

CPC COOPERATIVE PATENT CLASSIFICATION

G05G CONTROL DEVICES OR SYSTEMS INsofar 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, for example:

A61G 13/02	Controls for adjusting operating tables
A61G 15/02	Controls for adjusting operating chairs
A63F 13/20 , A63F 13/98	Accessories for games using an electronically generated display
B25J	Manipulators, e.g. controls therefor
B60K 26/00	Arrangement or mounting of propulsion-unit control devices in vehicles
B60T 7/00	Vehicle brake-action initiating means
B62D 33/073	Adaptations of control devices for movable vehicle cabs
B62K 21/00	Cycle-steering devices
B62K 23/00	Rider-operated controls specially adapted for cycles
B62L 3/00	Brake-actuating mechanisms specially adapted for cycles
B63H 25/02	Marine steering initiating means
B66B 1/00	Controls for elevators
B66C 13/18	Control systems or devices for cranes
B66C 13/56	Arrangements of handles or pedals for crane operation
E02F 9/20	Control devices for dredging or soil shifting machines
F16C 3/28	Adjustable cranks or eccentrics
F16D 43/00	Automatic clutches
F16K 31/00 , F16K 33/00	Controls for valves
F16P 3/00	Safety devices acting in conjunction with the control or operation of a machine
F16P 7/02	Stopping machines on occurrence of dangerous conditions therein
G02B 21/32	Micromanipulators structurally combined with microscopes
G04B 1/00 - G04B 18/00	Driving mechanisms in clocks or watches
G06C	Digital computers in which all the computation is effected mechanically
G06F 3/02	Manual computer input arrangements
G06K 11/00	Converting a pattern of mechanical parameters into electric signals
G21C 7/08	Displacement of solid control elements in nuclear reactors
H01H	Mechanisms for operating switch contacts
H03J 1/00	Mechanical control of resonant circuits.

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)	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
NOTE Within this main group the first place priority rule is applied, i.e. at each hierarchical level classification is made in the first appropriate place			

1/082	. . {having safety devices, e.g. means for disengaging the control member from the actuated member}	5/005	. {for preventing unintentional use of a control mechanism (G05G 5/28 takes precedence)}
1/085	. . {Crank handles (G05G 1/082 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)
1/087	. . {retractable; Flush control knobs}		
1/10	. . Details, e.g. of discs, knobs, wheels or handles {(G05G 1/085 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)
1/105	. . . {comprising arrangements for illumination}		
1/12	. . . Means for securing the members on rotatable spindles or the like	5/04	. Stops for limiting movement of members, e.g. adjustable stop (G05G 5/03 , G05G 5/05 , G05G 5/28 take precedence)
1/30	. Controlling members actuated by foot	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)
1/305	. . {Compound pedal co-operating with two or more controlled members}	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)
1/32	. . with means to prevent injury	5/065	. . {using a spring-loaded ball}
1/323	. . . means disconnecting the connection between pedal and controlled member, e.g. by breaking or bending the connecting rod	5/08	. . Interlocking of members, e.g. locking member in a particular position before or during the movement of another member
1/327	. . . means disconnecting the pedal from its hinge or support, e.g. by breaking or bending the support	5/12	. for holding members in an indefinite number of positions, e.g. by a toothed quadrant (G05G 5/28 takes precedence)
1/34	. . Double foot controls, e.g. for instruction vehicles	5/14	. . by locking a member with respect to a fixed quadrant, rod, or the like
1/36	. . Mounting units comprising an assembly of two or more pedals, e.g. for facilitating mounting	5/16	. . . by friction
1/38	. . comprising means to continuously detect pedal position	5/18	. . . by positive interengagement, e.g. by a pawl
1/40	. . adjustable	5/20	. . by locking a quadrant, rod, or the like carried by the member
1/405	. . . infinitely adjustable	5/22	. . . by friction
1/42	. . non-pivoting, e.g. sliding	5/24	. . . by positive interengagement, e.g. by a pawl
1/44	. . pivoting	5/26	. . by other means than a quadrant, rod, or the like
1/445	. . . about a central fulcrum	5/28	. for preventing unauthorised access to the controlling member or its movement to a command position
1/46	. . Means, e.g. links, for connecting the pedal to the controlled unit		
1/48	. . Non-slip pedal treads; Pedal extensions or attachments characterised by mechanical features only	7/00	Manually-actuated control mechanisms provided with one single controlling member co-operating with one single controlled member; Details thereof (controlling members G05G 1/00)
1/483	. . . Non-slip treads; Pedal extensions or attachments characterised by mechanical features only	7/02	. Characterised by special provisions for conveying or converting motion, or for acting at a distance
1/487	. . . Pedal extensions	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
1/50	. . Manufacturing of pedals; Pedals characterised by the material used	7/06	. . in which repeated movement of the controlling member produces increments of movement of the controlled member (G05G 7/08 takes precedence)
1/503	. . . {Controlling members for hand-actuation}	7/08	. . in which repeated movement of the controlling member moves the controlling member through a cycle of distinct positions
1/506	. . . {Controlling members for foot-actuation}	7/10	. . specially adapted for remote control (G05G 7/04 - G05G 7/08 take precedence)
1/52	. Controlling members specially adapted for actuation by other parts of the human body than hand or foot	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
1/54	. Controlling members specially adapted for actuation by auxiliary operating members or extensions; Operating members or extensions therefor (pedal extensions)		
1/56	. . Controlling members specially adapted for actuation by keys, screwdrivers or like tools		
1/58	. Rests or guides for relevant parts of the operator's body		
1/60	. . Foot rests or foot guides		
1/62	. . Arm rests		
3/00	Controlled members; Assemblies or arrangements thereof (interlocking of controlled members 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 17/00 takes precedence)		

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	9/04792	. . . . . {for rotary control around the axis of the controlling member}
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	9/04796	. . . . . {for rectilinear control along the axis of the controlling member}
9/00	Manually-actuated control mechanisms provided with one single controlling member co-operating with two or more controlled members, e.g. selectively, simultaneously	9/053	. . . . the controlling member comprising a ball {graph-reading using a tracing ball or mouse G06F 3/033 }
9/02	the controlling member being movable in different independent ways, movement in each individual way actuating one controlled member only	9/06	the controlled members being actuated successively by repeated movement of the controlling member
9/04	. . in which movement in two or more ways can occur simultaneously	9/08	the controlled members being actuated successively by progressive movement of the controlling member {(Single lever throttle and clutch control for marine engines B63H 21/213)}
9/047	. . . the controlling member being movable by hand about orthogonal axes, e.g. joysticks {(for switches H01H 25/04)}	9/085	. . {the controlling member acting on a set of cams or slot cams}
2009/04703	. . . . {Mounting of controlling member}	9/10	with preselection and subsequent movement of each controlled member by movement of the controlling member in two different ways, e.g. guided by a shift gate
2009/04707	. . . . {with ball joint}	11/00	Manually-actuated control mechanisms provided with two or more controlling members co-operating with one single controlled member
2009/04711	. . . . {with substantially hemispherical bearing part forced into engagement, e.g. by a spring}	13/00	Manually-actuated control mechanisms provided with two or more controlling members and also two or more controlled members (interlocking G05G 5/08)
2009/04714	. . . . {with orthogonal axes}	13/02	with separate controlling members for preselection and shifting of controlled members
2009/04718	. . . . {with cardan or gimbal type joint}	15/00	Mechanical devices for initiating a movement automatically due to a specific cause
2009/04722	. . . . {elastic, e.g. flexible shaft}	15/002	. {due to an abnormal functioning of the controlled apparatus (if speed is abnormal G05G 15/06)}
2009/04725	. . . . {with coil spring}	15/005	. {due to a dangerous situation for the operator}
2009/04729	. . . . {melastomeric}	15/007	. {due to an exerted pressure}
2009/04733	. . . . {with a joint having a nutating disc, e.g. forced by a spring}	15/02	due to alteration of the sense of movement of a member
9/04737	. . . . {with six degrees of freedom}	15/04	due to distance or angle travelled by a member
2009/0474	. . . . {characterised by means converting mechanical movement into electric signals}	15/06	due to the speed of rotation or of bodily movement of a member, e.g. passing an upper or lower limit thereof (speedometers G01P)
2009/04744	. . . . {Switches}	15/08	due to the load or torque on a member, e.g. if exceeding a predetermined value thereof
2009/04748	. . . . {Position sensor for rotary movement, e.g. potentiometer}	17/00	Mechanical devices for moving a member after being released; Trip or release mechanisms characterised thereby
2009/04751	. . . . {Position sensor for linear movement}	19/00	Servo-mechanisms with follow-up action, e.g. occurring in steps
2009/04755	. . . . {Magnetic sensor, e.g. hall generator, pick-up coil}	21/00	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)
2009/04759	. . . . {Light-sensitive detector, e.g. photoelectric}	23/00	Means for ensuring the correct positioning of parts of control mechanisms, e.g. for taking-up play
2009/04762	. . . . {Force transducer, e.g. strain gauge}	23/02	self-adjusting
2009/04766	. . . . {providing feel, e.g. indexing means, means to create counterforce}	25/00	Other details or appurtenances of control mechanisms, e.g. supporting intermediate members elastically
2009/0477	. . . . {holding the member in a number of definite positions}	25/02	Inhibiting the generation or transmission of noise {(suppression of noise or vibrations in selector apparatus for gears F16H 59/0208)}
2009/04774	. . . . {with additional switches or sensors on the handle}		
2009/04777	. . . . {with additional push or pull action on the handle}		
2009/04781	. . . . {with additional rotation of the controlling member}		
NOTE			
Provisional indexing codes related to scheme of trilateral project T021			
9/04785	. . . . {the controlling member being the operating part of a switch arrangement}		
9/04788	. . . . {comprising additional control elements}		

- 25/04 . Sealing against entry of dust, weather or the like {[\(in selector apparatus for gearings, F16H 59/0213\)](#)}
- 2505/00 Means for preventing, limiting or returning the movements of parts of a control mechanism, e.g. locking controlling member**
- 2700/00 Control mechanisms or elements therefor applying a mechanical movement**
- 2700/02 . Means for regulating or adjusting control mechanisms, e.g. devices for automatic adjustment
- 2700/04 . Control mechanisms limiting amplitude or adjusting datum position
- 2700/06 . . Control mechanisms for holding members in a number of positions comprising a device to limit the control range
- 2700/08 . . Control mechanisms for locking members in one or more positions
- 2700/10 . . Control mechanisms for locking or at least for blocking a member in one position out of a number of several positions
- 2700/12 . Control mechanisms with one controlling member and one controlled member
- 2700/14 . . with one elastic element as essential part, e.g. elastic components as a part of an actuating mechanism
- 2700/16 . . Mechanisms for conveying motion or signals for or in relation with control mechanisms
- 2700/18 . . Systems wherein the control element may be placed in two or more positions
- 2700/20 . Control mechanisms not otherwise provided for
- 2700/22 . Mechanisms linking plurality of controlling or controlled members
- 2700/24 . . Locking controlled members of selectively controlled mechanisms
- 2700/26 . . with a control member moving selectively or simultaneously the controlled members
- 2700/28 . . . with a control member that is moved for preselection in another direction than for final actuating
- 2700/30 . . . 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
- 2700/32 . . with plurality of control members, e.g. preselection and actuating members actuating several controlled members