, such as municipal water, well water, brackish water and water containing foulants. The water treatment system typically receives water from the water source or a point of entry and purifies the water containing at least some undesirable species before delivering the treated water to a point of use. The water treatment system has a pressurized reservoir system in line with an electrochemical device such as an electrodeionization device. The water treatment system can have a controller for adjusting or regulating at least one operating parameter of the treatment system or a component of the water treatment system.

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FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

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9 September 2005

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- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/037706

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C02F5/00

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 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)

EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2003/080467 A1 (ANDREWS CRAIG C ET AL) 1 May 2003 (2003-05-01) the whole document -----	1-10,14, 15,70

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

° Special categories of cited documents :

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "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

14 March 2005

Date of mailing of the international search report

28.06.05

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INTERNATIONAL SEARCH REPORT

International application No.
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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:

3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:

4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

1-10, 14, 15, 70

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-10 14 15 70

System comprising a pressurized vessel

2. claim: 11

System comprising a specific controller

3. claim: 12

System for treating chlorine containing water

4. claim: 13 68 69

System comprising heat exchanger

5. claims: 16, 21-29 40-45

Water treatment method and system comprising an auxiliary
use

6. claim: 17

Irrigation system

7. claim: 18

Household water distribution system

8. claim: 19

System for treating water with a conductivity of less than
220 microsiemens / cm

9. claim: 20

Electrodeionization system

10. claims: 30-39

Method comprising treating water from a reservoir outside it
and returning the treated water there

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

11. claims: 46-50

Water distribution system comprising pretreatment

12. claims: 51-55 60-67

water treatment system and methods comprising means for
accumulating water.

13. claims: 56-59

Method for treating water comprising mixing treated and non
treated water

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/037706

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