G08G TRAFFIC CONTROL SYSTEMS (guiding railway traffic, ensuring the safety of railway traffic B61L; arrangement of road signs or traffic signals E01F 9/00; radar or analogous systems, sonar systems, lidar systems specially adapted for traffic control G01S 13/91, G01S 15/88, G01S 17/88; (radar or analogous systems, sonar systems, lidar systems specially adapted for anti-collision purposes G01S 13/93, G01S 15/93, G01S 17/93))

NOTES

1. This subclass covers:
   • identification of traffic offenders;
   • indicating the position of vehicles for traffic control purposes;
   • navigation systems for traffic control purposes, i.e. systems in which the navigation is not performed autonomously by or in the vehicles, but where the vehicles are guided by instructions transmitted to them;
   • indication of free spaces in parking areas.

2. This subclass does not cover:
   • arrangements for measuring levels and bearings for surveillance and navigation, which are covered by G01C;
   • radio navigation systems, e.g. for locating, measuring distances or velocity, which are covered by G01S;
   • details of display instrumentation, which are covered by G09F, G09G

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.
Override of traffic control, e.g. by signal transmitted by an emergency vehicle

Arrangements for giving variable traffic instructions ([railroad crossing signals B61L; reflectors E01F, G08B]; indicating arrangements for variable information by selection or combination of individual elements G09F 9/00)

Traffic information broadcasting (broadcasting communication H04H)

Coding or decoding of the information

Data selection, e.g. prioritizing information, managing message queues, selecting the information to be output

Hardware aspects; Signal processing or signal properties, e.g. frequency bands

Traffic lights

transportable

provided with indicators in which a mark progresses showing the time elapsed, e.g. of green phase

having an indicator mounted inside the vehicle, e.g. giving voice messages

Systems involving the acquisition of information from passive traffic signs by means mounted on the vehicle (G08G 1/0962 takes precedence)

where the origin of the information is within the own vehicle, e.g. a local storage device, digital map

responding to signals from another vehicle, e.g. emergency vehicle

Systems involving transmission of highway information, e.g. weather, speed limits (transmission of navigation instructions to the vehicle G08G 1/0968)

where the received information might be used to generate an automatic action on the vehicle control

where the received information does not generate an automatic action on the vehicle control

where the received information generates an automatic action on the vehicle control

where a selection of the information might take place

where the source of the transmitted information selects which information to transmit to each vehicle

where a selection from the received information takes place in the vehicle

where no selection takes place on the transmitted or the received information

where the system is characterised by the origin of the information transmission

where the origin of the information is a central station

where the origin of the information is a roadside individual element

where the origin of the information is another vehicle

Systems involving transmission of navigation instructions to the vehicle ((navigation or navigational instruments specially adapted for navigation in a road network G01C 21/26))

where the transmitted instructions are used to compute a route

where the route is computed offboard

where the complete route is transmitted to the vehicle at once

where the segments of the route are transmitted to the vehicle at different locations and times

where the route is computed onboard

where different aspects are considered when computing the route

where the user preferences are taken into account or the user selects one route out of a plurality

where the complete route is dynamically recomputed based on new data

where the complete route is computed only once and not updated

where the output is provided in a suitable form to the driver (details on I/O arrangements for onboard navigation computers G01C 21/36)

where the immediate route instructions are output to the driver, e.g. arrow signs for next turn

where the complete route is shown to the driver

where instructions are given per voice

where the input to the navigation device is provided by a suitable I/O arrangement (details of I/O arrangements for onboard navigation computers G01C 21/36; I/O arrangements for general purpose computers G06F 3/00)

where the transmitted instructions are used to compute a route

where the route is computed offboard

where the complete route is transmitted to the vehicle at once

where the segments of the route are transmitted to the vehicle at different locations and times

where the route is computed onboard

where different aspects are considered when computing the route

where the user preferences are taken into account or the user selects one route out of a plurality

where the complete route is dynamically recomputed based on new data

where the complete route is computed only once and not updated

where the output is provided in a suitable form to the driver (details on I/O arrangements for onboard navigation computers G01C 21/36)

where the immediate route instructions are output to the driver, e.g. arrow signs for next turn

where the complete route is shown to the driver

where instructions are given per voice

where the input to the navigation device is provided by a suitable I/O arrangement (details of I/O arrangements for onboard navigation computers G01C 21/36; I/O arrangements for general purpose computers G06F 3/00)

where the transmitted instructions are used to compute a route

where the route is computed offboard

where the complete route is transmitted to the vehicle at once

where the segments of the route are transmitted to the vehicle at different locations and times

where the route is computed onboard

where different aspects are considered when computing the route

where the user preferences are taken into account or the user selects one route out of a plurality

where the complete route is dynamically recomputed based on new data

where the complete route is computed only once and not updated

where the output is provided in a suitable form to the driver (details on I/O arrangements for onboard navigation computers G01C 21/36)

where the immediate route instructions are output to the driver, e.g. arrow signs for next turn

where the complete route is shown to the driver

where instructions are given per voice

where the input to the navigation device is provided by a suitable I/O arrangement (details of I/O arrangements for onboard navigation computers G01C 21/36; I/O arrangements for general purpose computers G06F 3/00)

where the transmitted instructions are used to compute a route

where the route is computed offboard

where the complete route is transmitted to the vehicle at once

where the segments of the route are transmitted to the vehicle at different locations and times

where the route is computed onboard

where different aspects are considered when computing the route

where the user preferences are taken into account or the user selects one route out of a plurality

where the complete route is dynamically recomputed based on new data

where the complete route is computed only once and not updated

where the output is provided in a suitable form to the driver (details on I/O arrangements for onboard navigation computers G01C 21/36)

where the immediate route instructions are output to the driver, e.g. arrow signs for next turn

where the complete route is shown to the driver

where instructions are given per voice

where the input to the navigation device is provided by a suitable I/O arrangement (details of I/O arrangements for onboard navigation computers G01C 21/36; I/O arrangements for general purpose computers G06F 3/00)

where the transmitted instructions are used to compute a route

where the route is computed offboard

where the complete route is transmitted to the vehicle at once

where the segments of the route are transmitted to the vehicle at different locations and times

where the route is computed onboard

where different aspects are considered when computing the route

where the user preferences are taken into account or the user selects one route out of a plurality

where the complete route is dynamically recomputed based on new data

where the complete route is computed only once and not updated

where the output is provided in a suitable form to the driver (details on I/O arrangements for onboard navigation computers G01C 21/36)

where the immediate route instructions are output to the driver, e.g. arrow signs for next turn

where the complete route is shown to the driver

where instructions are given per voice

where the input to the navigation device is provided by a suitable I/O arrangement (details of I/O arrangements for onboard navigation computers G01C 21/36; I/O arrangements for general purpose computers G06F 3/00)

where the transmitted instructions are used to compute a route

where the route is computed offboard

where the complete route is transmitted to the vehicle at once

where the segments of the route are transmitted to the vehicle at different locations and times

where the route is computed onboard

where different aspects are considered when computing the route

where the user preferences are taken into account or the user selects one route out of a plurality

where the complete route is dynamically recomputed based on new data

where the complete route is computed only once and not updated

where the output is provided in a suitable form to the driver (details on I/O arrangements for onboard navigation computers G01C 21/36)

where the immediate route instructions are output to the driver, e.g. arrow signs for next turn

where the complete route is shown to the driver

where instructions are given per voice

where the input to the navigation device is provided by a suitable I/O arrangement (details of I/O arrangements for onboard navigation computers G01C 21/36; I/O arrangements for general purpose computers G06F 3/00)

where the immediate route instructions are output to the driver, e.g. arrow signs for next turn

where the complete route is shown to the driver

where instructions are given per voice

where the input to the navigation device is provided by a suitable I/O arrangement (details of I/O arrangements for onboard navigation computers G01C 21/36; I/O arrangements for general purpose computers G06F 3/00)
1/144 . . . [on portable or mobile units, e.g. personal digital assistant [PDA]]
1/145 . . . [where the indication depends on the parking areas]
1/146 . . . [where the parking area is a limited parking space, e.g. parking garage, restricted space]
1/147 . . . [where the parking area is within an open public zone, e.g. city centre]
1/148 . . . [Management of a network of parking areas]
1/149 . . . [coupled to means for restricting the access to the parking space, e.g. authorization, access barriers, indicative lights]
1/16 . Anti-collision systems (road vehicle drive control systems for predicting or avoiding probable or impending collision otherwise than by control of a particular sub-unit B60W 30/08)
1/161 . . . [Decentralised systems, e.g. inter-vehicle communication]
1/162 . . . [event-triggered]
1/163 . . . [involving continuous checking]
1/164 . . . [Centralised systems, e.g. external to vehicles]
1/165 . . . [for passive traffic, e.g. including static obstacles, trees]
1/166 . . . [for active traffic, e.g. moving vehicles, pedestrians, bikes]
1/167 . . . [Driving aids for lane monitoring, lane changing, e.g. blind spot detection]
1/168 . . . [Driving aids for parking, e.g. acoustic or visual feedback on parking space]
1/20 . [Monitoring the location of vehicles belonging to a group, e.g. fleet of vehicles, countable or determined number of vehicles]
1/202 . . . [Dispatching vehicles on the basis of a location, e.g. taxi dispatching]
1/205 . . . [Indicating the location of the monitored vehicles as destination, e.g. accidents, stolen, rental]
1/207 . . . [with respect to certain areas, e.g. forbidden or allowed areas with possible alerting when inside or outside boundaries]
1/22 . [Platooning, i.e. convoy of communicating vehicles]
3/00 Traffic control systems for marine craft (marking of navigational route B63B 22/16, B63B 51/00)
3/02 . Anti-collision systems
5/00 Traffic control systems for aircraft [{ e.g. air-traffic control [ATC]}]

NOTES
1. This groups covers arrangements, located in the aircraft or on the ground, for controlling aircraft within a traffic environment.
2. This group does not cover arrangements for control of position, course, altitude or attitude of aircraft not specific to a traffic environment, e.g. automatic pilots, which are covered by group G05D 1/00.
3. In this group the following term is used with the meaning indicated:
   • “traffic” includes traffic on the ground and in the air.
4. Attention is drawn to the following places which might be interesting for search:
   • mechanical aspects of equipment for fitting in or to aircraft B64D
   • combined instruments indicating more than one navigational value G01C 23/00
5/0004 . [Transmission of traffic-related information to or from an aircraft (airborne radio transmission systems in general H04B 7/185; airborne wireless networks H04W 84/06)]
5/0008 . . with other aircraft]
5/0013 . . with a ground station]
5/0017 . [Arrangements for implementing traffic-related aircraft activities, e.g. arrangements for generating, displaying, acquiring or managing traffic information (head-up displays G02B 27/01; ground or aircraft-carrier-deck-installations B64F)]
5/0021 . . located in the aircraft]
5/0026 . . located on the ground]
5/003 . [Flight plan management]
5/0034 . . Assembly of a flight plan]
5/0039 . . [Modification of a flight plan]
5/0043 . . [Traffic management of multiple aircrafts from the ground (G08G 5/002) takes precedence; data processing specially designed for resource management, e.g. scheduling or allocating time, human or machine resources G06Q 10/06)]
5/0047 . [Navigation or guidance aids for a single aircraft (details of equipment G08G 5/0017)]
5/0052 . . [for cruising (combined instruments indicating more than one navigational value G01C 23/00)]
5/0056 . . [in an emergency situation, e.g. hijacking]
5/006 . . [in accordance with predefined flight zones, e.g. to avoid prohibited zones]
5/0065 . . [for taking-off]
5/0069 . . [specially adapted for an unmanned aircraft]
5/0073 . . [Surveillance aids (scene image recognition G06K 9/00624)]
5/0078 . . [for monitoring traffic from the aircraft (radar or analogous systems specially adapted for traffic control G01S 13/91)]
5/0082 . . [for monitoring traffic from a ground station (radar or analogous systems specially adapted for traffic control G01S 13/91)]
5/0086 . . [for monitoring terrain (radar or analogous systems specially adapted for terrain avoidance G01S 13/935)]
5/0091 . . [for monitoring atmospheric conditions (radar or analogous systems specially adapted for meteorological use G01S 13/95; meteorology G01W)]
5/0095 . [Aspects of air-traffic control not provided for in the other subgroups of this main group]
5/02 . [Automatic (approach or) landing aids, i.e. systems in which flight data of incoming planes are processed to provide landing data (landing aids fitted in or to aircraft B64D 45/04; visual or acoustic landing aids B64F 1/18)]
5/025 . . [Navigation or guidance aids (radar or analogous systems specially adapted for landing purposes G01S 13/913)]
5/04 . [Anti-collision systems]
5/045 . . [Navigation or guidance aids, e.g. determination of anti-collision manoeuvres (radar or analogous systems specially adapted for anti-collision between aircraft G01S 13/933)]
5/06 . [for control when on the ground]
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>5/065</td>
<td>Navigation or guidance aids, e.g. for taxiing or rolling</td>
</tr>
<tr>
<td>7/00</td>
<td>Traffic control systems for simultaneous control of two or more different kinds of craft</td>
</tr>
<tr>
<td>7/02</td>
<td>Anti-collision systems</td>
</tr>
<tr>
<td>9/00</td>
<td>Traffic control systems for craft where the kind of craft is irrelevant or unspecified</td>
</tr>
<tr>
<td>9/02</td>
<td>Anti-collision systems</td>
</tr>
<tr>
<td>99/00</td>
<td>Subject matter not provided for in other groups of this subclass</td>
</tr>
</tbody>
</table>