

# CPC COOPERATIVE PATENT CLASSIFICATION

## B60G VEHICLE SUSPENSION ARRANGEMENTS (air-cushion vehicles [B60V](#); {cycle suspensions [B62K 25/00](#)})

### NOTES

1. Attention is drawn to the explanatory note following the class title [B60](#)
2. Indexing codes [B60G 2200/00](#) - [B60G 2800/00](#) are dedicated to particular aspects of suspension arrangements:
  - [B60G 2200/00](#) refers to the type of suspension arrangement;
  - [B60G 2202/00](#) refers to the suspension elements used (springs, dampers and actuators);
  - [B60G 2204/00](#) refers to mounting features of suspension elements;
  - [B60G 2206/00](#) refers to constructional and manufacturing details of suspension elements;
  - [B60G 2300/00](#) refers to the type of vehicle;
  - [B60G 2400/00](#) - [B60G 2800/00](#) refer to the electronic control of suspension arrangements, whereby:
    - [B60G 2400/00](#) refers to input parameters of the control;
    - [B60G 2401/00](#) refers to types of sensors used;
    - [B60G 2500/00](#) refers to the controlled action or device;
    - [B60G 2600/00](#) refers to particular details of the control system;
    - [B60G 2800/00](#) refers to the result to be achieved by the control action.
3. Groups [B60G 2200/00](#) - [B60G 2800/00](#) are to be used in multi-aspect classification, so that subject matter characterised by aspects covered by more than one of these groups, which is considered to represent information of interest for search, should be classified in a combination of at least one relevant "invention information" symbol in association with indexing codes from each of these groups.

### WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[B60G 23/00](#) covered by [B60G 17/0165](#)

<b>1/00</b>	<b>Suspensions with rigid connection between axle and frame</b>	3/202	. . . {having one longitudinal arm and two parallel transversal arms, e.g. dual-link type strut suspension}
1/02	. with continuous axle		
1/04	. with divided axle	3/205	. . . . {with the pivotal point of the longitudinal arm being on the vertical plane defined by the wheel rotation axis and the wheel ground contact point}
<b>3/00</b>	<b>Resilient suspension for a single wheel (pivoted suspension arms <i>per se</i>, attachment thereof to sprung part of the vehicle, buffer means for limiting movement of arms <a href="#">B60G 7/00</a>; {rigid axle suspensions <a href="#">B60G 9/00</a>;} characterised by arrangement, location or type of springs <a href="#">B60G 11/00</a>)</b>	3/207	. . . {the arms being essentially parallel to the longitudinal axis of the vehicle}
3/01	. the wheel being mounted for sliding movement, e.g. in or on a vertical guide (camber maintaining means <a href="#">B60G 3/26</a> )	3/22	. . . a rigid arm forming the axle housing
3/02	. with a single pivoted arm	3/225	. . . . {the arm being of the trailing wishbone type}
3/04	. . the arm being essentially transverse to the longitudinal axis of the vehicle	3/24	. . . a rigid arm being formed by the live axle {( <a href="#">B60G 3/22</a> , <a href="#">B60G 3/26</a> take precedence; driving arrangements <a href="#">B60K 17/22</a> , <a href="#">B60K 17/30</a> , <a href="#">B60K 17/32</a> )}
3/06	. . . the arm being rigid	3/26	. . . Means for maintaining substantially-constant wheel camber during suspension movement; {Means for controlling the variation of the wheel position during suspension movement ( <a href="#">B60G 3/202</a> , <a href="#">B60G 3/22</a> , <a href="#">B60G 7/003</a> , <a href="#">B60G 7/006</a> take precedence; means for adjusting camber, castor, or toe-in <a href="#">B62D 17/00</a> )}
3/08	. . . . the arm forming the axle housing		
3/10	. . . the arm itself being resilient, e.g. leaf spring {( <a href="#">B60G 7/003</a> takes precedence)}	3/265	. . . . {with a strut cylinder contributing to the suspension geometry by being linked to the wheel support via an articulation}
3/12	. . the arm being essentially parallel to the longitudinal axis of the vehicle	3/28	. . at least one of the arms itself being resilient, e.g. leaf spring {( <a href="#">B60G 7/003</a> takes precedence)}
3/14	. . . the arm being rigid	3/285	. . . {the arm being essentially parallel to the longitudinal axis of the vehicle}
3/145	. . . . {the arm forming the axle housing}		
3/16	. . . the arm itself being resilient, e.g. leaf spring {( <a href="#">B60G 7/003</a> takes precedence)}		
3/18	. with two or more pivoted arms, e.g. parallelogram		
3/185	. . {the arms being essentially parallel to the longitudinal axis of the vehicle}		
3/20	. . all arms being rigid	<b>5/00</b>	<b>Resilient suspensions for a set of tandem wheels or axles having interrelated movement</b>

- 5/005 . {the wheels being fixed on a non-pivotal structure, e.g. a sliding mount}
- 5/01 . the set being characterised by having more than two successive axles
- 5/02 . mounted on a single pivoted arm, {e.g. the arm being rigid}
- 5/025 . . {the arm being transverse to the longitudinal axis of the vehicle}
- 5/03 . . the arm itself being resilient, e.g. a leafspring (B60G 5/053 takes precedence)
- 5/04 . with two or more pivoted arms, the movements of which are resiliently interrelated, {e.g. the arms being rigid}
- 5/043 . . {the arms being transverse to the longitudinal axis of the vehicle}
- 5/047 . . at least one arm being resilient, e.g. a leafspring (B60G 5/053 takes precedence)
- 5/053 . . a leafspring being used as equilibration unit between two axle-supporting units
- 5/06 . . the arms turning on a common pivot {, e.g. being rigid}
- 5/065 . . . {at least one arm being resilient}
- 7/00 Pivoted suspension arms; Accessories thereof** (means for maintaining substantially constant wheel camber during suspension movement B60G 3/26; {articulations for wheels B60G 5/00; leaf spring attaching means B60G 11/10, B60G 11/12; trailing arm twist beam axle attaching means B60G 21/052; articulations in general F16C})
- 7/001 . {Suspension arms, e.g. constructional features (B60G 7/006 takes precedence)}
- 7/003 . . {of adjustable length}
- 7/005 . {Ball joints (B60G 7/006 takes precedence; for steering linkage B62D 7/16; ball joints per se F16C 11/06)}
- 7/006 . {Attaching arms to sprung or unsprung part of vehicle, characterised by comprising attachment means controlled by an external actuator, e.g. a fluid or electrical motor (B62D 7/146 takes precedence)}
- 7/008 . {Attaching arms to unsprung part of vehicle (B60G 7/005, B60G 7/006 take precedence)}
- 7/02 . Attaching arms to sprung part of vehicle {(B60G 7/006 takes precedence)}
- 7/04 . Buffer means for limiting movement of arms {(stops limiting fluid passage in fluid dampers F16F 9/49; stroke-limiting stops for fluid dampers F16F 9/58)}
- 9/00 Resilient suspensions of a rigid axle or axle housing for two or more wheels** {(the axle being a part of a set of tandem axles B60G 5/00-B60G 5/065; with leaf springs B60G 11/02-B60G 11/08)}
- 9/003 . {the axle being rigidly connected to a trailing guiding device}
- 9/006 . {the axle being connected to two trailing arms with only one of them being rigidly connected to the axle}
- 9/02 . the axle or housing being pivotally mounted on the vehicle, {e.g. the pivotal axis being parallel to the longitudinal axis of the vehicle (B60G 9/003 takes precedence)}
- 9/022 . . {the axle having an imaginary pivotal point}
- 9/025 . . . {using linkages for the suspension of the axle allowing its lateral swinging displacement}
- 9/027 . . {the axle having either a triangular, a "T" or "U" shape and being directly articulated with the chassis only by its middle apex, e.g. De Dion suspension}
- 9/04 . the axle or housing not being pivotally mounted on the vehicle {(B60G 9/003 takes precedence)}
- 11/00 Resilient suspensions characterised by arrangement, location or kind of springs** (single wheel suspension by pivoted arm resilient in itself B60G 3/00; adjusting spring characteristic B60G 17/00; springs per se F16F)
- NOTE**
- The term "torsion bar" includes torsion tube or the like. The term "rubber" includes synthetic substitutes of a similar nature.
- 11/003 . {Lubrication devices for springs and dampers (vehicle lubrication devices in general B60R 17/00; for leaf springs in general F16F 1/24)}
- 11/006 . {Centrally located spring units, e.g. all wheels being connected to a common spring unit (B60G 5/00, B60G 17/033 take precedence)}
- 11/02 . having leaf spring only {(B60G 11/006 takes precedence)}
- 11/025 . . {repairing devices for leaf springs}
- 11/04 . . arranged substantially parallel to the longitudinal axis of the vehicle
- 11/06 . . arranged obliquely to the longitudinal axis of the vehicle
- 11/08 . . arranged substantially transverse to the longitudinal axis of the vehicle
- 11/10 . . characterised by means specially adapted for attaching the spring to axle or sprung part of the vehicle
- 11/107 . . . Sliding or rolling mountings
- 11/113 . . . Mountings on the axle (B60G 11/107 takes precedence)
- 11/12 . . . Links, pins, or bushes
- 11/125 . . . . {Multiple-eye arrangements}
- 11/14 . having helical, spiral or coil springs only {(B60G 11/006 takes precedence)}
- 11/15 . . Coil springs resisting deflection by winding up
- 11/16 . . characterised by means specially adapted for attaching the spring to axle or sprung part of the vehicle
- 11/18 . having torsion-bar springs only {(B60G 11/006 takes precedence; having rubber springs of the torsional-energy-absorption type B60G 11/23)}
- NOTE**
- B60G 11/184 takes precedence over B60G 11/181 - B60G 11/183
- 11/181 . . {arranged in a plane parallel to the longitudinal axis of the vehicle}
- 11/182 . . {arranged in a plane oblique to the longitudinal axis of the vehicle}
- 11/183 . . {arranged in a plane transverse to the longitudinal axis of the vehicle}
- 11/184 . . {the torsion-bar consisting of a bundle of torsion elements}
- 11/185 . . . {the elements being rods}
- 11/186 . . . . {of hexagonal cross-section}

11/187	. . . {the elements being leaf-springs loaded by twisting}	13/005	. . {characterised by the mounting on the axle or suspension arm of the damper unit}
11/188	. . . {the elements being cables}	13/006	. . . {on the stub axle}
11/189	. . {the torsion spring consisting of a tube with a slit}	13/008	. . . {involving use of an auxiliary cylinder (B60G 13/006 takes precedence)}
11/20	. . characterised by means specially adapted for attaching the spring to axle or sprung part of the vehicle	13/02	. having dampers dissipating energy, e.g. frictionally
11/22	. having rubber springs only {(B60G 11/006 takes precedence)}	13/04	. . mechanically, e.g. having frictionally-engaging springs as damping elements
11/225	. . {Neidhart type rubber springs}	13/06	. . of fluid type
11/23	. . of the torsional-energy-absorption type	13/08	. . . hydraulic
11/24	. . characterised by means specially adapted for attaching the spring to axle or sprung part of the vehicle	13/10	. . . pneumatic
11/26	. having fluid springs only, e.g. hydropneumatic springs {(B60G 11/006,) B60G 15/12 take precedence}	13/12	. . . quasi-fluid, i.e. having powdered medium
11/265	. . {hydraulic springs}	13/14	. having dampers accumulating utilisable energy, e.g. compressing air {(fluid springs with an accumulator B60G 11/30)}
11/27	. . wherein the fluid is a gas	13/16	. having dynamic absorber as main damping means, i.e. spring-mass system vibrating out of phase
11/28	. . characterised by means specially adapted for attaching the spring to axle or sprung part of the vehicle	13/18	. . combined with energy-absorbing means
11/30	. . having pressure fluid accumulator therefor, e.g. accumulator arranged in vehicle frame {(dampers accumulating utilisable energy B60G 13/14)}	<b>15/00</b>	<b>Resilient suspensions characterised by arrangement, location or type of combined spring and vibration damper, e.g. telescopic type (combined spring and vibration-dampers per se F16F)</b>
11/32	. having springs of different kinds {(B60G 11/006 takes precedence)}	15/02	. having mechanical spring
11/34	. . including leaf springs	15/04	. . and mechanical damper {or dynamic damper}
11/36	. . . and also helical, spiral or coil springs	15/06	. . and fluid damper
11/38	. . . and also rubber springs	15/061	. . . {with a coil spring being mounted inside the damper}
11/40	. . . . the rubber springs being attached to the axle	15/062	. . . {the spring being arranged around the damper (B60G 15/061, B60G 15/067, B60G 15/07 take precedence)}
11/42	. . . . the rubber springs being attached to sprung part of the vehicle	15/063	. . . . {characterised by the mounting of the spring on the damper (B60G 15/065, B60G 15/066 take precedence)}
11/44	. . . and also torsion-bar springs	15/065	. . . . {characterised by the use of a combination of springs}
11/46	. . . and also fluid springs	15/066	. . . . {the spring being different from a coil spring (B60G 15/065 takes precedence)}
11/465	. . . . {with a flexible wall}	15/067	. . . . {characterised by the mounting on the vehicle body or chassis of the spring and damper unit}
11/48	. . not including leaf springs	15/068	. . . . {specially adapted for MacPherson strut-type suspension}
11/50	. . . having helical, spiral or coil springs, and also torsion-bar springs	15/07	. . . the damper being connected to the stub axle and the spring being arranged around the damper {(B60G 15/068 takes precedence)}
11/52	. . . having helical, spiral or coil springs, and also rubber springs	15/08	. having fluid spring
11/54	. . . . with rubber springs arranged within helical, spiral or coil springs	15/10	. . and mechanical damper {or dynamic damper}
11/56	. . . having helical, spiral or coil springs, and also fluid springs	15/12	. . and fluid damper
11/58	. . . . arranged coaxially	15/14	. . . the damper being connected to the stub axle and the spring being arranged around the damper
11/60	. . . having both rubber springs and torsion-bar springs	<b>17/00</b>	<b>Resilient suspensions having means for adjusting the spring or vibration-damper characteristics, for regulating the distance between a supporting surface and a sprung part of vehicle or for locking suspension during use to meet varying vehicular or surface conditions, e.g. due to speed or load {(levelling or stabilising systems for tippers B60P 1/045)}</b>
11/62	. . . having both rubber springs and fluid springs	17/002	. {by temperature regulation of the suspension unit, e.g. heat operated systems}
11/64	. . . having both torsion-bar springs and fluid springs	17/005	. Suspension locking arrangements {(for retractable wheels B62D 61/12)}
<b>13/00</b>	<b>Resilient suspensions characterised by arrangement, location or type of vibration dampers (adjusting damping effect B60G 17/06; vibration dampers per se F16F)</b>		
13/001	. {Arrangements for attachment of dampers (mounting arrangements of combined spring and damper units B60G 15/00; mountings of fluid dampers in general F16F 9/54)}		
13/003	. . {characterised by the mounting on the vehicle body or chassis of the damper unit}		

- 17/015 . . the regulating means comprising electric or electronic elements ([B60G 17/002](#), [B60G 17/005](#) take precedence)
- 17/0152 . . {characterised by the action on a particular type of suspension unit ([B60G 17/01941](#) takes precedence)}
- 17/0155 . . . {pneumatic unit}
- 17/0157 . . . {non-fluid unit, e.g. electric motor}
- 17/016 . . characterised by their responsiveness, when the vehicle is travelling, to specific motion, a specific condition, or driver input ([B60G 17/017](#) takes precedence)}
- 17/0161 . . . {mainly during straight-line motion ([B60G 17/0164](#) takes precedence)}
- 17/0162 . . . {mainly during a motion involving steering operation, e.g. cornering, overtaking ([B60G 17/0164](#) takes precedence)}
- 17/0163 . . . . {the control involving steering geometry, e.g. four-wheel steering}
- 17/0164 . . . . {mainly during accelerating or braking}
- 17/0165 . . . . to an external condition, e.g. rough road surface, side wind
- 17/017 . . characterised by their use when the vehicle is stationary, e.g. during loading, engine start-up or switch-off
- 17/018 . . characterised by the use of a specific signal treatment or control method
- 17/0182 . . . {involving parameter estimation, e.g. observer, Kalman filter}
- 17/0185 . . . for failure detection
- 17/019 . . characterised by the type of sensor or the arrangement thereof ([B60G 17/01941](#) takes precedence)}
- 17/01908 . . . {Acceleration or inclination sensors (characterised by the use of gyroscopes [B60G 21/08](#))}
- 17/01916 . . . . {Mercury-switch type devices}
- 17/01925 . . . . {Pendulum-type devices}
- 17/01933 . . . {Velocity, e.g. relative velocity-displacement sensors}
- 17/01941 . . . {characterised by the use of piezo-electric elements, e.g. sensors or actuators}
- 17/0195 . . characterised by the regulation being combined with other vehicle control systems {(Conjoint control of vehicle sub-units including control of suspension systems [B60W 10/22](#))}
- 17/02 . . Spring characteristics {, e.g. mechanical springs and mechanical adjusting means} ([B60G 17/005](#), [B60G 17/015](#) take precedence)
- 17/021 . . {the mechanical spring being a coil spring ([B60G 17/0272](#) takes precedence)}
- 17/023 . . {the mechanical spring being a leaf spring ([B60G 17/0275](#) takes precedence)}
- 17/025 . . {the mechanical spring being a torsion spring ([B60G 17/0277](#), [B60G 21/0553](#) take precedence)}
- 17/027 . . Mechanical springs regulated by fluid means ([B60G 17/033](#) takes precedence)
- 17/0272 . . . {the mechanical spring being a coil spring}
- 17/0275 . . . {the mechanical spring being a leaf spring}
- 17/0277 . . . {the mechanical spring being a torsion spring ([B60G 21/0553](#) takes precedence)}
- 17/033 . . characterised by regulating means acting on more than one spring
- 17/04 . . fluid spring characteristics
- 17/0408 . . . {details, e.g. antifreeze for suspension fluid, pumps, retarding means *per se*}
- 17/0416 . . . {regulated by varying the resiliency of hydropneumatic suspensions ([B60G 17/048](#) takes precedence)}
- 17/0424 . . . . {by varying the air pressure of the accumulator}
- 17/0432 . . . . {by varying the number of accumulators connected to the hydraulic cylinder ([B60G 17/0424](#) takes precedence)}
- 17/044 . . . Self-pumping fluid springs (pumps for liquids [F04](#))
- 17/048 . . . with the regulating means inside the fluid springs ([B60G 17/044](#) takes precedence)
- 17/0485 . . . . {the springs being pneumatic springs with a flexible wall, e.g. with levelling valves}
- 17/052 . . . Pneumatic spring characteristics ([B60G 17/048](#) takes precedence ; valves *per se* [F16K](#))}
- 17/0521 . . . . {the spring having a flexible wall}
- 17/0523 . . . . {Regulating distributors or valves for pneumatic springs}
- 17/0525 . . . . . {Height adjusting or levelling valves}
- 17/0526 . . . . . {Distributor units, e.g. for retractable wheels (vehicles with retractable wheels *per se* [B62D 61/12](#))}
- 17/0528 . . . . . {Pressure regulating or air filling valves}
- 17/056 . . . Regulating distributors or valves {for hydropneumatic systems} ([B60G 17/044](#) - [B60G 17/048](#), [B60G 17/0416](#) take precedence; {Fluid interconnection systems to control vehicle inclination [B60G 21/06](#), [B60G 21/10](#)}; valves *per se* [F16K](#))}
- 17/0565 . . . . {Height adjusting valves}
- 17/06 . . Characteristics of dampers {, e.g. mechanical dampers} ([B60G 17/015](#) takes precedence)
- 17/08 . . Characteristics of fluid dampers (adjusting fluid dampers in general [F16F 9/44](#) - [F16F 9/53](#))
- 21/00** **Interconnection systems for two or more resiliently-suspended wheels, e.g. for stabilising a vehicle body with respect to acceleration, deceleration or centrifugal forces** ([B60G 17/033](#) takes precedence; {levelling or stabilising systems for tippers [B60P 1/045](#)}; steering deflectable wheels combined with means for inwardly inclining the vehicle body on bends [B62D 9/02](#))
- 21/002 . . {longitudinally}
- 21/005 . . {transversally}
- 21/007 . . {means for adjusting the wheel inclination}
- 21/02 . . permanently interconnected
- 21/023 . . {longitudinally}
- 21/026 . . {transversally}
- 21/04 . . mechanically
- 21/045 . . . between wheels on different axles on the same side of the vehicle, i.e. the left or the right side
- 21/05 . . . between wheels on the same axle but on different sides of the vehicle, i.e. the left and right wheel suspensions being interconnected
- 21/051 . . . . {Trailing arm twist beam axles}
- 21/052 . . . . . {Mounting means therefor}
- 21/053 . . . . . {adjustable}
- 21/055 . . . . Stabiliser bars
- 21/0551 . . . . . {Mounting means therefor}



21/0553	. . . . . {adjustable}	2200/23	. . Trailing arms connected by a U-shaped torsion bar
21/0555	. . . . . {including an actuator inducing vehicle roll}	2200/24	. . Interconnected split axles
21/0556	. . . . . {including a releasable coupling (B60G 21/0555 takes precedence)}	2200/30	. Rigid axle suspensions
21/0558	. . . . . {including means varying the stiffness of the stabiliser (B60G 21/0556 takes precedence)}	2200/31	. . with two trailing arms rigidly connected to the axle
21/06	. . fluid	2200/312	. . with one of the two trailing arms being rigidly connected to the axle
21/067	. . . between wheels on different axles on the same side of the vehicle, i.e. the left or the right side	2200/314	. . with longitudinally arranged arms articulated on the axle
21/073	. . . between wheels on the same axle but on different sides of the vehicle, i.e. the left and right wheel suspensions being interconnected	2200/315	. . . at least one of the arms having an A or V shape
21/08	. characterised by use of gyroscopes (gyroscopes for stabilising vehicle bodies without controlling suspension arrangements B62D 37/06)	2200/318	. . two or more axles being mounted on a longitudinal rocking or walking beam
21/10	. not permanently interconnected, e.g. operative only on acceleration, only on deceleration or only at off-straight position of steering	2200/32	. . pivoted
21/103	. . {longitudinally}	2200/322	. . . with a single pivot point and a straight axle
21/106	. . {transversally}	2200/324	. . . with a single pivot point and a triangular "T" or "U"-shaped axle, e.g. DeDion arrangement
<b>99/00</b>	<b>Subject matter not provided for in other groups of this subclass</b>	2200/326	. . . with two laterally spaced pivots, e.g. trailing frame
99/002	. {Suspension details of the suspension of the vehicle body on the vehicle chassis}	2200/34	. . Stabilising mechanisms, e.g. for lateral stability
99/004	. {Other suspension arrangements with rubber springs}	2200/341	. . . Panhard rod
99/006	. {Other suspension arrangements with metallic springs}	2200/3415	. . . . Scott-Russel linkage
99/008	. {Other suspension arrangements with fluid springs}	2200/342	. . . Watt linkage
<b>2200/00</b>	<b>Indexing codes relating to suspension types</b>	2200/343	. . . with an axle suspended by two pivoted rods in "V"-arrangement, the rods being coupled at its apex
2200/10	. Independent suspensions	2200/344	. . . with an axle suspended by two pivoted rods in an inverted "V"-arrangement, the rods being coupled at its apex
2200/13	. . with longitudinal arms only	2200/345	. . . with an axle suspended by two pivoted rods in "X"-arrangement
2200/132	. . . with a single trailing arm	2200/346	. . . with an axle suspended by two laterally displaced rods having an imaginary point of intersection above the wheel axis
2200/1322	. . . . with a wishbone or triangular arm	2200/347	. . . with an axle suspended by two laterally displaced rods having an imaginary point of intersection below the wheel axis
2200/1324	. . . . with a resilient trailing arm	2200/40	. Indexing codes relating to the wheels in the suspensions
2200/14	. . with lateral arms	2200/42	. . Driven wheels or dead axles
2200/141	. . . with one trailing arm and one lateral arm only	2200/422	. . Driving wheels or live axles
2200/142	. . . with a single lateral arm, e.g. MacPherson type	2200/44	. . steerable
2200/1422	. . . . the lateral arm being resilient	2200/445	. . Self-steered wheels
2200/1424	. . . . the lateral arm having an L-shape	2200/446	. . Non-steerable wheels
2200/143	. . . with lateral arms crossing each other, i.e. X formation as seen along the longitudinal axis	2200/46	. . camber angle
2200/144	. . . with two lateral arms forming a parallelogram	2200/462	. . Toe-in/out
2200/1442	. . . . including longitudinal rods	2200/4622	. . . Alignment adjustment
2200/154	. . . the lateral arm having an L-shape	2200/464	. . Caster angle
2200/156	. . . wishbone-type arm formed by two links defining a virtual apex	2200/466	. . Damping acceleration or deceleration torque on wheel axle
2200/17	. . with a strut contributing to the suspension geometry by being articulated onto the wheel support	<b>2202/00</b>	<b>Indexing codes relating to the type of spring, damper or actuator</b>
2200/18	. . Multilink suspensions, e.g. elastokinematic arrangements	2202/10	. Type of spring
2200/182	. . . with one longitudinal arm or rod and lateral rods	2202/11	. . Leaf spring
2200/184	. . . Assymetric arrangements	2202/112	. . . longitudinally arranged
2200/20	. Semi-rigid axle suspensions	2202/114	. . . transversally arranged
2200/21	. . Trailing arms connected by a torsional beam, i.e. twist-beam axles	2202/116	. . . having a "C" form loaded only at its ends transversally to its central axis
2200/22	. . Trailing arms connected by a straight torsion bar	2202/117	. . . having a "C" form loaded parallel to its central axis
		2202/12	. . Wound spring
		2202/122	. . . subjected to tension
		2202/13	. . Torsion spring

2202/132	. . . comprising a longitudinal torsion bar and/or tube	2204/00	<b>Indexing codes related to suspensions <u>per se</u> or to auxiliary parts</b>
2202/134	. . . comprising a transversal torsion bar and/or tube	2204/10	. Mounting of suspension elements
2202/135	. . . Stabiliser bar and/or tube	2204/11	. . Mounting of sensors thereon
2202/1351	. . . . comprising at least two stabiliser bars parallel to each other	2204/111	. . . on pneumatic springs
2202/136	. . . Twist-beam type arrangement	2204/112	. . . on dampers, e.g. fluid dampers
2202/1362	. . . . including a second torsional element, e.g. second beam, stabiliser bar or tube	2204/113	. . . Tyre related sensors
2202/14	. . Plastic spring, e.g. rubber	2204/114	. . . Steering column mounted sensors
2202/141	. . . subjected to tension	2204/115	. . . Wheel hub bearing sensors
2202/142	. . . subjected to shear, e.g. Neidhart type	2204/116	. . . Sensors coupled to the suspension arm
2202/1422	. . . . Axial	2204/1162	. . . . directly mounted on the suspension arm
2202/1424	. . . . Torsional	2204/12	. . Mounting of springs or dampers
2202/143	. . . subjected to compression	2204/121	. . . Mounting of leaf springs
2202/144	. . . of rotary type	2204/122	. . . Mounting of torsion springs
2202/15	. . Fluid spring	2204/1222	. . . . Middle mounts of stabiliser on vehicle body or chassis
2202/152	. . . Pneumatic spring	2204/1224	. . . . End mounts of stabiliser on wheel suspension
2202/1522	. . . . of rotary type	2204/1226	. . . . on the trailing arms of a twist beam type arrangement
2202/1524	. . . . with two air springs per wheel, arranged before and after the wheel axis	2204/124	. . . Mounting of coil springs
2202/154	. . . with an accumulator	2204/1242	. . . . on a damper, e.g. MacPherson strut
2202/16	. . Magnetic spring	2204/12422	. . . . . anchoring the end coils on the spring support plate
2202/20	. Type of damper	2204/1244	. . . . on a suspension arm
2202/21	. . with two dampers per wheel, arranged before and after the wheel axis	2204/1246	. . . . on twist beam axles
2202/22	. . Rotary Damper	2204/125	. . . Mounting of rubber type springs
2202/23	. . Friction Damper	2204/126	. . . Mounting of pneumatic springs
2202/24	. . Fluid damper	2204/1262	. . . . on a damper
2202/242	. . . Pneumatic damper	2204/127	. . . with the mounting of springs or dampers moving so that the direction of the related force vector can be changed, thus contributing to a variation of the loading of the wheel
2202/25	. . Dynamic damper	2204/128	. . . Damper mount on vehicle body or chassis
2202/30	. Spring/Damper and/or actuator Units	2204/129	. . . Damper mount on wheel suspension or knuckle
2202/31	. . with the spring arranged around the damper, e.g. MacPherson strut	2204/13	. . . with the spring, i.e. coil spring, or damper horizontally mounted
2202/312	. . . The spring being a wound spring	2204/1302	. . . . inside the vehicle frame
2202/314	. . . The spring being a pneumatic spring	2204/14	. . Mounting of suspension arms
2202/32	. . The spring being in series with the damper and/or actuator	2204/143	. . . on the vehicle body or chassis
2202/322	. . . the damper being controllable	2204/1431	. . . . of an L-shaped arm
2202/40	. Type of actuator	2204/1432	. . . . by vertical bolts or studs
2202/41	. . Fluid actuator	2204/1434	. . . . in twist-beam axles arrangement
2202/412	. . . Pneumatic actuator	2204/147	. . . on the vehicle engine body
2202/413	. . . Hydraulic actuator	2204/148	. . . on the unsprung part of the vehicle, e.g. wheel knuckle or rigid axle
2202/414	. . . using electrohydraulic valves	2204/1482	. . . . on rigid axle by elastic mount
2202/415	. . . using other types of valves, e.g. mechanically operated valves	2204/1484	. . . . on an intermediate upright strut upon which the stub axle is pivoted
2202/416	. . . using a pump, e.g. in the line connecting the lower chamber to the upper chamber of the actuator	2204/149	. . . Mounting of rigid axle on wheel knuckle
2202/42	. . Electric actuator	2204/15	. . Mounting of subframes
2202/422	. . . Linear motor	2204/16	. . Mounting of vehicle body on chassis
2202/424	. . . electrostrictive materials, e.g. piezoelectric actuator	2204/162	. . . Cabins, e.g. for trucks, tractors
2202/43	. . Mechanical actuator	2204/17	. . Mounting of bogies, e.g. for trailers
2202/432	. . . Spring motor	2204/18	. . Mounting of vehicle engines
2202/44	. . Axial actuator, e.g. telescopic	2204/182	. . . Electric motor on wheel support
2202/441	. . . where axial movement is translated to rotation of the connected end part	2204/19	. . Mounting of transmission differential
2202/442	. . Rotary actuator	2204/20	. . Mounting of accessories, e.g. pump, compressor
2202/45	. . Other types, e.g. external jets for stability with particular characteristics	2204/201	. . . of fluid lines
2202/49	. . Other type, e.g. external jets for stability	2204/202	. . . of cables
		2204/2022	. . . . using a suspension element (e.g. link, damper or spring) as part of the electrical circuitry

2204/22	. . Linking of trailers to trucks, e.g. truck-trailer connections	2204/46	. . Means for locking the suspension
2204/30	. . In-wheel mountings	2204/4602	. . . Locking of a McPherson type strut upper mount on the vehicle body
2204/40	. Auxiliary suspension parts; Adjustment of suspensions	2204/4604	. . . mechanically, e.g. using a hook as antireep mechanism
2204/41	. . Elastic mounts, e.g. bushings	2204/4605	. . . hydraulically, e.g. interrupting communication between the chambers of a hydraulic cylinder
2204/4102	. . . having a pin or stud extending perpendicularly to the axis of the elastic mount	2204/47	. . Means for retracting the suspension
2204/4103	. . . having an eccentrically located inner sleeve	2204/4702	. . . pneumatically
2204/4104	. . . Bushings having modified rigidity in particular directions	2204/61	. Adjustable during maintenance
2204/41042	. . . . by using internal cam surfaces	2204/62	. Adjustable continuously, e.g. during driving
2204/41043	. . . . formed by a U-shaped external bracket	2204/80	. Interactive suspensions; arrangement affecting more than one suspension unit
2204/41044	. . . . in a shell for being loaded mainly in axial direction, e.g. piston rod mounts, longitudinal push-pull rod mounts	2204/81	. . front and rear unit
2204/41046	. . . . having the axis of an inner sleeve or pin inclined to the axis of the bush	2204/8102	. . . diagonally arranged
2204/4106	. . . Elastokinematic mounts	2204/82	. . left and right unit on same axle
2204/41062	. . . . hydromounts; interconnected mounts	2204/83	. . Type of interconnection
2204/4108	. . . Resilient element being enclosed and or prestressed in a solid container	2204/8302	. . . Mechanical
2204/414	. . Cardan joints	2204/83022	. . . . using cables, wires, belts or chains
2204/416	. . Ball or spherical joints	2204/8304	. . . using a fluid
2204/418	. . Bearings, e.g. ball or roller bearings	2204/8306	. . . Permanent; Continuous
2204/419	. . Gears	<b>2206/00 Indexing codes related to the manufacturing of suspensions: constructional features, the materials used, procedures or tools</b>	
2204/4191	. . . Planetary or epicyclic gears	2206/01	. Constructional features of suspension elements, e.g. arms, dampers, springs
2204/4192	. . . rack and pinion	2206/011	. . Modular constructions
2204/4193	. . . worm gears	2206/0112	. . . Bogies for heavy vehicles
2204/42	. . Joints with cam surfaces	2206/0114	. . . Independent suspensions on subframes
2204/421	. . Pivoted lever mechanisms for mounting suspension elements, e.g. Watt linkage	2206/0116	. . . Integrated distribution control units with valves, accumulators, PCB's or the like
2204/422	. . Links for mounting suspension elements	2206/012	. . Hollow or tubular elements
2204/4222	. . . for movement on predefined locus of, e.g. the wheel center	2206/0122	. . . having a U profile with plate closing the profile in the total or partial length of the element
2204/423	. . Rails, tubes, or the like, for guiding the movement of suspension elements	2206/013	. . with embedded inserts for material reinforcement
2204/4232	. . . Sliding mounts	2206/014	. . with reinforcing nerves or branches
2204/424	. . Mechanisms for force adjustment, e.g. constant force mechanisms	2206/016	. . allowing controlled deformation during collision
2204/43	. . Fittings, brackets or knuckles	2206/017	. . forming an eye for the bushing
2204/4302	. . . for fixing suspension arm on the vehicle body or chassis	2206/10	. . Constructional features of arms
2204/4304	. . . Bracket for lower cylinder mount of McPherson strut	2206/11	. . . the arm being a radius or track or torque or steering rod or stabiliser end link
2204/4305	. . . Bracket for mounting of hydraulic lines on a damper cylinder	2206/111	. . . . of adjustable length
2204/4306	. . . Bracket or knuckle for rigid axles, e.g. for clamping	2206/1112	. . . . . Manually, for alignment purposes
2204/43065	. . . . U-shaped bolts crossing each other	2206/1114	. . . . . Self-adjustable during driving
2204/4307	. . . Bracket or knuckle for torsional springs	2206/1116	. . . . . Actively adjustable during driving
2204/4308	. . . Protecting guards, e.g. for rigid axle damage protection	2206/12	. . . with two attachment points on the sprung part of the vehicle
2204/44	. . Centering or positioning means	2206/121	. . . the arm having an H or X-shape
2204/4402	. . . Spacers or shims	2206/122	. . . the arm having L-shape
2204/4404	. . . Retainers for holding a fixing element, e.g. bushing, nut, bolt etc., until it is tightly fixed in position	2206/123	. . . the arm having T-shape
2204/45	. . Stops limiting travel	2206/124	. . . the arm having triangular or Y-shape, e.g. wishbone
2204/4502	. . . using resilient buffer	2206/13	. . . with more than two attachment points on the sprung part of the vehicle
2204/45021	. . . . for limiting upper mount movement of a McPherson strut	2206/14	. . . the arm forming a U-shaped recess for fitting a bush
2204/4504	. . . using cable or band to prevent extension	2206/141	. . . . The recess being integrally or seamlessly formed
		2206/15	. . . the arm being resilient
		2206/16	. . . the arm having a U profile and/or made of a plate

2206/161	. . . .	with middle section narrower than end section	2206/8104	. . . .	by drawing
2206/162	. . . .	with a plate closing the profile in the total or partial length of the arm	2206/8105	. . . .	by extrusion
2206/20	. .	Constructional features of semi-rigid axles, e.g. twist beam type axles	2206/8106	. . . .	by thermal treatment, e.g. curing hardening, vulcanisation
2206/201	. . .	with detachable cross beam and/or torsion stabiliser bar/tube	2206/81062	. . . .	to relieve internal stresses, e.g. during folding or bending
2206/202	. . .	with a radially deformed tube as a cross member	2206/8107	. . . .	by hydroforming
2206/203	. . .	with outwardly bent trailing arms to increase the width of the support or wheelbase	2206/8108	. . . .	by twisting
2206/30	. .	Constructional features of rigid axles	2206/8109	. . . .	by rolling
2206/31	. . .	Straight axle	2206/811	. . . .	by cutting
2206/312	. . .	Cranked axle	2206/8111	. . . .	by machining
2206/32	. . .	Hollow cross section	2206/8112	. . . .	by thermal spraying of molten material
2206/40	. .	Constructional features of dampers and/or springs	2206/82	. . .	Joining
2206/41	. . .	Dampers	2206/8201	. . . .	by welding
2206/42	. . .	Springs	2206/82012	. . . . .	Pressure welding
2206/422	. . . .	Accumulators for hydropneumatic springs	2206/82013	. . . . .	Friction or heat welding
2206/4222	. . . . .	with a flexible separating wall; Membrane construction	2206/82014	. . . . .	Magnetic pulse welding ( <a href="#">welding by magnetic pulse in general B23K 20/06</a> )
2206/424	. . . .	Plunger or top retainer construction for bellows or rolling lobe type air springs	2206/8205	. . . .	by conical or compressed rubber clamping inserts as joining means
2206/426	. . . .	Coil springs having a particular shape, e.g. curved axis, pig-tail end coils	2206/8206	. . . .	by riveting
2206/427	. . . .	Stabiliser bars or tubes	2206/8207	. . . .	by screwing
2206/428	. . . .	Leaf springs	2206/8208	. . . .	by hemming or seaming, e.g. by folding of the rim
2206/50	. .	Constructional features of wheel supports or knuckles, e.g. steering knuckles, spindle attachments	2206/8209	. . . .	by deformation
2206/60	. .	Subframe construction	2206/82092	. . . . .	by press-fitting
2206/601	. . .	Hanger bracket	2206/821	. . . .	by gluing
2206/602	. . .	Single transverse beam	2206/83	. . .	Punching
2206/604	. . .	with two parallel beams connected by cross members	2206/84	. . .	Hardening
2206/605	. . .	Flexible constructions	2206/8401	. . . .	Annealing
2206/606	. . .	Complex constructions	2206/8402	. . . .	Quenching
2206/70	. .	Materials used in suspensions	2206/8403	. . . .	Shot-peening
2206/71	. . .	Light weight materials	2206/85	. . .	Filament winding
2206/7101	. . . .	Fiber-reinforced plastics [FRP]	2206/90	. .	Maintenance
2206/7102	. . . .	Aluminium alloys	2206/91	. . .	Assembly procedures
2206/7103	. . . .	Magnesium alloys	2206/911	. . . .	using a modification kit
2206/7104	. . . .	Thermoplastics	2206/92	. . .	Tools or equipment used for assembling
2206/71042	. . . . .	Polyester elastomer	2206/921	. . . .	Coil spring compressor
2206/71043	. . . . .	Polyamid elastomer	2206/93	. . .	Tools used for adjustments
2206/71044	. . . . .	Soft nylon	2206/931	. . . .	McPherson strut positioning tool
2206/7105	. . . .	Porous materials, ceramics, e.g. as filling material	2206/94	. . .	Tools used for supporting parts
2206/72	. . .	Steel	2206/99	. . .	Suspension element selection procedure depending on loading or performance requirements, e.g. selection of damper, spring or bush
2206/722	. . . .	Plates			
2206/724	. . . .	Wires, bars or the like			
2206/73	. . .	Rubber; Elastomers			
2206/80	. .	Manufacturing procedures			
2206/81	. . .	Shaping			
2206/8101	. . . .	by casting			
2206/81012	. . . . .	by injection moulding			
2206/8102	. . . .	by stamping			
2206/81022	. . . . .	by forging			
2206/8103	. . . .	by folding or bending			
2206/81035	. . . . .	involving heating to relieve internal stresses			
			2300/00	<b>Indexing codes relating to the type of vehicle</b>	
			2300/02	. Trucks; Load vehicles	
			2300/022	. . Fork lift trucks, Clark	
			2300/024	. . Light trucks	
			2300/026	. . Heavy duty trucks	
			2300/0262	. . . Multi-axle trucks	
			2300/03	. Silo or fluid transporting vehicles	
			2300/04	. Trailers	
			2300/042	. . Semi-trailers	
			2300/044	. . Truck-trailer connections	
			2300/06	. Cranes	
			2300/07	. Off-road vehicles	
			2300/08	. Agricultural vehicles	
			2300/082	. . Tractors	
			2300/083	. . Boom carrying vehicles, e.g. for crop spraying	
			2300/084	. . Ridable lawn mowers	



2300/09	. Construction vehicles, e.g. graders, excavators	2400/2042	. . . Lateral speed
2300/10	. Railway vehicles	2400/206	. . Body oscillation speed; Body vibration frequency
2300/102	. . having track following mechanism for lateral stability	2400/208	. . of wheel rotation
2300/12	. Cycles; Motorcycles	2400/25	. Stroke; Height; Displacement
2300/122	. . Trikes	2400/252	. . vertical
2300/124	. . Quads	2400/256	. . horizontal
2300/13	. Small sized city motor vehicles	2400/257	. . . transversal with regard to vehicle
2300/14	. Buses	2400/258	. . . longitudinal with regard to vehicle
2300/16	. Aeroplanes	2400/30	. Propulsion unit conditions
2300/18	. Helicopters	2400/302	. . Selected gear ratio; Transmission function
2300/20	. Toys	2400/304	. . . neutral position
2300/22	. Perambulators	2400/306	. . . overdrive
2300/24	. Wheelchairs	2400/31	. . Clutch condition
2300/26	. Carts	2400/32	. . Torque on propulsion shaft
2300/27	. Racing vehicles, e.g. F1	2400/33	. . Throttle position
2300/28	. Amphibious vehicles	2400/34	. . Accelerator pedal position
2300/30	. Load ramps	2400/35	. . Position of fuel or air injector
2300/32	. Track vehicles	2400/36	. . Functioning of turbocharger
2300/322	. . Snowmobiles	2400/37	. . Brake pad or disc friction
2300/34	. Ambulances	2400/38	. . Speed of engine rotation
2300/36	. Independent Multi-axle long vehicles	2400/382	. . . Ignition switch
2300/37	. Vehicles having steerable wheels mounted on a vertically moving column	2400/39	. . Brake pedal position
2300/38	. Low or lowerable bed vehicles	2400/40	. Steering conditions
2300/40	. Variable track or wheelbase vehicles	2400/41	. . Steering angle
2300/402	. . Extra load carrying wheels, e.g. tag axles	2400/412	. . . of steering wheel or column
2300/45	. Rolling frame vehicles	2400/4122	. . . . Neutral position detection
2300/50	. Electric vehicles; Hybrid vehicles	2400/42	. . Steering torque
2300/60	. Vehicles using regenerative power	2400/44	. . Steering speed
		2400/46	. . Steering frequency
		2400/47	. . Rear wheel steering
<b>2400/00</b>	<b>Indexing codes relating to detected, measured or calculated conditions or factors</b>	2400/50	. Pressure
2400/05	. Attitude	2400/51	. . in suspension unit
2400/051	. . Angle	2400/512	. . . in spring
2400/0511	. . . Roll angle	2400/5122	. . . . Fluid spring
2400/0512	. . . Pitch angle	2400/51222	. . . . . Pneumatic
2400/0513	. . . Yaw angle	2400/518	. . . in damper
2400/0514	. . . Wheel angle detection	2400/5182	. . . . Fluid damper
2400/05142	. . . . Wheel camber	2400/52	. . in tyre
2400/05144	. . . . Wheel toe	2400/60	. Load
2400/05146	. . . . Wheel caster	2400/61	. . Load distribution
2400/0516	. . . Angular position of a suspension element	2400/62	. . Seat occupation; Passenger presence
2400/05162	. . . . the element being a suspension arm	2400/63	. . Location of the center of gravity
2400/052	. . Angular rate	2400/64	. . Wheel forces, e.g. on hub, spindle or bearing
2400/0521	. . . Roll rate	2400/70	. Temperature of vehicle part or in the vehicle
2400/0522	. . . Pitch rate	2400/71	. . of suspension unit
2400/0523	. . . Yaw rate	2400/712	. . . of spring
2400/053	. . Angular acceleration	2400/7122	. . . . Fluid spring
2400/0531	. . . Roll acceleration	2400/716	. . . of damper
2400/0532	. . . Pitch acceleration	2400/7162	. . . . Fluid damper
2400/0533	. . . Yaw acceleration	2400/72	. . in vehicle interior
2400/10	. Acceleration; Deceleration	2400/73	. . of other part than suspension unit
2400/102	. . vertical	2400/732	. . . of propulsion unit
2400/104	. . lateral or transversal with regard to vehicle	2400/80	. Exterior conditions
2400/1042	. . . using at least two sensors	2400/82	. . Ground surface
2400/106	. . longitudinal with regard to vehicle, e.g. braking	2400/821	. . . Uneven, rough road sensing affecting vehicle body vibration
2400/1062	. . . using at least two sensors	2400/822	. . . Road friction coefficient determination affecting wheel traction
2400/20	. Speed	2400/8222	. . . . Hydroplaning
2400/202	. . Piston speed; Relative velocity between vehicle body and wheel	2400/823	. . . Obstacle sensing
2400/204	. . Vehicle speed	2400/824	. . . Travel path sensing; Track monitoring

2400/84	. . Atmospheric conditions	2500/11	. . Damping valves
2400/841	. . . Wind	2500/112	. . . Fluid actuation
2400/842	. . . Temperature	2500/114	. . . pressure regulating valves
2400/8422	. . . . of air	2500/116	. . . for damping pressure oscillations of the fluid in hydraulic lines
2400/8424	. . . . of ground or road	2500/20	. Spring action or springs
2400/843	. . . Humidity; Rainfall	2500/201	. . Air spring system type
2400/845	. . . Darkness	2500/2012	. . . Open systems
2400/847	. . . Sunshine; Light	2500/2014	. . . Closed systems
2400/90	. Other conditions or factors	2500/202	. . Height or leveling valve for air-springs
2400/91	. . Frequency	2500/2021	. . . Arrangement of valves
2400/92	. . Travelling or driving time	2500/2022	. . . with valve seat actuation for selectively adjusting neutral height
2400/922	. . Travelling distance	2500/203	. . Distributor valve units comprising several elements, e.g. valves, pump or accumulators
2400/94	. . Deformation of a vehicle part	2500/204	. . Pressure regulating valves for air-springs
2400/942	. . . of vehicle body	2500/2041	. . . for variable volume air springs, e.g. using accumulators as expansion chambers
2400/95	. . Position of vehicle body elements	2500/2042	. . . Air filling valves
2400/952	. . . of door or bonnet	2500/2043	. . . Wheatstone bridge type valve arrangements
2400/954	. . . Wheelbase	2500/2044	. . . Air exhausting valves
2400/96	. . Presence, absence or inactivity of driver	2500/2046	. . . Pressure equalising valves between two units
2400/97	. . Relation between towing and towed vehicle, e.g. tractor-trailer combination	2500/205	. . Air-compressor operation
2400/972	. . . Angle of articulation	2500/206	. . Variable pressure accumulators for hydropneumatic suspensions
2400/98	. . Stabiliser movement	2500/2062	. . . by varying the air-pressure of the accumulator
<b>2401/00</b>	<b>Indexing codes relating to the type of sensors based on the principle of their operation</b>	2500/2064	. . . by varying the number of accumulators connected in parallel to the hydraulic cylinder
2401/10	. Piezoelectric elements	2500/22	. . Spring constant
2401/11	. Electrostrictive transducers	2500/30	. Height or ground clearance
2401/12	. Strain gauge	2500/302	. . using distributor valves
2401/122	. . Wheatstone bridge circuit	2500/32	. . of only one vehicle part or side
2401/14	. Photo or light sensitive means, e.g. Infrared	2500/322	. . . only front part
2401/142	. . Visual Display Camera, e.g. LCD	2500/324	. . . only rear part
2401/144	. . Fiber optic sensor	2500/326	. . . only left or right side
2401/15	. Doppler effect	2500/40	. Steering
2401/16	. GPS track data	2500/42	. . Sensibility
2401/17	. Magnetic/Electromagnetic	<b>2600/00</b>	<b>Indexing codes relating to particular elements, systems or processes used on suspension systems or suspension control systems</b>
2401/172	. . Hall effect	2600/02	. Retarders, delaying means, dead zones, threshold values, cut-off frequency, timer interruption
2401/174	. . Radar	2600/04	. Means for informing, instructing or displaying
2401/176	. . Radio or audio sensitive means, e.g. Ultrasonic	2600/042	. . Monitoring means
2401/19	. Speech recognising means	2600/0422	. . . involving data transmission, e.g. via satellite or GPS; for data monitoring, telemetry or platooning purposes
2401/20	. Switches, e.g. mercury or ball type switches	2600/044	. . Alarm means
2401/21	. Laser	2600/07	. Inhibiting means
2401/22	. Radioactivity sensitive materials	2600/08	. Failure or malfunction detecting means
2401/23	. Memory materials	2600/082	. . Sensor drift
2401/24	. Heat sensitive materials; temperature gauge	2600/084	. . Supervisory systems
2401/25	. Capacitance type, e.g. as level indicator	2600/086	. . Redundant systems
2401/26	. Resistance type, e.g. as level indicator	2600/09	. Feedback signal
2401/27	. Gravitational, e.g. pendulum or axial movement type	2600/11	. Feedforward signal
2401/28	. Gyroscopes	2600/12	. Sampling or average detecting; Addition or subtraction
2401/90	. Single sensor for two or more measurements	2600/122	. . Summation signal
2401/902	. . the sensor being an xy axis sensor	2600/124	. . Error signal
2401/904	. . the sensor being an xyz axis sensor	2600/14	. Differentiating means, i.e. differential control
<b>2500/00</b>	<b>Indexing codes relating to the regulated action or device</b>	2600/16	. Integrating means, i.e. integral control
2500/02	. Supply or exhaust flow rates; Pump operation	2600/17	. Proportional control, i.e. gain control
2500/022	. . Minimisation of pressure cavitation effects upon demand		
2500/04	. using inertia type valves		
2500/10	. Damping action or damper		
2500/102	. . stepwise		
2500/104	. . continuous		
2500/106	. . duty rate		

2600/172	. . Weighting coefficients or factors	<b>2800/00</b>	<b>Indexing codes relating to the type of movement or to the condition of the vehicle and to the end result to be achieved by the control action</b>
2600/18	. Automatic control means	2800/01	. Attitude or posture control
2600/181	. . Signal modulation; pulse-width, frequency-phase	2800/012	. . Rolling condition
2600/182	. . Active control means	2800/0122	. . . Roll rigidity ratio; Warping
2600/184	. . Semi-Active control means	2800/0124	. . . Roll-over conditions
2600/186	. . Analogue Controller Details and Signal Treatment	2800/014	. . Pitch; Nose dive
2600/187	. . Digital Controller Details and Signal Treatment	2800/016	. . Yawing condition
2600/1871	. . . Optimal control; Kalman Filters	2800/019	. . Inclination due to load distribution or road gradient
2600/1872	. . . Observer; Luapinov function	2800/0192	. . . longitudinal with regard to vehicle
2600/1873	. . . Model Following	2800/0194	. . . transversal with regard to vehicle
2600/1874	. . . Modal analysis	2800/16	. Running
2600/1875	. . . Other parameter or state estimation methods not involving the mathematical modelling of the vehicle	2800/162	. . Reducing road induced vibrations
2600/1876	. . . Artificial intelligence	2800/164	. . Heaving; Squatting
2600/1877	. . . Adaptive Control	2800/166	. . Platooning
2600/1878	. . . Neural Networks	2800/18	. Starting, accelerating
2600/1879	. . . Fuzzy Logic Control	2800/182	. . Traction
2600/188	. . Spectral analysis; Transformations	2800/20	. Stationary vehicle
2600/1881	. . . Integral	2800/202	. . kneeling, e.g. for letting passengers on/off
2600/1882	. . . Fourier	2800/203	. . lowering the floor for loading/unloading
2600/1883	. . . z-transform	2800/204	. . adjusting floor height to the loading ramp level
2600/1884	. . . Laplace	2800/2042	. . . using an anticreep mechanism to lock the height
2600/1885	. . . Euler equations	2800/205	. . jacking-up for changing tyre or vehicle inspection
2600/189	. . Statistical analysis	2800/21	. Traction, slip, skid or slide control
2600/20	. Manual control or setting means	2800/212	. . Transversal; Side-slip during cornering
2600/202	. . using a remote, e.g. cordless, transmitter or receiver unit	2800/213	. . by applying forward/backward torque on each wheel individually
2600/204	. . Joystick actuated suspension	2800/214	. . by varying the load distribution
2600/206	. . Control-by-wire	2800/215	. . by applying a braking action on each wheel individually
2600/21	. Self-controlled or adjusted	2800/22	. Braking, stopping
2600/22	. Magnetic elements	2800/222	. . during collision
2600/24	. . permanent magnets	2800/224	. . automatically, based on dangerous living style
2600/26	. . Electromagnets; Solenoids	2800/226	. . automatically, based on stopping at a preset or target point position
2600/28	. Temporary fluctuations	2800/24	. Steering, cornering
2600/41	. SISO system, i.e. single input - single output system	2800/242	. . Obstacle avoidance manoeuvre
2600/43	. MIMO system, i.e. multi input - multi output system	2800/244	. . Oversteer
2600/44	. Vibration noise suppression	2800/246	. . Understeer
2600/60	. Signal noise suppression; Electronic filtering means	2800/248	. . Neutral steering behaviour
2600/602	. . high pass	2800/70	. Estimating or calculating vehicle parameters or state variables
2600/604	. . low pass	2800/702	. . Improving accuracy of a sensor signal
2600/66	. Humidifying or drying means	2800/7022	. . . Calibration of a sensor, e.g. automatically
2600/68	. Filtering means, e.g. fluid filters	2800/704	. . predicting unorthodox driving conditions for safe or optimal driving
2600/70	. Computer memory; Data storage, e.g. maps for adaptive control	2800/80	. Detection or control after a system or component failure
2600/702	. . Parallel processing	2800/802	. . Diagnostics
2600/704	. . Electronic tags containing data, e.g. identification number of a component; Gain values for the control of the unit, etc.	2800/85	. System Prioritisation
2600/71	. Distributed control; Master - slave controllers; Remote control units	2800/87	. System configuration based on vehicle type or model
2600/72	. Cooling or warming means	2800/90	. System Controller type
2600/73	. Electrical control	2800/91	. . Suspension Control
2600/74	. Analog systems	2800/912	. . . Attitude Control; levelling control
2600/76	. Digital systems	2800/9122	. . . . ARS - Anti-Roll System Control
2600/77	. A/D, D/A signal converters	2800/9123	. . . . Active Body Control [ABC]
2600/82	. duty rate function	2800/9124	. . . . Roll-over protection systems, e.g. for warning or control
2600/85	. Speed of regulation		
2600/90	. other signal treatment means		

2800/914	. . .	Height Control System
2800/915	. . .	Suspension load distribution
2800/916	. . .	Body Vibration Control
2800/92	. .	ABS - Brake Control
2800/922	. . .	EBV - Electronic brake force distribution
2800/925	. .	Airbag deployment systems
2800/93	. .	Skid or slide control [ASR]
2800/94	. .	Electronic Stability Program (ESP, i.e. ABS +ASC+EMS)
2800/95	. .	Automatic Traction or Slip Control [ATC]
2800/952	. . .	Electronic driving torque distribution
2800/954	. . .	Four-wheel drive
2800/96	. .	ASC - Assisted or power Steering control
2800/962	. . .	Four-wheel steering
2800/963	. . .	Steer-by-wire
2800/964	. . .	Auto-navigation
2800/965	. . .	Automatic or driver-independent manoeuvre, e.g. for obstacle avoidance or roll-over prevention
2800/97	. .	Engine Management System [EMS]
2800/972	. .	Electronic Differential Lock [EDS]
2800/98	. .	Intelligent Transportation System or Bus [IDB]
2800/982	. .	Active Cruise Control, e.g. DISTRONIC type
2800/984	. .	Tyre Pressure Monitoring Systems