Title: COMPOSITIONS FOR REPLACEMENT FLUID AND ASSOCIATED SYSTEMS AND METHODS USABLE IN THE PERFORMANCE OF FREQUENT HEMOFILTRATION

Abstract: A replacement fluid is specially formulated to be used in conjunction with a modality of hemofiltration that is to be performed at least four times weekly, called frequent hemofiltration. The replacement fluid for frequent hemofiltration comprises a balanced salt solution that includes sodium, calcium, potassium, chloride, and either bicarbonate or an anion that can be metabolized into bicarbonate. The frequent hemofiltration modality minimizes the depletion of blood electrolytes during each therapy session, so the replacement fluid need not contain electrolytes. Furthermore, due to the moderate physiological effects brought about during each frequent hemofiltration session, the concentrations of sodium, calcium, potassium, and chloride in the replacement fluid are such that they make possible the use of relatively inexpensive commodity solutions, e.g., normal saline or Ringer's lactate, as the replacement fluid.
INTERNATIONAL SEARCH REPORT

A. CLASSIFICATION OF SUBJECT MATTER
IPC(7) : 604/4.01; 210/650, 252; 321.6; 424/677, 686
US CL : A61M 37/00; B01D 35/00, 61/00; C02F 9/00; A61K 33/14
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)
U.S. : Please See Continuation Sheet

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) replacement fluid, hemofiltration, method

C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 4,468,329 A (SHALDON et al.) 28 August 1984, entire document.</td>
<td>31-48</td>
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<td>Y</td>
<td>US 5,211,849 A (KITAEVICH et al.) 18 May 1993, entire document.</td>
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<td>Y</td>
<td>US 5,919,369 A (ASH) 06 July 1999, entire document.</td>
<td>1, 16, 31-48</td>
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<td>2-15, 17-30</td>
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<tr>
<td>Y</td>
<td>US 5,945,449 A (PURCELL et al.) 31 August 1999, entire document.</td>
<td>1-48</td>
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</table>

Further documents are listed in the continuation of Box C. See patent family annex.

¥ Special categories of cited documents:
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Date of the actual completion of the international search
24 June 2001 (24.06.2001)

Date of mailing of the international search report 29 OCT 2001

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Form PCT/ISA/210 (second sheet) (July 1998)
Continuation of B. FIELDS SEARCHED Item 1: 604/4.01, 5.01-.04, 6.09, 6.1, 6.11, 6.16; 210/645, 650-52, 252-59, 321.6-.61, 321.64, 321.65, 321.71-.79, 322, 323.1, 348, 500.21, 929; 424/600, 610, 611, 661, 677-80, 686, 715, 717; 436/826, 8, 16, 18; 422/44; 514/832-33, 23