G07C COOPERATIVE PATENT CLASSIFICATION

G PHYSICS
(NOTES omitted)

INSTRUMENTS

G07 CHECKING-DEVICES

G07C TIME OR ATTENDANCE REGISTERS; REGISTERING OR INDICATING THE WORKING OF MACHINES; GENERATING RANDOM NUMBERS; VOTING OR LOTTERY APPARATUS; ARRANGEMENTS, SYSTEMS OR APPARATUS FOR CHECKING NOT PROVIDED FOR ELSEWHERE (identification of persons A61B 5/117; indicating or recording apparatus for measuring in general, analogous apparatus but in which the input is not a variable to be measured, e.g. a hand operation, G01D; clocks, clock mechanisms G04B, G04C; time-interval measuring G04F; counting mechanisms per se G06M)

WARNING
In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

1/00 Registering, indicating or recording the time of events or elapsed time, e.g. time-recorders for work people (registering or indicating the working of machines or vehicles G07C 3/00, G07C 5/00)

NOTE
Subgroups G07C 1/20 - G07C 1/32 take precedence over subgroups G07C 1/02 - G07C 1/18

1/02 . . not involving the registering, indicating or recording of other data
1/04 . . wherein the time is indicated in figures
1/06 . . . with apparatus adapted for use with individual cards
1/08 . . wherein the time is indicated by marking an element, e.g. a card or tape, in a position determined by the time
1/10 . . together with the recording, indicating or registering of other data, e.g. of signs of identity (together with the recording of a continuously-varying variable G01D or the appropriate other subclass of G01, dependent on the variable)
1/12 . . wherein the time is indicated in figures
1/14 . . . with apparatus adapted for use with individual cards
1/16 . . wherein the time is indicated by marking an element, e.g. a card or tape, in a position determined by the time
1/18 . . . with apparatus adapted for use with individual cards
1/20 . . Checking timed patrols, e.g. of watchman
1/22 . . in connection with sports or games
1/24 . . . Race time-recorders (race-finish cameras G03B 41/00)
1/26 . . . Pigeon-timing or like equipment
1/28 . . . Indicating playing time
1/30 . . Parking meters (registering or indicating waiting time of vehicles by means driven by the vehicle G07C 5/02; coin-freed parking meters G07F 17/24)
1/32 . . Time-recording locks (locks giving indication of unauthorised unlocking E05B 39/00)
3/00 Registering or indicating the condition or the working of machines or other apparatus, other than vehicles (engine indicators G01L; testing apparatus incident to its manufacture G01M; signalling arrangements per se, indicating undesired or abnormal working conditions G08B)
3/002 . . [during manufacturing process]
3/02 . . Registering or indicating working or idle time only
3/04 . . . using counting means or digital clocks
3/045 . . . [Mechanical counters or clocks]
3/06 . . . in graphical form
3/08 . . Registering or indicating the production of the machine either with or without registering working or idle time
3/10 . . . using counting means (counting mechanisms per se G06M)
3/12 . . . in graphical form
3/14 . . Quality control systems
3/143 . . . [Finished product quality control]
3/146 . . . [during manufacturing process]
5/00 Registering or indicating the working of vehicles (for measuring distance travelled or combinations of speed and distance G01C; engine indicators G01L; devices for measuring speed or acceleration G01P)
5/002 . . [Analysing tachograph charts (arrangements for graph-reading in general G06K 11/00)]
5/004 . . [Indicating the operating range of the engine (economical driving B60R 16/0236, F02B 77/084; measuring liquid fuel of an engine G01F 9/00)]
5/006 . . [Indicating maintenance]
5/008 . . . (communicating information to a remotely located station (transmission systems for measured values G08C))

5/02 . . . Registering or indicating driving, working, idle, or waiting time only (apparatus forming part of taximeters G07R)

5/04 . . . using counting means or digital clocks

5/06 . . . in graphical form

5/08 . Registering or indicating performance data other than driving, working, idle, or waiting time, with or without registering driving, working, idle or waiting time

5/0808 . . . (Diagnosing performance data (testing of vehicles G01M 17/00; testing of electrical installation on vehicles G01R 31/005))

5/0816 . . . (Indicating performance data, e.g. occurrence of a malfunction)

5/0825 . . . (using optical means)

5/0833 . . . (using audio means)

5/0841 . . . (Registering performance data (recording measured values G01D; information storage G11B))

5/085 . . . (using electronic data carriers)

5/0858 . . . (wherein the data carrier is removable)

5/0866 . . . (the electronic data carrier being a digital video recorder in combination with video camera)

5/0875 . . . (using magnetic data carriers)

5/0883 . . . (wherein the data carrier is removable)

5/0891 . . . (Video recorder in combination with video camera)

5/10 . . . using counting means or digital clocks

5/12 . . . in graphical form

7/00 Details or accessories common to the registering or indicating apparatus of groups G07C 3/00 and G07C 5/00

9/00 Individual entry or exit registers

NOTES

1. This group covers:
   - controlling and registering access of persons to restricted areas or devices

2. This group does not cover:
   - electric permutation locks using mechanical keys, covered by E05B 49/00;
   - apparatus actuated by coded identity cards or credit cards, to free or activate vending, hiring or money-dispensing, covered by G07F 7/08;
   - access to facilities or services by means of coins or tokens, covered by G07F 17/00;
   - arrangements actuated by coded cards for dispensing or receiving money and posting such transactions to existing accounts, e.g. automatic teller machines, covered by G07F 19/00

3. Attention is drawn to the following places, which may be of interest for search:
   - G06K 7/00, G06K 19/00 arrangements for sensing or reading record carriers
   - H03K 17/00 electronic switching
   - G06K 9/00 biometric sensors, recognising biometric patterns
   - A61B 5/117 biometric identification used for diagnostic purposes

   • G06F 1/00 access to data processing equipment

   9/0007 . . . (Access-control involving the use of a pass (for electromagnetical or electronical keys and locks, see E05B 49/00))

   9/0015 . . . (the pass having a variable code, e.g. varied by the controlling system (G07C 9/00102 takes precedence))

   9/0023 . . . (the system having a variable access-code, e.g. varied as a function of time)

   9/0031 . . . (in combination with an identity-check of the pass-holder (recognizing patterns, e.g. fingerprints or signatures G06K 9/00))

   9/0039 . . . (by means of a pass-word (G07F 7/00 takes precedence))

   9/0047 . . . (by means of the handwritten signature of the pass-holder)

   9/0055 . . . (visually, e.g. by comparing in a viewer the written signature with a reference on the pass)

   9/0063 . . . (electronically, e.g. by comparing signal of hand-writing with a reference signal from the pass)

   9/0071 . . . (by means of personal physical data, e.g. characteristic facial curves, hand geometry, voice spectrum, fingerprints (measuring or recording devices for testing the shape, pattern, size or movement of the body or parts thereof per se A61B 5/1031))

   9/0079 . . . (visually)

   9/0087 . . . (electronically)

   2009/00095 . . . . . . (comprising a biometric sensor on the pass)

   9/00103 . . . (with central registration and control, e.g. for swimming pools or hotel-rooms, generally in combination with a pass-dispensing system)

   9/00111 . . . (the pass performing a presence indicating function, e.g. identification tag or transponder (identification by using radar means G01S 13/02, G01S 13/74; detecting presence by using magnetic or electric fields produced or modified by objects in general G01V 3/08, G01V 3/165; means for indicating the location of accidentally buried persons A63B 29/02))

   9/0019 . . . (the pass containing active electronic elements (active credit cards G07F 7/08; record carriers characterised by digital working G06K 19/06))

   9/0026 . . . (Access control not involving the use of a pass (permutation locks E05B 49/00; access to facilities or services by means of coins or tokens G07F 17/00))

   9/0034 . . . (in combination with an identity-check)

   9/0042 . . . (by means of a pass-word)

   9/0015 . . . (by means of a handwritten signature)

   9/0058 . . . (by means of a personal physical data)

   9/00166 . . . (with central registration and control)

   9/00174 . . . (Electronically operated locks; Circuits therefor; Nonmechanical keys therefor, e.g. passive or active electrical keys or other data carriers without mechanical keys (mechanical locks with electric permutation E05B 49/00); arrangements for sensing or reading record carriers G06K 7/00; G06K 9/00; electronic switching H03K 17/00)

   9/00182 . . . (operated with unidirectional data transmission between data carrier and locks)
[the keyless data carrier having only one limited data transmission range]

[and the lock having only one limited data transmission range]

[the keyless data carrier having more than one limited data transmission range]

[the transmitted data signal containing a code which is changed]

(periodically, e.g. after a time period)

(dynamically, e.g. variable code - rolling code)

[the keyless data carrier having more than one function]

[opening and locking of all locks at the same time]

[opening of different locks separately]

[immobilizer]

[anti-theft]

[starting ignition]

[operated with bidirectional data transmission between data carrier and locks]

[keyless data carrier having only one limited data transmission range]

[and the lock having only one limited data transmission range]

[keyless data carrier having more than one limited data transmission range]

[the lock having only one limited data transmission range]

[the lock having more than one limited data transmission ranges]

[in combination with a wake-up circuit]

[whereby the wake-up circuit is situated in the lock]

[code verification carried out according to the challenge/response method]

[starting with prompting the keyless data carrier]

[starting with prompting the lock]

[the transmitted data signal being encrypted]

[the transmitted data signal containing a code which is changed]

(periodically after a time period)

(by the system)

(by the key)

(by the lock)

(randomly)

(after n uses)

(dynamically)

[whereby the code is a variable code]

[whereby the code is a rolling code]

[whereby the code is a random code]

[keyless data carrier having more than one function]

[opening and locking of all locks at the same time]

[opening of different locks separately]
9/00904 . . . [for hotels, motels, office buildings or the like]
9/00912 . . . [for safes, strong-rooms, vaults or the like]
2009/0092 . . . [for cargo, freight or shipping containers and applications therefore in general]
2009/00928 . . . [for garage doors]
2009/00936 . . . [for key cabinets]
9/00944 . . . [Details of construction or manufacture]
2009/00952 . . . [Electronic keys comprising a mechanical key within their housing, e.g. extractable or retractable emergency key]
2009/0096 . . . [Electronic keys comprising a non-biometric sensor]
2009/00968 . . . [shape of the data carrier]
2009/00976 . . . [card]
2009/00984 . . . [fob]
2009/00992 . . . [mechanical key]
9/02 . . . Turnstiles with registering means (turnstiles per se E04H; coin-freed aspects G07F)
9/025 . . . [with arrangements to prevent the passage of more than one person at a time, e.g. with fotocell-barrier]

11/00 Arrangements, systems, or apparatus for checking, e.g. the occurrence of a condition, not provided for elsewhere (signalling or alarm arrangements G08B)
2011/02 . . . [related to amusement parks]
2011/04 . . . [related to queuing systems]

13/00 Voting apparatus
13/005 . . . [operating mechanically]
13/02 . . . Ballot boxes

15/00 Generating random numbers; Lottery apparatus
[{{games in general A63F; digital computer arrangements for generating random or pseudo-random numbers G06F 7/58; generating electric pulses at random intervals H03K 3/84)}
15/001 . . . [with balls or the like]
15/003 . . . [hand-held]
15/005 . . . [with dispensing of lottery tickets]
15/006 . . . [electronically]
15/008 . . . [electronic dies]

2205/00 Indexing scheme relating to group G07C 5/00
2205/02 . . . using a vehicle scan tool

2209/00 Indexing scheme relating to groups
G07C 9/00 - G07C 9/02
2209/02 . . . Access control comprising means for the enrolment of users
2209/04 . . . Access control involving a hierarchy in access rights
2209/06 . . . Involving synchronization or resynchronization between transmitter and receiver; reordering of codes
2209/08 . . . With time considerations, e.g. temporary activation, valid time window or time limitations
2209/10 . . . Comprising means for protocol conversion, i.e. format conversion
2209/12 . . . Comprising means for protecting or securing the privacy of biometric data, e.g. cancellable biometrics
2209/14 . . . With a sequence of inputs of different identification information
2209/40 . . . Indexing scheme relating to group
G07C 9/00007 - G07C 9/00119