G05 CONTROLLING; REGULATING
(NOTES omitted)

G05G CONTROL DEVICES OR SYSTEMS INSO FAR AS CHARACTERISED BY MECHANICAL FEATURES ONLY ("Bowden" or like mechanisms F16C 1/10; gearings or mechanisms not peculiar to this purpose F16H; speed changing or reversing mechanisms for gearings conveying rotary motion F16H 59/00 - F16H 63/00)

NOTES
1. This subclass covers:
   - members of general applicability for mechanical control;
   - mechanical systems for moving members to one or more definite settings.
2. Systems peculiar to the control of particular machines or apparatus provided for in a single other class are classified in the relevant class for such machines or apparatus.

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 Controlling members, e.g. knobs or handles; Assemblies or arrangements thereof; Indicating position of controlling members (means for preventing, limiting or returning the movements of parts of a control mechanism G05G 5/00; providing feel, e.g. means to create a counterforce G05G 5/03; specially adapted for programme control G05G 21/00; vibration damping G05G 25/02; joysticks G05G 9/04; steering wheels for motor vehicles B62D)

NOTE
In this group, the first place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

1/01 Arrangements of two or more controlling members with respect to one another (double foot control, e.g. for instruction vehicles G05G 1/34; mounting units comprising an assembly with two or more pedals G05G 1/36)

1/015 Arrangements for indicating the position of a controlling member (means for continuously detecting pedal position G05G 1/38; means for detecting position through tactile feedback G05G 5/03)

1/02 Controlling members for hand actuation by linear movement, e.g. push buttons

1/025 Actuated by sliding movement

1/04 Controlling members for hand actuation by pivoting movement, e.g. levers

1/06 Details of their grip parts (G05G 1/10 takes precedence)

1/08 Controlling members for hand actuation by rotary movement, e.g. hand wheels

1/082 Having safety devices, e.g. means for disengaging the control member from the actuated member

1/085 Crank handles (G05G 1/082 takes precedence)

1/087 Retractable; Flush control knobs

1/10 Details, e.g. of discs, knobs, wheels or handles (G05G 1/085 takes precedence)

1/105 Comprising arrangements for illumination

1/12 Means for securing the members on rotatable spindles or the like

1/30 Controlling members actuated by foot

1/305 Compound pedal co-operating with two or more controlled members

1/32 With means to prevent injury

1/323 Means disconnecting the connection between pedal and controlled member, e.g. by breaking or bending the connecting rod

1/327 Means disconnecting the pedal from its hinge or support, e.g. by breaking or bending the support

1/34 Double foot controls, e.g. for instruction vehicles

1/36 Mounting units comprising an assembly of two or more pedals, e.g. for facilitating mounting

1/38 Comprising means to continuously detect pedal position

1/40 Adjustable

1/405 Infinitely adjustable

1/42 Non-pivoting, e.g. sliding

1/44 Pivoting

1/445 About a central fulcrum
Means for preventing, limiting or returning the movements of parts of a control mechanism, e.g. locking controlling member (G05G 5/08)

5/00 Means for preventing, limiting or returning the movements of parts of a control mechanism, e.g. locking controlling member (G05G 7/08 takes precedence)

5/05 (for preventing unintentional use of a control mechanism (G05G 5/28 takes precedence))

5/02 Means preventing undesired movements of a controlling member which can be moved in two or more separate steps or ways, e.g. restricting to a stepwise movement or to a particular sequence of movements (G05G 5/28 takes precedence)

5/03 Means for enhancing the operator's awareness of arrival of the controlling member at a command or datum position; Providing feel, e.g. means for creating a counterforce (arrangements for indicating the position of the controlling member (G05G 1/015))

5/04 Stops for limiting movement of members, e.g. adjustable stop (G05G 5/03, G05G 5/05, G05G 5/28 takes precedence)

5/05 Means for returning or tending to return controlling members to an inoperative or neutral position, e.g. by providing return springs or resilient end-stops (G05G 5/28 takes precedence)

5/06 for holding members in one or a limited number of definite positions only (G05G 5/005, G05G 5/03, G05G 5/05, G05G 5/28 take precedence)

5/065 (using a spring-loaded ball)

5/08 Interlocking of members, e.g. locking member in a particular position before or during the movement of another member

5/12 for holding members in an indefinite number of positions, e.g. by a toothed quadrant (G05G 5/28 takes precedence)

5/14 by locking a member with respect to a fixed quadrant, rod, or the like

5/16 by friction

5/18 by positive interengagement, e.g. by a pawl

5/20 by locking a quadrant, rod, or the like carried by the member

5/22 by friction

5/24 by positive interengagement, e.g. by a pawl

5/26 by other means than a quadrant, rod, or the like

5/28 for preventing unauthorised access to the controlling member or its movement to a command position

Manually-actuated control mechanisms provided with one single controlling member co-operating with one single controlled member; Details thereof (G05G 7/08)

7/02 characterised by special provisions for conveying or converting motion, or for acting at a distance

7/04 altering the ratio of motion or force between controlling member and controlled member as a function of the position of the controlling member

7/06 in which repeated movement of the controlling member produces increments of movement of the controlled member (G05G 7/08 takes precedence)

7/08 in which repeated movement of the controlling member moves the controlling member through a cycle of distinct positions

7/10 specially adapted for remote control (G05G 7/04 - G05G 7/08 take precedence)

7/12 specially adapted for actuating a member on a system in motion with respect to the controlling member, e.g. on a rotating shaft

7/14 characterised by means for delaying initiation of, or making more gradual throughout, the movement of the controlled member in response to a given input from the controlling member, e.g. by providing lost motion in the command train

7/16 Special provisions for reducing the effect of slight relative movement between supports of the mechanism, e.g. resulting from resilient mounting of a controlled mechanism

Manually-actuated control mechanisms provided with one single controlling member co-operating with two or more controlled members, e.g. selectively, simultaneously

9/02 the controlling member being movable in different independent ways, movement in each individual way actuating one controlled member only

9/04 in which movement in two or more ways can occur simultaneously

9/047 the controlling member being movable by hand about orthogonal axes, e.g. joysticks (for switches H01H 25/04)

2009/04703 (Mounting of controlling member)

2009/04707 (with ball joint)

2009/04711 (with substantially hemispherical bearing part forced into engagement, e.g. by a spring)

2009/04714 (with orthogonal axes)

2009/04718 (with cardan or gimbal type joint)

2009/04722 (elastic, e.g. flexible shaft)

2009/04725 (with coil spring)

2009/04729 (melastomeric)

2009/04733 (with a joint having a nutating disc, e.g. forced by a spring)

9/04737 (with six degrees of freedom)
G05G

Manually-actuated control mechanisms provided with two or more controlling members cooperating with one single controlled member

Manually-actuated control mechanisms provided with two or more controlling members and also two or more controlled members (interlocking G05G 5/08)

Mechanical devices for initiating a movement automatically due to a specific cause

- due to a abnormal functioning of the controlled apparatus (if speed is abnormal G05G 15/06)
- due to a dangerous situation for the operator

Mechanical devices for moving a member after being released; Trip or release mechanisms characterised thereby

- due to alteration of the sense of movement of a member
- due to distance or angle travelled by a member
- due to the speed of rotation or of bodily movement of a member, e.g. passing an upper or lower limit thereof (speedometers G01P)
- due to the load or torque on a member, e.g. if exceeding a predetermined value thereof

Servo-mechanisms with follow-up action, e.g. occurring in steps

Mechanical apparatus for control of a series of operations, i.e. programme control, e.g. involving a set of cams (G05G 5/02 takes precedence)

Means for ensuring the correct positioning of parts of control mechanisms, e.g. for taking-up play

- self-adjusting

Other details or appurtenances of control mechanisms, e.g. supporting intermediate members elastically

- Inhibiting the generation or transmission of noise (suppression of noise or vibrations in selector apparatus for gearings F16H 59/0208)
- Sealing against entry of dust, weather or the like (in selector apparatus for gearings, F16H 59/0213)

Means for preventing, limiting or returning the movements of parts of a control mechanism, e.g. locking controlling member

Control mechanisms or elements therefor applying a mechanical movement

- Means for regulating or adjusting control mechanisms, e.g. devices for automatic adjustment
- Control mechanisms limiting amplitude or adjusting datum position
- Control mechanisms for holding members in a number of positions comprising a device to limit the control range
- Control mechanisms for locking members in one or more positions
- Control mechanisms for locking or at least for blocking a member in one position out of a number of several positions
- Control mechanisms with one controlling member and one controlled member
- with one elastic element as essential part, e.g. elastic components as a part of an actuating mechanism
- Mechanisms for conveying motion or signals for or in relation with control mechanisms
- Systems wherein the control element may be placed in two or more positions

Control mechanisms not otherwise provided for

- Mechanisms linking plurality of controlling or controlled members
- Locking controlled members of selectively controlled mechanisms
with a control member moving selectively or simultaneously the controlled members

with a control member that is moved for preselection in another direction than for final actuating

without preselection or differentiation between selection and actuating, e.g. control members with a fix control sequence, after a determined advance cycle, in which the control device comprises cams actuating separately the controlled members

with plurality of control members, e.g. preselection and actuating members actuating several controlled members