(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number
WO 2004/088567 A2

(51) International Patent Classification[7]: G06F 19/00

(21) International Application Number:
PCT/US2004/009611

(22) International Filing Date: 29 March 2004 (29.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/458,311 28 March 2003 (28.03.2003) US

(71) Applicant: **ALARIS MEDICAL SYSTEMS, INC.** [US/US]; 10221 Wateridge Circle, Building A, San Diego, CA 92121 (US).

(72) Inventors: **BUTTERFIELD, Robert, D.**; 13980 Poway Valley Road, Poway, CA 92064 (US). **SCHLOTTERBECK, David, L.**; 12 Hermitage Lane, Laguna Niguel, CA 92677 (US).

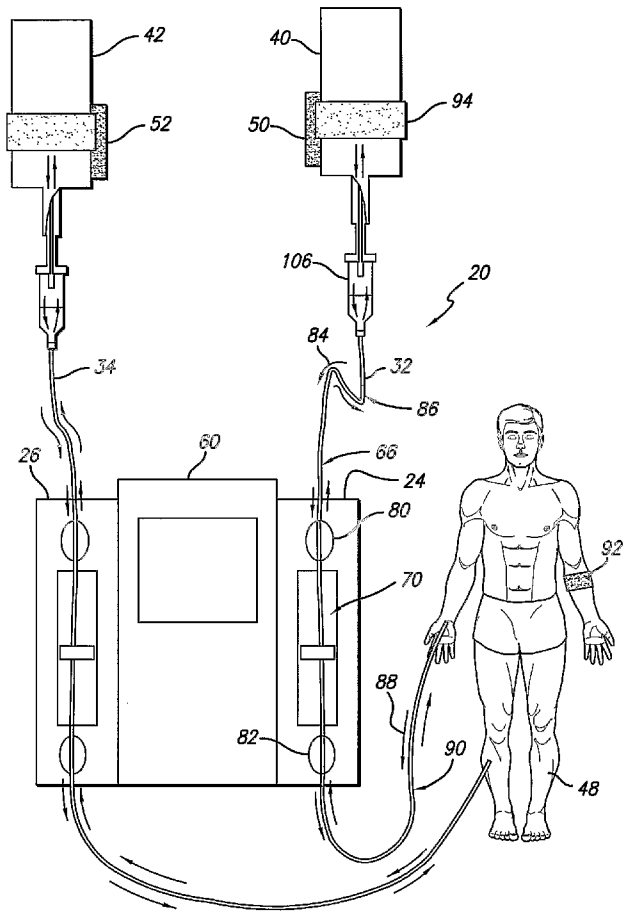
(74) Agents: **RUNK, Thomas, A.** et al.; Fulwider Patton Lee & Utecht, LLP, Howard Hughes Center, 6060 Center Drive, Tenth Floor, Los Angeles, CA 90045 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK,

[Continued on next page]

(54) Title: INFUSION DATA COMMUNICATION SYSTEM



(57) Abstract: An infusion data communication system provides a communication link among a fluid container, an infusion pump, and a patient through which identification data may be communicated. Data devices are located at the fluid container and the patient and conduct low frequency RF energy at a low power level containing the data into the medical fluid. The data-laden RF energy propagates through the medication fluid to data readers at the infusion pump which receives the RF energy and reads the data. A comparison is made to verify that the right medication is mounted to the infusion pump for administration to the right patient. RFID devices may be used for the data devices and readers. Pump programming data may also be propagated to the infusion pump from the container RFID tag. The RFID device at the patient may be writable and may be used to store a patient MAR.

WO 2004/088567 A2

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.