

(43) International Publication Date
29 December 2010 (29.12.2010)

PCT

(10) International Publication Number
WO 2010/151902 A1(51) International Patent Classification:
G07C 9/00 (2006.01) *G08B 13/00* (2006.01)(21) International Application Number:
PCT/US2010/040267(22) International Filing Date:
28 June 2010 (28.06.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

61/221,000	26 June 2009 (26.06.2009)	US
61/221,001	26 June 2009 (26.06.2009)	US
61/221,003	26 June 2009 (26.06.2009)	US
61/287,018	16 December 2009 (16.12.2009)	US
61/287,029	16 December 2009 (16.12.2009)	US
61/287,034	16 December 2009 (16.12.2009)	US

(71) Applicant (for all designated States except US): **CUBIC CORPORATION** [US/US]; 9333 Balboa Avenue, San Diego, California 92123 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **POWERS, David, R.** [US/US]; 2505 Ardath Road, La Jolla, California 92037 (US). **WARF, Donald, H.** [US/US]; 10057 Hume Court, Bristow, Virginia 20136 (US). **KAMAI, Moses, M.** [US/US]; 12893 Darnick Court, Bristow, Virginia 20136 (US). **BERTUNA, Daniel** [US/US]; 8312 Greentree Manor Lane, Fairfax Station, Virginia 22039 (US). **BONNEAU, Walter, C., Jr.** [US/US]; 1111 Mary Lane Court, Escondido, California 92025 (US). **ABERIZK, David, K.** [US/US]; 1016 First Street, San Diego, California 92118 (US). **NEASHAM, Jon, D.** [US/US]; 1110 Sophia Street, Fredericksburg, Virginia 22401 (US). **WILSON, Scott** [US/US]; 5A East Alexandria Avenue, Alexandria, Virginia 22301 (US). **FRANKIE, Keith, L.** [US/US]; 13605 Tiverton Road, San Diego, California 92130 (US). **WADDELL, Stuart, J.** [US/US]; 10187 Silva Road, El Cajon, California 92021 (US).

(74) Agents: **FRANKLIN, Thomas, D.** et al.; Townsend and Townsend and Crew LLP, 1400 Wewatta Street, Suite 600, Denver, CO 80202-5556 (US).

[Continued on next page]

(54) Title: SYSTEM FOR OPERATING A CONTAINER LOCK

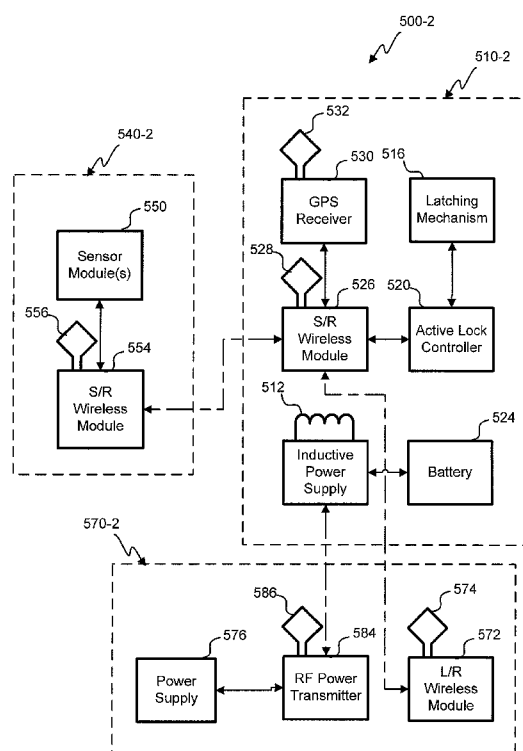


Fig. 5B

(57) Abstract: A system for monitoring chain of custody of contents of a container includes a lock mechanism configured to lock at least one door of the container in a closed position, a housing enclosing at least a portion of the lock mechanism, and a lock circuit at least partially enclosed within the housing. The lock circuit includes a memory, a lock controller, a wireless module configured to receive information from at least one sensor associated with the container, the information regarding at least one property of the contents of the container, wherein the wireless module is configured to store the information in memory, wherein at least one of the wireless module or the sensor is powered wirelessly, and a lock controller configured to receive commands related to operation of the lock mechanism, to monitor the stored information to identify a change of state of the at least one sensor, and to generate chain of custody data to be transmitted to a remote location via the wireless module. The chain of custody data includes at least two of sensor data, an authentication code associated with the sensor, and/or an authentication code associated with the lock mechanism.



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

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))