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(54) Title: ACTIVE OVERLAY OF DIABETES MANAGEMENT INFORMATION ON A DISPLAY

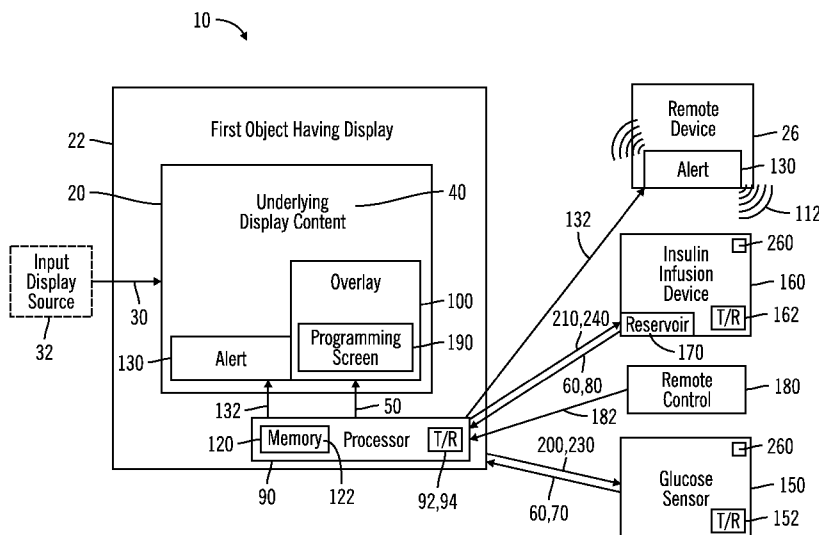


FIG. 1

(57) Abstract: The present invention describes an active overlay of real-time glucose and/or insulin information on a display for convenient monitoring and control of information for the management of diabetes. The superimposed images on display can be varied based on automated and/or programmable processes and/or alerts of the system. In various embodiments, the system can include a console and/or remote control to allow the user to control the overlay display. In specific embodiments, the system can communicate with a glucose sensor and/or insulin infusion device.

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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
 INV. G06F19/00
 ADD.
 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)
 G06F

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)
 EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/174553 A1 (KAUFMAN FRANCINE R [US] ET AL) 8 July 2010 (2010-07-08) figures 6A, 6B paragraph [0046] - paragraph [0056] paragraph [0067] - paragraph [0071] -----	1-32
X	"A Practical Guide to Continuous Glucose Monitoring", 1 January 2011 (2011-01-01), pages 1-23, XP055081234, North Ryde, NSW, Australia Retrieved from the Internet: URL:http://www.medtronic-diabetes.com.au/w cm/groups/mdtcom_sg/@mdt/@ap/@au/@diabetes /documents/documents/contrib_107974.pdf [retrieved on 2013-09-26] page 14 ----- -/--	1-32

Further documents are listed in the continuation of Box C.

See patent family annex.

* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&" document member of the same patent family</p>
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Date of the actual completion of the international search 16 October 2013	Date of mailing of the international search report 28/10/2013
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer Eichenauer, Lars
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/039303

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008/235053 A1 (RAY PINAKI [US] ET AL) 25 September 2008 (2008-09-25) figures 18, 19A, 19B -----	1-32
X	WO 2009/143040 A1 (DISETRONIC MEDICAL SYSTEMS AG [CH]; HEATON KELLY BOWMAN [CH]; CLARK AM) 26 November 2009 (2009-11-26) figure 5 page 18, line 23 - page 19, line 19 -----	1-32
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X	WO 2005/060466 A2 (DIGITALDERM INC [US]; KUDRA MALCOLM J [US]; GRICHNIK JAMES [US]; CHESN) 7 July 2005 (2005-07-07) figures 3-6 -----	1-32
A	YUN HUANG ET AL: "Mobile Data Overlay (MDO): A Data Placement Paradigm for Mobile Applications", MOBILE DATA MANAGEMENT, 2008. MDM '08. 9TH INTERNATIONAL CONFERENCE ON, IEEE, PISCATAWAY, NJ, USA, 27 April 2008 (2008-04-27), pages 173-180, XP031248684, ISBN: 978-0-7695-3154-0 the whole document -----	1-32
A	Cariona Cornett: "Top 6 Help Design Patterns for iPhone Apps", inspireUX, 7 February 2011 (2011-02-07), pages 2-12, XP055080681, Retrieved from the Internet: URL: http://www.inspireux.com/2011/02/07/to p-6-help-design-patterns-for-iphone-apps/ [retrieved on 2013-09-24] the whole document -----	1-32
A	Janne Lammi: "Overlay", Patternry Open, 30 June 2010 (2010-06-30), pages 1-14, XP055080657, Helsinki, Finland Retrieved from the Internet: URL: http://patternry.com/p%3Doverlay/ [retrieved on 2013-09-24] the whole document -----	1-32
A	GB 2 281 780 A (HEWLETT PACKARD CO [US]) 15 March 1995 (1995-03-15) figure 6 -----	5
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2013/039303

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>"The MiniMed Paradigm Veo System - A step-by-step guide", Medtronic Australia</p> <p>2010, XP002713821, Retrieved from the Internet: URL:http://www.medtronic-diabetes.com.au/cm/groups/mdtcom_sg@mdt/@ap/@au/@diabetes/documents/documents/contrib_107961.pdf [retrieved on 2013-09-27] page 42 - page 44</p> <p style="text-align: center;">-----</p>	11-15
A	<p>"Getting Started - CareLink Personal",</p> <p>1 January 2011 (2011-01-01), pages 1-18, XP055081464, North Ryde, NSW, Australia Retrieved from the Internet: URL:http://www.medtronic-diabetes.com.au/cm/groups/mdtcom_sg@mdt/@ap/@au/@diabetes/documents/documents/contrib_107976.pdf [retrieved on 2013-09-27] page 5</p> <p style="text-align: center;">-----</p>	16,17
A	<p>"The MiniMed Paradigm Veo(TM) System", Medtronic</p> <p>1 January 2009 (2009-01-01), XP055081471, Europe Retrieved from the Internet: URL:http://www.agentek.co.il/files/EnglishParadigmveoadults.pdf [retrieved on 2013-09-27] page 7</p> <p style="text-align: center;">-----</p>	22,23,26

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2013/039303

Box No. 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.: 21, 24, 27, 28
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:
see FURTHER INFORMATION sheet PCT/ISA/210

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 No. 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:

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 fees, this Authority did not invite payment of additional fees.

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 and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

Continuation of Box II.2

Claims Nos.: 21, 24, 27, 28

Claims 21, 24, 27 and 28 use the terms "console", "programming screen", "motion detection", and "analyte reading". It is not clear, also from the description, how these elements are functionally and structurally integrated in the system for overlaying diabetes management information. Therefore a meaningful search is not possible.

The applicant's attention is drawn to the fact that claims relating to inventions in respect of which no international search report has been established need not be the subject of an international preliminary examination (Rule 66.1(e) PCT). The applicant is advised that the EPO policy when acting as an International Preliminary Examining Authority is normally not to carry out a preliminary examination on matter which has not been searched. This is the case irrespective of whether or not the claims are amended following receipt of the search report or during any Chapter II procedure. If the application proceeds into the regional phase before the EPO, the applicant is reminded that a search may be carried out during examination before the EPO (see EPO Guidelines C-IV, 7.2), should the problems which led to the Article 17(2) declaration be overcome.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2013/039303

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