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 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-free 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)
3/005 . . [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}
This group does not cover biometric identification used for:

1. This group covers biometric sensors, recognising,

2. (testing of vehicles GO1M 17/00; testing of electrical installation on vehicles GO1R 31/005)

3. (indicating performance data, e.g. occurrence of a malfunction)

4. (using optical means)

5. (Registering performance data (recording measured values GO1D; information storage GI1B))

6. (using electronic data carriers)

7. (wherein the data carrier is removable)

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

9. (using magnetic data carriers)

10. (Video recorder in combination with video camera)

11. using counting means or digital clocks

12. in graphical form

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

Individual registration on entry or exit

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 GO5B 49/00;
   - apparatus actuated by coded identity cards or credit cards, to free or actuate vending, hiring or money-dispensing, covered by GO7F 7/08;
   - access to facilities or services by means of coins or tokens, covered by GO7F 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 GO7F 19/00

3. Attention is drawn to the following places, which may be of interest for search:
   - GO6K 7/00, GO6K 19/00 arrangements for sensing or reading record carriers
   - H03K 17/00 electronic switching
   - GO6K 9/00 biometric sensors, recognising biometric patterns
   - A61B 5/117 biometric identification used for diagnostic purposes
   - GO6F 1/00 access to data processing equipment
   - (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 EO5B 49/00); arrangements for sensing or reading record carriers GO6K 7/00, GO6K 9/00; electronic switching H03K 17/00)

2009/0019 . . . (the keyless data carrier having only one limited data transmission range)
2009/00198 . . . (the keyless data carrier having more than one limited data transmission range)
2009/00206 . . . (the keyless data carrier being hand operated)
2009/00214 . . . (by one push button)
2009/00222 . . . (by more than one push button)
2009/0023 . . . (with encryption of the transmitted data signal)
2009/00238 . . . (the transmitted data signal containing a code which is changed)
2009/00246 . . . (periodically, e.g. after a time period)
2009/00253 . . . (dynamically, e.g. variable code - rolling code)
2009/00261 . . . (the keyless data carrier having more than one function)
2009/00269 . . . (opening and locking of all locks at the same time)
2009/00277 . . . (opening of different locks separately)
2009/00285 . . . (immobilizer)
2009/00293 . . . (anti-theft)
2009/00301 . . . (starting ignition)
2009/00309 . . . (operated with bidirectional data transmission between data carrier and locks)
2009/00317 . . . (keyless data carrier having only one limited data transmission range)
2009/00325 . . . (and the lock having only one limited data transmission range)
2009/00333 . . . (and the lock having more than one limited data transmission range)
2009/00341 . . . (keyless data carrier having more than one limited data transmission range)
2009/00349 . . . (and the lock having only one limited data transmission range)
2009/00357 . . . (and the lock having more than one limited data transmission range)
2009/00365 . . . (in combination with a wake-up circuit)
2009/00373 . . . (whereby the wake-up circuit is situated in the lock)
2009/0038 . . . (whereby the wake-up circuit is situated in the keyless data carrier)
2009/00388 . . . (code verification carried out according to the challenge/response method)
2009/00396 . . . (starting with prompting the keyless data carrier)
2009/00404 . . . (starting with prompting the lock)
2009/00412 . . . (the transmitted data signal being encrypted)
2009/0042 . . . (the transmitted data signal containing a code which is changed)
2009/00428 . . . (periodically after a time period)
2009/00436 . . . (by the system)
2009/00444 . . . (by the key)
2009/00452 . . . (by the lock)
2009/0046 . . . (randomly)
{ operated by active electrical keys }
{ operated by passive electrical keys }
{ Power supply for the lock }
{ Power supply for the keyless data carrier }
{ operated by interacting with a central unit }
{ operated by permanent magnets }
{ with magnetic components, e.g. magnets,
    magnetic strips, metallic inserts (mechanical
    locks operated by permanent magnets
    E05B 47/0038) }
{ actuating magnetically controlled switches,
    e.g. reed relays }
{ sensed by Hall effect devices }
{ [keyless data carrier having more than one
    function] }
{ operated of different locks separately }
{ [immobilizer] }
{ [starting ignition] }
{ [comprising means to detect or avoid relay
    attacks] }
{ using personal physical data of the operator, e.g.
    finger prints, retinal images, voicepatterns }
{ [operated by a central unit] }
{ [Power supply for the keyless data carrier] }
WARNING
Group G07C 9/27 is impacted by reclassification into group G07C 9/21. Groups G07C 9/27 and G07C 9/21 should be considered in order to perform a complete search.

9/28 . . the pass enabling tracking or indicating presence
9/29 . . the pass containing active electronic elements, e.g. smartcards
9/30 . . not involving the use of a pass
9/32 . . in combination with an identity check
9/33 . . by means of a password
9/35 . . by means of a handwritten signature
9/37 . . using biometric data, e.g. fingerprints, iris scans or voice recognition
9/38 . . with central registration

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 9/38

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 groups G07C 9/20 - G07C 9/29
2209/41 . . with means for the generation of identity documents