

Title (en)
Electronic locking systems.

Title (de)
Elektronische Verriegelungssysteme.

Title (fr)
Systèmes de verrouillage électronique.

Publication
EP 0239342 A2 19870930 (EN)

Application
EP 87302465 A 19870323

Priority
• US 1308987 A 19870210
• US 84268486 A 19860321

Abstract (en)
Electronic locking system including keys (30) and self-sufficient door locking units (50) both of which carry multiple "zone" codes (F1,F2...). Upon recognition of a key (30) by a door unit (50), the zone codes within the key and door unit are matched against each other so that a match between any one of the key zone codes (FI) and any one of the door unit zone codes (FJ) will result in an "allow access" decision (366). In the "basic zone" function (350), this decision will permit unlocking of the door (368); in other keying system functions or features (330), additional steps may be required for such unlocking, and the coding of either the key or door unit may be altered (340). The keying system architecture, and method of issuing keys, may be defined in terms of a directed acyclic "door group" graph (400) or equivalent data structure, door groups (401,402...) being defined hierarchically as door units, groups of door units, or groups of door groups. Each node of this graph (400) is identified with a given door group and, except for terminal nodes (404,405,415,417,422-429) (which are typically identified with given door units), each such node has an associated "choice rule" (450). In issuing keys (30) the key issuing operator, working from a given door group (401) as the starting point, traverses subordinate nodes (402,403...) subject to limitations and decisions imposed by the choice rules (450), until only terminal nodes (404,405....) remain -- thereby defining the coding of a particular key.

IPC 1-7
E05B 49/00; **G07C 9/00**

IPC 8 full level
E05B 47/06 (2006.01); **G07C 9/00** (2006.01)

CPC (source: EP US)
E05B 47/063 (2013.01 - EP); **G07C 9/00571** (2013.01 - EP); **G07C 9/00904** (2013.01 - EP); **G07C 9/21** (2020.01 - EP US); **G07C 9/27** (2020.01 - EP); **G07C 2009/00761** (2013.01 - EP)

Cited by
EP0410024A1; ES2070045A2; EP1643457A1; CN110895847A; CN113674462A; EP0501715A1; EP1083277A1; EP0426387A3; EP1699019A3; AU2001239626B2; CZ300524B6; EP2122584A4; NO337719B1; WO0166887A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
EP 0239342 A2 19870930; **EP 0239342 A3 19881207**

DOCDB simple family (application)
EP 87302465 A 19870323