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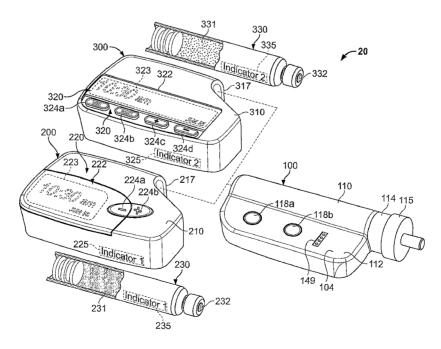
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[Continued on next page]

### (54) Title: MODULAR INFUSION PUMP HAVING TWO DIFFERENT ENERGY SOURCES



(57) Abstract: Some embodiments of a medical infusion pump system include a pump device and a removable controller device. When the pump device and the removable controller device are removably attached to one another, the components may provide a portable infusion pump unit to dispense medicine to a user. In particular embodiments, the removable controller device includes a user interface to readily provide information, for example, about the operation of the pump.



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# INTERNATIONAL SEARCH REPORT

International application No PCT/US2006/036369

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A. CLASSIFICATION OF SUBJECT MATTER INV. A61M5/142					
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) A61M					
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					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category* Citation of document, with indication, whe	ere appropriate, of the relevant passages	Relevant to claim No.			
9 December 2003 (200	US 6 659 978 B1 (KASUGA MASAO [JP] ET AL) 9 December 2003 (2003-12-09) paragraphs [0079] - [0085]; figures 2-4,12				
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Further documents are listed in the continuation of Box C. X See patent family annex.					
* Special categories of cited documents :	#T0 hakes do come at our	Baland Manada Sahamada Sahamad			
'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  "I later document published after the international tiling 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					
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other means  "P" document published prior to the international filing date but in the art.  later than the priority date claimed  "A" document member of the same patent		,			
Date of the actual completion of the international search	Date of mailing of t	the international search report			
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Pate NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 ep Fax: (+31-70) 340-3016	oo ni	ı, Heiko			

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# INTERNATIONAL SEARCH REPORT

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:
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
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. X 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.:  see additional sheet(s)
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: 1-5, and 9-11, and claim 35 in combination with 36

Claims 1-5, and 9-11, and claim 35 in combination with 36 essentially define a medical infusion pump system comprising

1) a pump device including a drive system, and

2) a removable controller device with a user interface being removably attachable to the pump device,

- 3) wherein one or more electrical contacts of the controller engage electrical contacts of the pump device when removably attached.
- 4) the user interface comprising a display screen, user selectable buttons and the system forming a portable system (cf. claims 2, 3, and 35).
- 2. claims: 14-23, and claim 1 in combination with 12, 13

Claims 14-23, and claim 1 in combination with 12, 13 essentially define a medical infusion pump system comprising the features 1)-3) of group I), and

4) a second removable controller having a second user interface that is different from the first user interface.

3. claims: 24-34, and claim 1 in combination with 6-8, and claim 35 in combination with 37-40, and claims 41-45

These claims essentially define a a medical infusion pump system or to a method of operating such a system implying / comprising the features 1)-3) of group I), and

4) the pump device having a first battery, and the controller device having a second battery, wherein

5) the first battery has a greater energy density than the second battery, and provides energy to charge the second battery, which provides energy to the drive system of the pump device.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2006/036369

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