



US007559483B2

(12) **United States Patent**
Hickle et al.

(10) **Patent No.:** **US 7,559,483 B2**
(45) **Date of Patent:** **Jul. 14, 2009**

(54) **SMART SUPPLIES, COMPONENTS AND CAPITAL EQUIPMENT**

5,854,591 A	12/1998	Atkinson	.....	340/825.17
5,882,338 A	3/1999	Gray	.....	604/131
5,925,066 A	7/1999	Kroll et al.	.....	607/3

(75) Inventors: **Randall S. Hickle**, Lubbock, TX (US);
Samsun Lampotang, Gainesville, FL (US)

(73) Assignee: **Scott Laboratories, Inc.**, Lubbock, TX (US)

(Continued)

FOREIGN PATENT DOCUMENTS

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

CN 87104336 A 2/1988

(21) Appl. No.: **11/898,063**

(Continued)

(22) Filed: **Sep. 7, 2007**

OTHER PUBLICATIONS

(65) **Prior Publication Data**

International Search Report, Application No. PCT/US02/15956 dated Oct. 14, 2002.

US 2008/0061153 A1 Mar. 13, 2008

Related U.S. Application Data

Primary Examiner—Karl D. Frech
(74) *Attorney, Agent, or Firm*—Hogan & Hartson LLP

(62) Division of application No. 10/151,255, filed on May 21, 2002, now Pat. No. 7,299,981.

(60) Provisional application No. 60/291,943, filed on May 21, 2001.

(51) **Int. Cl.**
G06K 19/06 (2006.01)

(57) **ABSTRACT**

(52) **U.S. Cl.** **235/492**; 235/375; 235/383; 235/384; 235/385

The present invention relates to capital equipment units, such as systems for providing medical treatment, that are associated with smart supplies. The smart supplies are tagged with data carriers which may encode such information as a unique ID for the supply or component, the identification of the supply or component, the identification of the source of the supply or component, the status of whether said supply or component has been previously used, the expiration date of the supply or component, and in the case where the supply or component contains drug, the purity levels of the drug and the concentration levels of the drug. The capital equipment units or their users then utilize the information to assure quality of any procedure run with the units, by way of improved pre-use checks, certification of the supplies for use, record keeping, inventory control, and charge capture.

(58) **Field of Classification Search** 235/375, 235/380, 382, 383, 384, 385, 492
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,003,379 A	1/1977	Ellinwood, Jr.	.....	128/260
4,510,490 A	4/1985	Anderson, III et al.	...	340/572.1
4,616,316 A	10/1986	Hanpeter et al.	.....	364/413
5,305,745 A	4/1994	Zacouto	.....	128/637
5,313,052 A *	5/1994	Watanabe et al.	.....	235/375
5,431,627 A	7/1995	Pastrone et al.	.....	604/65

25 Claims, 4 Drawing Sheets

