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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: A61K 33/14 // (A61K 33/14, 31:70, 33:06, 33:00)	A3	(11) International Publication Number: WO 96/20719 (43) International Publication Date: 11 July 1996 (11.07.96)
(21) International Application Number: PCT/GB95/03032 (22) International Filing Date: 22 December 1995 (22.12.95) (30) Priority Data: 9426417.3 30 December 1994 (30.12.94) GB (71) Applicant (for all designated States except US): THE EAST AND MIDLOTHIAN NHS TRUST [GB/GB]; Edenhall Hospital, Pinkieburn, Musselburgh, East Lothian EH21 7TZ (GB). (72) Inventor; and (75) Inventor/Applicant (for US only): PRIOR, Francis, George, Richard [GB/GB]; 26 Cotlands Park, Longniddry, East Lothian EH32 0QX (GB). (74) Agents: McCALLUM, William, Potter et al.; Cruikshank & Fairweather, 19 Royal Exchange Square, Glasgow, G1 3AE (GB).		(81) Designated States: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, 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, TT, UA, UG, US, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 6 September 1996 (06.09.96)
(54) Title: BODY FLUID REPLACEMENT SOLUTION (57) Abstract The present invention provides a sterile pyrogen-free body fluid electrolyte replacement solution for intravenous infusion. The solution consists essentially of an aqueous solution containing from 30 to 100 mMol Na (per 1000 mls) as a physiologically acceptable salt; from 15 to 50 mMol K (per 1000 mls) as a physiologically acceptable salt; and an effective amount of a physiologically acceptable osmolality control agent for providing an osmolality of from 260 to 320 mOsm per kg of solution. The solution is also substantially free of material having a molecular weight greater than 5000, and substantially free of any material capable of significantly affecting acid-base balance in vivo.		

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INTERNATIONAL SEARCH REPORT

International Application No
PC/GB 95/03032

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A61K33/14 //(A61K33/14,31:70,33:06,33:00)

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 6 A61K

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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR,A,2 613 228 (AGRONOMIQUE INST NAT RECH) 7 October 1988 see the whole document ---	1-9
A	FR,A,2 619 715 (BAYLE FRANCOIS ; COMBES PHILIPPE (FR)) 3 March 1989 see the whole document ---	1-9
A	US,A,4 592 909 (WINER STEVEN ET AL) 3 June 1986 see the whole document ---	1-9
A	US,A,3 356 570 (H.R. BUTCHER ET AL.) 5 December 1967 see the whole document ---	1-9
A	WO,A,92 11773 (UNIV FLORIDA) 23 July 1992 see the whole document ---	1-9
-/--		

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

☒ Patent family members are listed in annex.

* Special categories of cited documents :

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- *E* earlier document but published on or after the international filing date
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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

20 June 1996

Date of mailing of the international search report

15.07.96

Name and mailing address of the ISA

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB 95/03032

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DATABASE WPI Week 8228 Derwent Publications Ltd., London, GB; AN 82-58469e XP002006194 & JP,A,57 091 912 (KYOSEI SEIYAKU KK) , 8 June 1982 see abstract ---	1-9
A	DATABASE WPI Week 8228 Derwent Publications Ltd., London, GB; AN 82-58468e XP002006195 & JP,A,57 091 911 (KYOSEI SEIYAKU KK) , 8 June 1982 see abstract -----	1-9

INTERNATIONAL SEARCH REPORT

International application No.

PCT/GB95/03032

Box I Observations where certain claims were found unsearchable (Continuation of item 1 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.: 1-9
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:
please see attached form!

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 II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

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

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.:

Remark on Protest

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

INTERNATIONAL SEARCH REPORT

International Application No. PCT/GB95/03032

FURTHER INFORMATION CONTINUED FROM PCT/ISA/210

MEANINGFUL SEARCH NOT POSSIBLE OR INCOMPLETE SEARCH

2. Obscurities,...etc.

Expressions like "a physiologically acceptable osmolality control agent", "a non-ionic osmolality control agent", "an easily metabolised sugar" etc. do not make sufficiently clear, which specific compounds are meant. The search had to be restricted to the compounds specifically mentioned in the claims and the description and to the general inventive concept.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/GB 95/03032

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR-A-2613228	07-10-88	NONE	
FR-A-2619715	03-03-89	NONE	
US-A-4592909	03-06-86	NONE	
US-A-3356570	05-12-67	NONE	
WO-A-9211773	23-07-92	US-A- 5147650	15-09-92
		US-A- 5238684	24-08-93
		US-A- 5236712	17-08-93
		AU-B- 9159891	17-08-92