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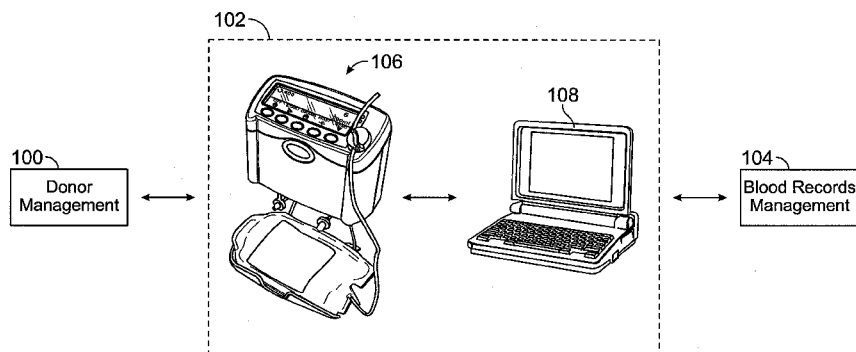


FIG. 1A

(57) **Abstract:** Methods and apparatus collecting blood from patients and managing blood donations are provided, which may include any number of features. One feature is a blood collection device configured to collect blood from a patient and periodically transmit blood collection data from the device to a control system. Another feature is a system and method for updating firmware on a plurality of blood collection devices. In one embodiment, a software interface with a blood collection control can be used to specify a blood collection protocol, and the blood collection protocol can be then transmitted to one or more blood collection devices.

A. CLASSIFICATION OF SUBJECT MATTER**G06Q 50/24(2012.01)i, A61M 1/38(2006.01)i, A61G 12/00(2006.01)i**

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)

G06Q 50/24; G06F 19/00; G06F 9/06; G06F 9/00; H04L 9/00; G06Q 50/00; A61B 5/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: blood, collection, device

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	KR 10-2005-0072937 A (SAMSUNG ELECTRONICS CO., LTD.) 13 July 2005 See abstract, claims 1-5 and figures 1-4.	8-13,30-31 1-7,14-29
Y A	KR 10-2003-0063426 A (ENGEL GERHARD et al.) 28 July 2003 See abstract, claims 1-4 and figures 1-4.	8-13,30-31 1-7,14-29
A	WO 02-069793 A2 (GAMBRO, INC. et al.) 12 September 2002 See abstract, claims 1-20, 68-86 and figures 1-6.	1-31
A	US 2008-0208750 A1 (CHEN YAN) 28 August 2008 See abstract, claims 11-22 and figures 1-3.	1-31
A	US 2002-0013523 A1 (MIKLOS CSORE et al.) 31 January 2002 See abstract, claims 1-9 and figures 1-8.	1-31



Further documents are listed in the continuation of Box C.



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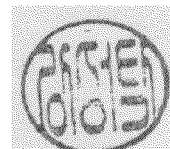
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