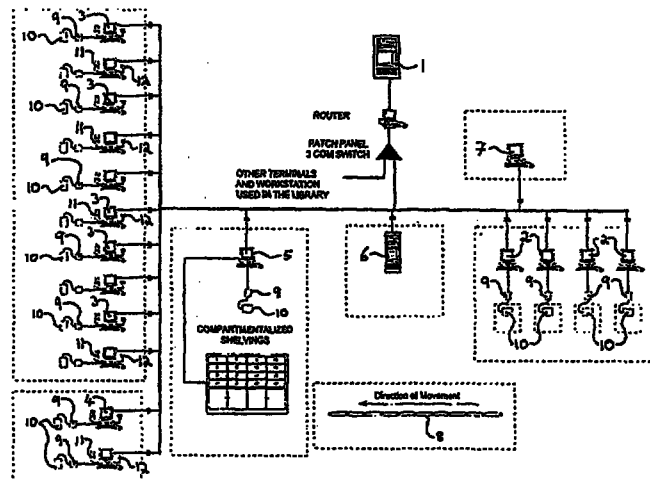




## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <p>(51) International Patent Classification <sup>6</sup> :<br/>G06F 19/00, H04B 1/59, B65G 1/137</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p>A1</p> | <p>(11) International Publication Number: ✓ WO 99/64974<br/>(43) International Publication Date: 16 December 1999 (16.12.99)</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <p>(21) International Application Number: ✓ PCT/SG98/00041<br/>(22) International Filing Date: ✓ 8 June 1998 (08.06.98)<br/>(71) Applicants (for all designated States except US): ST LOG-<br/>TRACK PTE LTD [SG/SG]; 5 Clementi Loop, St Lo-<br/>gistics Centre, Singapore 129816 (SG). THE NATIONAL<br/>LIBRARY BOARD [SG/SG]; 1 Temasek Avenue #06-00,<br/>Millenia Tower, Singapore 039192 (SG). ✓<br/>(72) Inventors; and<br/>(75) Inventors/Applicants (for US only): KOH, Soo, ✓ Keong<br/>[SG/SG]; 22 Sunset Close, Singapore 597536 (SG). SEAH,<br/>Moon, Ming [SG/SG]; 66 Kew Heights, Singapore 465861<br/>(SG). CHIA, Teck, Khiam, Christopher [SG/SG]; 41 Ewe<br/>Boon Road #03-45, Singapore 259335 (SG). ✓<br/>(74) Agent: YEO WU THIAN; 78 Shenton Way #08-01A, Singa-<br/>pore 079120 (SG).</p> |           | <p>(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR,<br/>BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE,<br/>GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ,<br/>LK, LR, LS, LT, LU, LV, MD, MG, <del>MX</del>, MN, MW,<br/>MX, NO, NZ, PL, PT, RO, RU, SD, SE, <del>SG</del>, SK, SL,<br/>TL, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AR, PO<br/>patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian<br/>patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European<br/>patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR,<br/>IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF,<br/>CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published<br/>With international search report.</p> <p>0003719-2<br/>IPDS copy</p> |

(54) Title: A MONITORING SYSTEM ✓



## (57) Abstract

A library monitoring system includes a number of borrowable items. Each item has a radio frequency identification device mounted thereon and the radio frequency identification device has a unique identification code. A processing unit (1) is coupled to a database containing an indication of the location of each library item and is also coupled to a borrowing location (3), a borrowed item returning location (2) and the returned item sorting location (5). The borrowed item returning location (2) includes a receptacle (32, 33) into which the borrowed item (34) is inserted. The receptacle (32, 33) includes an antenna (10) which detects an insertion of library item (34) having a radio frequency identification device mounted thereon. The borrowed item returning location (2) responds to the insertion of a library item (34) into the receptacle (32, 33) detects the identification code and sends the identification code corresponding to the returned library item (34) to the processing unit (1). The processing unit (1) responds to the received identification code, updates the information on the database relating to the returned library item (34) to indicate that the returned library item (34) has been returned to the library.