CPC   COOPERATIVE PATENT CLASSIFICATION

B   PERFORMING OPERATIONS; TRANSPORTING
(NOTES omitted)

TRANSPORTING

B60   VEHICLES IN GENERAL
(NOTE omitted)

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

NOTES

1. Attention is drawn to the Note following the title of class 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.}

WARNINGS

1. The following IPC groups are not in the CPC scheme. The subject matter for these IPC groups is classified in the following CPC groups:

   B60G 23/00   covered by   B60G 17/0165
2. 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	**Suspensions with rigid connection between axle and frame**
1/02	. with continuous axle
1/04	. with divided axle
3/00	**Resilient suspensions for a single wheel** (pivoted suspensions arms per se, attachment thereof to sprung part of the vehicle, buffer means for limiting movement of arms B60G 7/00; {rigid axle suspensions B60G 9/00;} characterised by arrangement, location or type of springs B60G 11/00)
3/01	. the wheel being mounted for sliding movement, e.g. in or on a vertical guide (camber maintaining means B60G 3/26)
3/02	. with a single pivoted arm
3/04	. . the arm being essentially transverse to the longitudinal axis of the vehicle
3/06	. . . the arm being rigid
3/08	. . . . the arm forming the axle housing
3/10	. . . the arm itself being resilient, e.g. leaf spring {(B60G 7/003 takes precedence)}
3/12	. . the arm being essentially parallel to the longitudinal axis of the vehicle
3/14	. . . the arm being rigid
3/145	. . . . {the arm forming the axle housing}

3/16	. . . the arm itself being resilient, e.g. leaf spring {(B60G 7/003 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
3/202	. . . {having one longitudinal arm and two parallel transversal arms, e.g. dual-link type strut suspension}
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}
3/207	. . . {the arms being essentially parallel to the longitudinal axis of the vehicle}
3/22	. . . a rigid arm forming the axle housing
3/225	. . . . {the arm being of the trailing wishbone type}
3/24	. . . a rigid arm being formed by the live axle {(B60G 3/22, B60G 3/26 take precedence; driving arrangements B60K 17/22, B60K 17/30, B60K 17/32)}

3/26	. . .	Means for maintaining substantially-constant wheel camber during suspension movement {; Means for controlling the variation of the wheel position during suspension movement (B60G 3/202, B60G 3/22, B60G 7/003, B60G 7/006 take precedence; means for adjusting camber, castor, or toe-in B62D 17/00)}
3/265	. . . .	{with a strut cylinder contributing to the suspension geometry by being linked to the wheel support via an articulation}
3/28	. .	at least one of the arms itself being resilient, e.g. leaf spring {(B60G 7/003 takes precedence)}
3/285	. . .	{the arm being essentially parallel to the longitudinal axis of the vehicle}
5/00		**Resilient suspensions for a set of tandem wheels or axles having interrelated movements**
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 springs only {(B60G 11/006 takes precedence)}
11/025	. .	{reparing 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}
11/188	. . .	{the elements being cables}
11/189	. .	{the torsion spring consisting of a tube with a slit}
11/20	. .	characterised by means specially adapted for attaching the spring to axle or sprung part of the vehicle
11/22	.	having rubber springs only {(B60G 11/006 takes precedence)}
11/225	. .	{Neidhart type rubber springs}
11/23	. .	of the torsional-energy-absorption type
11/24	. .	characterised by means specially adapted for attaching the spring to axle or sprung part of the vehicle
11/26	.	having fluid springs only, e.g. hydropneumatic springs ({B60G 11/006,} B60G 15/12 take precedence)
11/265	. .	{hydraulic springs}
11/27	. .	wherein the fluid is a gas
11/28	. .	characterised by means specially adapted for attaching the spring to axle or sprung part of the vehicle
11/30	. .	having pressure fluid accumulator therefor, e.g. accumulator arranged in vehicle frame {(dampers accumulating utilisable energy B60G 13/14)}
11/32	.	having springs of different kinds {(B60G 11/006 takes precedence)}
11/34	. .	including leaf springs
11/36	. . .	and also helical, spiral or coil springs
11/38	. . .	and also rubber springs
11/40	. . . .	the rubber springs being attached to the axle
11/42	. . . .	the rubber springs being attached to sprung part of the vehicle
11/44	. . .	and also torsion-bar springs
11/46	. . .	and also fluid springs
11/465	. . . .	{with a flexible wall}
11/48	. .	not including leaf springs
11/50	. . .	having helical, spiral or coil springs, and also torsion-bar springs
11/52	. . .	having helical, spiral or coil springs, and also rubber springs
11/54	. . . .	with rubber springs arranged within helical, spiral or coil springs
11/56	. . .	having helical, spiral or coil springs, and also fluid springs
11/58	. . . .	arranged coaxially
11/60	. . .	having both rubber springs and torsion-bar springs
11/62	. . .	having both rubber springs and fluid springs
11/64	. . .	having both torsion-bar springs and fluid springs

13/00		**Resilient suspensions characterised by arrangement, location or type of vibration dampers** (adjusting damping effect B60G 17/06; vibration dampers per se F16F)
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}
13/005	. .	{characterised by the mounting on the axle or suspension arm of the damper unit}
13/006	. . .	{on the stub axle}
13/008	. . .	{involving use of an auxiliary cylinder (B60G 13/006 takes precedence)}
13/02	.	having dampers dissipating energy, e.g. frictionally
13/04	. .	mechanically, e.g. having frictionally-engaging springs as damping elements
13/06	. .	of fluid type
13/08	. . .	hydraulic
13/10	. . .	pneumatic
13/12	. . .	quasi-fluid, i.e. having powdered medium
13/14	.	having dampers accumulating utilisable energy, e.g. compressing air {(fluid springs with an accumulator B60G 11/30)}
13/16	.	having dynamic absorbers as main damping means, i.e. spring-mass system vibrating out of phase
13/18	. .	combined with energy-absorbing means

15/00		**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)
15/02	.	having mechanical spring
15/04	. .	and mechanical damper {or dynamic damper}
15/06	. .	and fluid damper
15/061	. . .	{with a coil spring being mounted inside the damper}
15/062	. . .	{the spring being arranged around the damper (B60G 15/061, B60G 15/067, B60G 15/07 take precedence)}
15/063	. . . .	{characterised by the mounting of the spring on the damper (B60G 15/065, B60G 15/066 take precedence)}
15/065	. . . .	{characterised by the use of a combination of springs}
15/066	. . . .	{the spring being different from a coil spring (B60G 15/065 takes precedence)}
15/067	. . .	{characterised by the mounting on the vehicle body or chassis of the spring and damper unit}
15/068	. . . .	{specially adapted for MacPherson strut-type suspension}

15/07	. . .	the damper being connected to the stub axle and the spring being arranged around the damper {(B60G 15/068 takes precedence)}
15/08	.	having fluid spring
15/10	. .	and mechanical damper {or dynamic damper}
15/12	. .	and fluid damper
15/14	. . .	the damper being connected to the stub axle and the spring being arranged around the damper

17/00 **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)**}**

17/002	.	{by temperature regulation of the suspension unit, e.g. heat operated systems}
17/005	.	Suspension locking arrangements {(for retractable wheels B62D 61/12)}
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 piezoelectric 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}
21/0555	. . . .	{including an actuator inducing vehicle roll}
21/0556	. . . .	{including a releasable coupling (B60G 21/0555 takes precedence)}
21/0558	. . . .	{including means varying the stiffness of the stabiliser (B60G 21/0556 takes precedence)}
21/06	. .	fluid
21/067	. . .	between wheels on different axles on the same side of the vehicle, i.e. the left or the right side
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
21/08	.	characterised by use of gyroscopes (gyroscopes for stabilising vehicle bodies without controlling suspension arrangements B62D 37/06)
21/10	.	not permanently interconnected, e.g. operative only on acceleration, only on deceleration or only at off-straight position of steering
21/103	. .	{longitudinally}
21/106	. .	{transversally}
99/00		**Subject matter not provided for in other groups of this subclass**
99/002	.	{Suspension details of the suspension of the vehicle body on the vehicle chassis}
99/004	.	{Other suspension arrangements with rubber springs}
99/006	.	{Other suspension arrangements with metallic springs}
99/008	.	{Other suspension arrangements with fluid springs}
2200/00		**Indexing codes relating to suspension types**
2200/10	.	Independent suspensions
2200/13	. .	with longitudinal arms only
2200/132	. . .	with a single trailing arm
2200/1322	. . . .	with a wishbone or triangular arm
2200/1324	. . . .	with a resilient trailing arm
2200/14	. .	with lateral arms
2200/141	. . .	with one trailing arm and one lateral arm only
2200/142	. . .	with a single lateral arm, e.g. MacPherson type
2200/1422	. . . .	the lateral arm being resilient
2200/1424	. . . .	the lateral arm having an L-shape
2200/143	. . .	with lateral arms crossing each other, i.e. X formation as seen along the longitudinal axis
2200/144	. . .	with two lateral arms forming a parallelogram
2200/1442	. . . .	including longitudinal rods
2200/154	. . .	the lateral arm having an L-shape
2200/156	. . .	wishbone-type arm formed by two links defining a virtual apex
2200/17	. .	with a strut contributing to the suspension geometry by being articulated onto the wheel support
2200/18	. .	Multilink suspensions, e.g. elastokinematic arrangements
2200/182	. . .	with one longitudinal arm or rod and lateral rods
2200/184	. . .	Assymetric arrangements
2200/20	.	Semi-rigid axle suspensions
2200/21	. .	Trailing arms connected by a torsional beam, i.e. twist-beam axles
2200/22	. .	Trailing arms connected by a straight torsion bar
2200/23	. .	Trailing arms connected by a U-shaped torsion bar
2200/24	. .	Interconnected split axles
2200/30	.	Rigid axle suspensions
2200/31	. .	with two trailing arms rigidly connected to the axle
2200/312	. .	with one of the two trailing arms being rigidly connected to the axle
2200/314	. .	with longitudinally arranged arms articulated on the axle
2200/315	. . .	at least one of the arms having an A or V shape
2200/318	. .	two or more axles being mounted on a longitudinal rocking or walking beam
2200/32	. .	pivoted
2200/322	. . .	with a single pivot point and a straight axle
2200/324	. . .	with a single pivot point and a triangular "T" or "U"-shaped axle, e.g. DeDion arrangement
2200/326	. . .	with two laterally spaced pivots, e.g. trailing frame
2200/34	. .	Stabilising mechanisms, e.g. for lateral stability
2200/341	. . .	Panhard rod
2200/3415	. . . .	Scott-Russel linkage
2200/342	. . .	Watt linkage
2200/343	. . .	with an axle suspended by two pivoted rods in "V"-arrangement, the rods being coupled at its apex
2200/344	. . .	with an axle suspended by two pivoted rods in an inverted "V"-arrangement, the rods being coupled at its apex
2200/345	. . .	with an axle suspended by two pivoted rods in "X"-arrangement
2200/346	. . .	with an axle suspended by two laterally displaced rods having an imaginary point of intersection above the wheel axis
2200/347	. . .	with an axle suspended by two laterally displaced rods having an imaginary point of intersection below the wheel axis
2200/40	.	Indexing codes relating to the wheels in the suspensions

2200/42	. .	Driven wheels or dead axles
2200/422	. .	Driving wheels or live axles
2200/44	. .	steerable
2200/445	. .	Self-steered wheels
2200/446	. .	Non-steerable wheels
2200/46	. .	camber angle
2200/462	. .	Toe-in/out
2200/4622	. . .	Alignment adjustment
2200/464	. .	Caster angle
2200/466	. .	Damping acceleration or deceleration torque on wheel axle

2202/00		**Indexing codes relating to the type of spring, damper or actuator**
2202/10	.	Type of spring
2202/11	. .	Leaf spring
2202/112	. . .	longitudinally arranged
2202/114	. . .	transversally arranged
2202/116	. . .	having a "C" form loaded only at its ends transversally to its central axis
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
2202/134	. . .	comprising a transversal torsion bar and/or tube
2202/135	. . .	Stabiliser bar and/or tube
2202/1351	. . . .	comprising at least two stabiliser bars parallel to each other
2202/136	. . .	Twist-beam type arrangement
2202/1362	. . . .	including a second torsional element, e.g. second beam, stabiliser bar or tube
2202/14	. .	Plastic spring, e.g. rubber
2202/141	. . .	subjected to tension
2202/142	. . .	subjected to shear, e.g. Neidhart type
2202/1422	. . . .	Axial
2202/1424	. . . .	Torsional
2202/143	. . .	subjected to compression
2202/144	. . .	of rotary type
2202/15	. .	Fluid spring
2202/152	. . .	Pneumatic spring
2202/1522	. . . .	of rotary type
2202/1524	. . . .	with two air springs per wheel, arranged before and after the wheel axis
2202/154	. . .	with an accumulator
2202/16	. .	Magnetic spring
2202/20	.	Type of damper
2202/21	. .	with two dampers per wheel, arranged before and after the wheel axis
2202/22	. .	Rotary Damper
2202/23	. .	Friction Damper
2202/24	. .	Fluid damper
2202/242	. . .	Pneumatic damper
2202/25	. .	Dynamic damper
2202/30	.	Spring/Damper and/or actuator Units
2202/31	. .	with the spring arranged around the damper, e.g. MacPherson strut
2202/312	. . .	The spring being a wound spring
2202/314	. . .	The spring being a pneumatic spring
2202/32	. .	The spring being in series with the damper and/or actuator

2202/322	. . .	the damper being controllable
2202/40	.	Type of actuator
2202/41	. .	Fluid actuator
2202/412	. . .	Pneumatic actuator
2202/413	. . .	Hydraulic actuator
2202/414	. . .	using electrohydraulic valves
2202/415	. . .	using other types of valves, e.g. mechanically operated valves
2202/416	. . .	using a pump, e.g. in the line connecting the lower chamber to the upper chamber of the actuator
2202/42	. .	Electric actuator
2202/422	. . .	Linear motor
2202/424	. . .	electrostrictive materials, e.g. piezoelectric actuator
2202/43	. .	Mechanical actuator
2202/432	. . .	Spring motor
2202/44	. .	Axial actuator, e.g. telescopic
2202/441	. . .	where axial movement is translated to rotation of the connected end part
2202/442	. .	Rotary actuator
2202/45	. .	Other types, e.g. external jets for stability with particular characteristics
2202/49	. .	Other type, e.g. external jets for stability

2204/00		**Indexing codes related to suspensions per se or to auxiliary parts**
2204/10	.	Mounting of suspension elements
2204/11	. .	Mounting of sensors thereon
2204/111	. . .	on pneumatic springs
2204/112	. . .	on dampers, e.g. fluid dampers
2204/113	. . .	Tyre related sensors
2204/114	. . .	Steering column mounted sensors
2204/115	. . .	Wheel hub bearing sensors
2204/116	. . .	Sensors coupled to the suspension arm
2204/1162	. . . .	directly mounted on the suspension arm
2204/12	. .	Mounting of springs or dampers
2204/121	. . .	Mounting of leaf springs
2204/122	. . .	Mounting of torsion springs
2204/1222	. . . .	Middle mounts of stabiliser on vehicle body or chassis
2204/1224	. . . .	End mounts of stabiliser on wheel suspension
2204/1226	. . . .	on the trailing arms of a twist beam type arrangement
2204/124	. . .	Mounting of coil springs
2204/1242	. . . .	on a damper, e.g. MacPerson strut
2204/12422	. . . . .	anchoring the end coils on the spring support plate
2204/1244	. . . .	on a suspension arm
2204/1246	. . . .	on twist beam axles
2204/125	. . .	Mounting of rubber type springs
2204/126	. . .	Mounting of pneumatic springs
2204/1262	. . . .	on a 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
2204/128	. . .	Damper mount on vehicle body or chassis
2204/129	. . .	Damper mount on wheel suspension or knuckle
2204/13	. . .	with the spring, i.e. coil spring, or damper horizontally mounted
2204/1302	. . . .	inside the vehicle frame

2204/14	. .	Mounting of suspension arms
2204/143	. . .	on the vehicle body or chassis
2204/1431	. . . .	of an L-shaped arm
2204/1432	. . . .	by vertical bolts or studs
2204/1434	. . . .	in twist-beam axles arrangement
2204/147	. . .	on the vehicle engine body
2204/148	. . .	on the unsprung part of the vehicle, e.g. wheel knuckle or rigid axle
2204/1482	. . . .	on rigid axle by elastic mount
2204/1484	. . . .	on an intermediate upright strut upon which the stub axle is pivoted
2204/149	. . .	Mounting of rigid axle on wheel knuckle
2204/15	. .	Mounting of subframes
2204/16	. .	Mounting of vehicle body on chassis
2204/162	. . .	Cabins, e.g. for trucks, tractors
2204/17	. .	Mounting of bogies, e.g. for trailers
2204/18	. .	Mounting of vehicle engines
2204/182	. . .	Electric motor on wheel support
2204/19	. .	Mounting of transmission differential
2204/20	. .	Mounting of accessories, e.g. pump, compressor
2204/201	. . .	of fluid lines
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
2204/30	. .	In-wheel mountings
2204/40	.	Auxiliary suspension parts; Adjustment of suspensions
2204/41	. .	Elastic mounts, e.g. bushings
2204/4102	. . .	having a pin or stud extending perpendicularly to the axis of the elastic mount
2204/4103	. . .	having an eccentrically located inner sleeve
2204/4104	. . .	Bushings having modified rigidity in particular directions
2204/41042	. . . .	by using internal cam surfaces
2204/41043	. . . .	formed by a U-shaped external bracket
2204/41044	. . . .	in a shell for being loaded mainly in axial direction, e.g. piston rod mounts, longitudinal push-pull rod mounts
2204/41046	. . . .	having the axis of an inner sleeve or pin inclined to the axis of the bush
2204/4106	. . .	Elastokinematic mounts
2204/41062	. . . .	hydromounts; interconnected mounts
2204/4108	. . .	Resilient element being enclosed and or prestressed in a solid container
2204/414	. .	Cardan joints
2204/416	. .	Ball or spherical joints
2204/418	. .	Bearings, e.g. ball or roller bearings
2204/419	. .	Gears
2204/4191	. . .	Planetary or epicyclic gears
2204/4192	. . .	rack and pinion
2204/4193	. . .	worm gears
2204/42	. .	Joints with cam surfaces
2204/421	. .	Pivoted lever mechanisms for mounting suspension elements, e.g. Watt linkage
2204/422	. .	Links for mounting suspension elements
2204/4222	. . .	for movement on predefined locus of, e.g. the wheel center
2204/423	. .	Rails, tubes, or the like, for guiding the movement of suspension elements
2204/4232	. . .	Sliding mounts

2204/424	. .	Mechanisms for force adjustment, e.g. constant force mechanisms
2204/43	. .	Fittings, brackets or knuckles
2204/4302	. . .	for fixing suspension arm on the vehicle body or chassis
2204/4304	. . .	Bracket for lower cylinder mount of McPherson strut
2204/4305	. . .	Bracket for mounting of hydraulic lines on a damper cylinder
2204/4306	. . .	Bracket or knuckle for rigid axles, e.g. for clamping
2204/43065	. . . .	U-shaped bolts crossing each other
2204/4307	. . .	Bracket or knuckle for torsional springs
2204/4308	. . .	Protecting guards, e.g. for rigid axle damage protection
2204/44	. .	Centering or positioning means
2204/4402	. . .	Spacers or shims
2204/4404	. . .	Retainers for holding a fixing element, e.g. bushing, nut, bolt etc., until it is tightly fixed in position
2204/45	. .	Stops limiting travel
2204/4502	. . .	using resilient buffer
2204/45021	. . . .	for limiting upper mount movement of a McPherson strut
2204/4504	. . .	using cable or band to prevent extension
2204/46	. .	Means for locking the suspension
2204/4602	. . .	Locking of a McPerson type strut upper mount on the vehicle body
2204/4604	. . .	mechanically, e.g. using a hook as anticreep mechanism
2204/4605	. . .	hydraulically, e.g. interrupting communication between the chambers of a hydraulic cylinder
2204/47	. .	Means for retracting the suspension
2204/4702	. . .	pneumatically
2204/61	.	Adjustable during maintenance
2204/62	.	Adjustable continuously, e.g. during driving
2204/80	.	Interactive suspensions; arrangement affecting more than one suspension unit
2204/81	. .	front and rear unit
2204/8102	. . .	diagonally arranged
2204/82	. .	left and right unit on same axle
2204/83	. .	Type of interconnection
2204/8302	. . .	Mechanical
2204/83022	. . . .	using cables, wires, belts or chains
2204/8304	. . .	using a fluid
2204/8306	. . .	Permanent; Continuous
2206/00		**Indexing codes related to the manufacturing of suspensions: constructional features, the materials used, procedures or tools**
2206/01	.	Constructional features of suspension elements, e.g. arms, dampers, springs
2206/011	. .	Modular constructions
2206/0112	. . .	Bogies for heavy vehicles
2206/0114	. . .	Independent suspensions on subframes
2206/0116	. . .	Integrated distribution control units with valves, accumulators, PCB's or the like
2206/012	. .	Hollow or tubular elements
2206/0122	. . .	having a U profile with plate closing the profile in the total or partial length of the element
2206/013	. .	with embedded inserts for material reinforcement
2206/014	. .	with reinforcing nerves or branches
2206/016	. .	allowing controlled deformation during collision

2206/017	. .	forming an eye for the bushing
2206/10	. .	Constructional features of arms
2206/11	. . .	the arm being a radius or track or torque or steering rod or stabiliser end link
2206/111	. . . .	of adjustable length
2206/1112	. . . . .	Manually, for alignment purposes
2206/1114	. . . . .	Self-adjustable during driving
2206/1116	. . . . .	Actively adjustable during driving
2206/12	. . .	with two attachment points on the sprung part of the vehicle
2206/121	. . .	the arm having an H or X-shape
2206/122	. . .	the arm having L-shape
2206/123	. . .	the arm having T-shape
2206/124	. . .	the arm having triangular or Y-shape, e.g. wishbone
2206/13	. . .	with more than two attachment points on the sprung part of the vehicle
2206/14	. . .	the arm forming a U-shaped recess for fitting a bush
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
2206/162	. . . .	with a plate closing the profile in the total or partial length of the arm
2206/20	. .	Constructional features of semi-rigid axles, e.g. twist beam type axles
2206/201	. . .	with detachable cross beam and/or torsion stabiliser bar/tube
2206/202	. . .	with a radially deformed tube as a cross member
2206/203	. . .	with outwardly bent trailing arms to increase the width of the support or wheelbase
2206/30	. .	Constructional features of rigid axles
2206/31	. . .	Straight axle
2206/312	. . .	Cranked axle
2206/32	. . .	Hollow cross section
2206/40	. .	Constructional features of dampers and/or springs
2206/41	. . .	Dampers
2206/42	. . .	Springs
2206/422	. . . .	Accumulators for hydropneumatic springs
2206/4222	. . . . .	with a flexible separating wall; Membrane construction
2206/424	. . . .	Plunger or top retainer construction for bellows or rolling lobe type air springs
2206/426	. . . .	Coil springs having a particular shape, e.g. curved axis, pig-tail end coils
2206/427	. . . .	Stabiliser bars or tubes
2206/428	. . . .	Leaf springs
2206/50	. .	Constructional features of wheel supports or knuckles, e.g. steering knuckles, spindle attachments
2206/60	. .	Subframe construction
2206/601	. . .	Hanger bracket
2206/602	. . .	Single transverse beam
2206/604	. . .	with two parallel beams connected by cross members
2206/605	. . .	Flexible constructions
2206/606	. . .	Complex constructions
2206/70	. .	Materials used in suspensions

2206/71	. . .	Light weight materials
2206/7101	. . . .	Fiber-reinforced plastics [FRP]
2206/7102	. . . .	Aluminium alloys
2206/7103	. . . .	Magnesium alloys
2206/7104	. . . .	Thermoplastics
2206/71042	. . . . .	Polyester elastomer
2206/71043	. . . . .	Polyamid elastomer
2206/71044	. . . . .	Soft nylon
2206/7105	. . . .	Porous materials, ceramics, e.g. as filling material
2206/72	. . .	Steel
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
2206/8104	. . . .	by drawing
2206/8105	. . . .	by extrusion
2206/8106	. . . .	by thermal treatment, e.g. curing hardening, vulcanisation
2206/81062	. . . . .	to relieve internal stresses, e.g. during folding or bending
2206/8107	. . . .	by hydroforming
2206/8108	. . . .	by twisting
2206/8109	. . . .	by rolling
2206/811	. . . .	by cutting
2206/8111	. . . .	by machining
2206/8112	. . . .	by thermal spraying of molten material
2206/82	. . .	Joining
2206/8201	. . . .	by welding
2206/82012	. . . . .	Pressure welding
2206/82013	. . . . .	Friction or heat welding
2206/82014	. . . . .	Magnetic pulse welding
2206/8205	. . . .	by conical or compressed rubber clamping inserts as joining means
2206/8206	. . . .	by riveting
2206/8207	. . . .	by screwing
2206/8208	. . . .	by hemming or seaming, e.g. by folding of the rim
2206/8209	. . . .	by deformation
2206/82092	. . . . .	by press-fitting
2206/821	. . . .	by gluing
2206/83	. . .	Punching
2206/84	. . .	Hardening
2206/8401	. . . .	Annealing
2206/8402	. . . .	Quenching
2206/8403	. . . .	Shot-peening
2206/85	. . .	Filament winding
2206/90	. .	Maintenance
2206/91	. . .	Assembly procedures
2206/911	. . . .	using a modification kit
2206/92	. . .	Tools or equipment used for assembling
2206/921	. . . .	Coil spring compressor
2206/93	. . .	Tools used for adjustments
2206/931	. . . .	McPherson strut positioning tool

2206/94	. . .	Tools used for supporting parts
2206/99	. . .	Suspension element selection procedure depending on loading or performance requirements, e.g. selection of damper, spring or bush
2300/00		**Indexing codes relating to the type of vehicle**
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
2300/10	.	Railway vehicles
2300/102	. .	having track following mechanismn for lateral stability
2300/12	.	Cycles; Motorcycles
2300/122	. .	Trikes
2300/124	. .	Quads
2300/13	.	Small sized city motor vehicles
2300/14	.	Buses
2300/16	.	Aeroplanes
2300/18	.	Helicopters
2300/20	.	Toys
2300/22	.	Perambulators
2300/24	.	Wheelchairs
2300/26	.	Carts
2300/27	.	Racing vehicles, e.g. F1
2300/28	.	Amphibious vehicles
2300/30	.	Load ramps
2300/32	.	Track vehicles
2300/322	. .	Snowmobiles
2300/34	.	Ambulances
2300/36	.	Independent Multi-axle long vehicles
2300/37	.	Vehicles having steerable wheels mounted on a vertically moving column
2300/38	.	Low or lowerable bed vehicles
2300/40	.	Variable track or wheelbase vehicles
2300/402	. .	Extra load carrying wheels, e.g. tag axles
2300/45	.	Rolling frame vehicles
2300/50	.	Electric vehicles; Hybrid vehicles
2300/60	.	Vehicles using regenerative power
2400/00		**Indexing codes relating to detected, measured or calculated conditions or factors**
2400/05	.	Attitude
2400/051	. .	Angle
2400/0511	. . .	Roll angle
2400/0512	. . .	Pitch angle
2400/0513	. . .	Yaw angle
2400/0514	. . .	Wheel angle detection
2400/05142	. . . .	Wheel camber
2400/05144	. . . .	Wheel toe
2400/05146	. . . .	Wheel caster
2400/0516	. . .	Angular position of a suspension element
2400/05162	. . . .	the element being a suspension arm
2400/052	. .	Angular rate
2400/0521	. . .	Roll rate
2400/0522	. . .	Pitch rate
2400/0523	. . .	Yaw rate
2400/053	. .	Angular acceleration
2400/0531	. . .	Roll acceleration
2400/0532	. . .	Pitch acceleration
2400/0533	. . .	Yaw acceleration
2400/10	.	Acceleration; Deceleration
2400/102	. .	vertical
2400/104	. .	lateral or transversal with regard to vehicle
2400/1042	. . .	using at least two sensors
2400/106	. .	longitudinal with regard to vehicle, e.g. braking
2400/1062	. . .	using at least two sensors
2400/20	.	Speed
2400/202	. .	Piston speed; Relative velocity between vehicle body and wheel
2400/204	. .	Vehicle speed
2400/2042	. . .	Lateral speed
2400/206	. .	Body oscillation speed; Body vibration frequency
2400/208	. .	of wheel rotation
2400/25	.	Stroke; Height; Displacement
2400/252	. .	vertical
2400/256	. .	horizontal
2400/257	. . .	transversal with regard to vehicle
2400/258	. . .	longitudinal with regard to vehicle
2400/30	.	Propulsion unit conditions
2400/302	. .	Selected gear ratio; Transmission function
2400/304	. . .	neutral position
2400/306	. . .	overdrive
2400/31	. .	Clutch condition
2400/32	. .	Torque on propulsion shaft
2400/33	. .	Throttle position
2400/34	. .	Accelerator pedal position
2400/35	. .	Position of fuel or air injector
2400/36	. .	Functioning of turbocharger
2400/37	. .	Brake pad or disc friction
2400/38	. .	Speed of engine rotation
2400/382	. . .	Ignition switch
2400/39	. .	Brake pedal position
2400/40	.	Steering conditions
2400/41	. .	Steering angle
2400/412	. . .	of steering wheel or column
2400/4122	. . . .	Neutral position detection
2400/42	. .	Steering torque
2400/44	. .	Steering speed
2400/46	. .	Steering frequency
2400/47	. .	Rear wheel steering
2400/50	.	Pressure
2400/51	. .	in suspension unit
2400/512	. . .	in spring
2400/5122	. . . .	Fluid spring
2400/51222	. . . . .	Pneumatic
2400/518	. . .	in damper
2400/5182	. . . .	Fluid damper
2400/52	. .	in tyre
2400/60	.	Load
2400/61	. .	Load distribution

2400/62	. .	Seat occupation; Passenger presence
2400/63	. .	Location of the center of gravity
2400/64	. .	Wheel forces, e.g. on hub, spindle or bearing
2400/70	.	Temperature of vehicle part or in the vehicle
2400/71	. .	of suspension unit
2400/712	. . .	of spring
2400/7122	. . . .	Fluid spring
2400/716	. . .	of damper
2400/7162	. . . .	Fluid damper
2400/72	. .	in vehicle interior
2400/73	. .	of other part than suspension unit
2400/732	. . .	of propulsion unit
2400/80	.	Exterior conditions
2400/82	. .	Ground surface
2400/821	. . .	Uneven, rough road sensing affecting vehicle body vibration
2400/822	. . .	Road friction coefficient determination affecting wheel traction
2400/8222	. . . .	Hydroplaning
2400/823	. . .	Obstacle sensing
2400/824	. . .	Travel path sensing; Track monitoring
2400/84	. .	Atmospheric conditions
2400/841	. . .	Wind
2400/842	. . .	Temperature
2400/8422	. . . .	of air
2400/8424	. . . .	of ground or road
2400/843	. . .	Humidity; Rainfall
2400/845	. . .	Darkness
2400/847	. . .	Sunshine; Light
2400/90	.	Other conditions or factors
2400/91	. .	Frequency
2400/92	. .	Travelling or driving time
2400/922	. .	Travelling distance
2400/94	. .	Deformation of a vehicle part
2400/942	. . .	of vehicle body
2400/95	. .	Position of vehicle body elements
2400/952	. . .	of door or bonnet
2400/954	. . .	Wheelbase
2400/96	. .	Presence, absence or inactivity of driver
2400/97	. .	Relation between towing and towed vehicle, e.g. tractor-trailer combination
2400/972	. . .	Angle of articulation
2400/98	. .	Stabiliser movement
2401/00		**Indexing codes relating to the type of sensors based on the principle of their operation**
2401/10	.	Piezoelectric elements
2401/11	.	Electrostrictive transducers
2401/12	.	Strain gauge
2401/122	. .	Wheatstone bridge circuit
2401/14	.	Photo or light sensitive means, e.g. Infrared
2401/142	. .	Visual Display Camera, e.g. LCD
2401/144	. .	Fiber optic sensor
2401/15	.	Doppler effect
2401/16	.	GPS track data
2401/17	.	Magnetic/Electromagnetic
2401/172	. .	Hall effect
2401/174	. .	Radar
2401/176	. .	Radio or audio sensitive means, e.g. Ultrasonic
2401/19	.	Speech recognising means
2401/20	.	Switches, e.g. mercury or ball type switches
2401/21	.	Laser

2401/22	.	Radioactivity sensitive materials
2401/23	.	Memory materials
2401/24	.	Heat sensitive materials; temperature gauge
2401/25	.	Capacitance type, e.g. as level indicator
2401/26	.	Resistance type, e.g. as level indicator
2401/27	.	Gravitational, e.g. pendulum or axial movement type
2401/28	.	Gyroscopes
2401/90	.	Single sensor for two or more measurements
2401/902	. .	the sensor being an xy axis sensor
2401/904	. .	the sensor being an xyz axis sensor
2500/00		**Indexing codes relating to the regulated action or device**
2500/02	.	Supply or exhaust flow rates; Pump operation
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
2500/11	. .	Damping valves
2500/112	. . .	Fluid actuation
2500/114	. . .	pressure regulating valves
2500/116	. . .	for damping pressure oscillations of the fluid in hydraulic lines
2500/20	.	Spring action or springs
2500/201	. .	Air spring system type
2500/2012	. . .	Open systems
2500/2014	. . .	Closed systems
2500/202	. .	Height or leveling valve for air-springs
2500/2021	. . .	Arrangement of valves
2500/2022	. . .	with valve seat actuation for selectively adjusting neutral height
2500/203	. .	Distributor valve units comprising several elements, e.g. valves, pump or accumulators
2500/204	. .	Pressure regulating valves for air-springs
2500/2041	. . .	for variable volume air springs, e.g. using accumulators as expansion chambers
2500/2042	. . .	Air filling valves
2500/2043	. . .	Wheatstone bridge type valve arrangements
2500/2044	. . .	Air exhausting valves
2500/2046	. .	Pressure equalising valves between two units
2500/205	. .	Air-compressor operation
2500/206	. .	Variable pressure accumulators for hydropneumatic suspensions
2500/2062	. . .	by varying the air-pressure of the accumulator
2500/2064	. . .	by varying the number of accumulators connected in parallel to the hydraulic cylinder
2500/22	. .	Spring constant
2500/30	.	Height or ground clearance
2500/302	. .	using distributor valves
2500/32	. .	of only one vehicle part or side
2500/322	. . .	only front part
2500/324	. . .	only rear part
2500/326	. . .	only left or right side
2500/40	.	Steering
2500/42	. .	Sensibility
2600/00		**Indexing codes relating to particular elements, systems or processes used on suspension systems or suspension control systems**

2600/02	.	Retarders, delaying means, dead zones, threshold values, cut-off frequency, timer interruption
2600/04	.	Means for informing, instructing or displaying
2600/042	. .	Monitoring means
2600/0422	. . .	involving data transmission, e.g. via satellite or GPS; for data monitoring, telemetry or platooning purposes
2600/044	. .	Alarm means
2600/07	.	Inhibiting means
2600/08	.	Failure or malfunction detecting means
2600/082	. .	Sensor drift
2600/084	. .	Supervisory systems
2600/086	. .	Redundant systems
2600/09	.	Feedback signal
2600/11	.	Feedforward signal
2600/12	.	Sampling or average detecting; Addition or substraction
2600/122	. .	Summation signal
2600/124	. .	Error signal
2600/14	.	Differentiating means, i.e. differential control
2600/16	.	Integrating means, i.e. integral control
2600/17	.	Proportional control, i.e. gain control
2600/172	. .	Weighting coefficients or factors
2600/18	.	Automatic control means
2600/181	. .	Signal modulation; pulse-width, frequency-phase
2600/182	. .	Active control means
2600/184	. .	Semi-Active control means
2600/186	. .	Analogue Controller Details and Signal Treatment
2600/187	. .	Digital Controller Details and Signal Treatment
2600/1871	. . .	Optimal control; Kalman Filters
2600/1872	. . .	Observer; Luaponov function
2600/1873	. . .	Model Following
2600/1874	. . .	Modal analysis
2600/1875	. . .	Other parameter or state estimation methods not involving the mathematical modelling of the vehicle
2600/1876	. . .	Artificial intelligence
2600/1877	. . .	Adaptive Control
2600/1878	. . .	Neural Networks
2600/1879	. . .	Fuzzy Logic Control
2600/188	. .	Spectral analysis; Transformations
2600/1881	. . .	Integral
2600/1882	. . .	Fourier
2600/1883	. . .	z-transform
2600/1884	. . .	Laplace
2600/1885	. . .	Euler equations
2600/189	. .	Statistical analysis
2600/20	.	Manual control or setting means
2600/202	. .	using a remote, e.g. cordless, transmitter or receiver unit
2600/204	. .	Joystick actuated suspension
2600/206	. .	Control-by-wire
2600/21	.	Self-controlled or adjusted
2600/22	.	Magnetic elements
2600/24	. .	permanent magnets
2600/26	. .	Electromagnets; Solenoids
2600/28	.	Temporary fluctuations
2600/41	.	SISO system, i.e. single input - single output system
2600/43	.	MIMO system, i.e. multi input - multi output system
2600/44	.	Vibration noise suppression
2600/60	.	Signal noise suppression; Electronic filtering means

2600/602	. .	high pass
2600/604	. .	low pass
2600/66	.	Humidifying or drying means
2600/68	.	Filtering means, e.g. fluid filters
2600/70	.	Computer memory; Data storage, e.g. maps for adaptive control
2600/702	. .	Parallel processing
2600/704	. .	Electronic tags containing data, e.g. identification number of a component; Gain values for the control of the unit, etc.
2600/71	.	Distributed control; Master - slave controllers; Remote control units
2600/72	.	Cooling or warming means
2600/73	.	Electrical control
2600/74	.	Analog systems
2600/76	.	Digital systems
2600/77	.	A/D, D/A signal converters
2600/82	.	duty rate function
2600/85	.	Speed of regulation
2600/90	.	other signal treatment means
2800/00		**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**
2800/01	.	Attitude or posture control
2800/012	. .	Rolling condition
2800/0122	. . .	Roll rigidity ratio; Warping
2800/0124	. . .	Roll-over conditions
2800/014	. .	Pitch; Nose dive
2800/016	. .	Yawing condition
2800/019	. .	Inclination due to load distribution or road gradient
2800/0192	. . .	longitudinal with regard to vehicle
2800/0194	. . .	transversal with regard to vehicle
2800/16	.	Running
2800/162	. .	Reducing road induced vibrations
2800/164	. .	Heaving; Squatting
2800/166	. .	Platooning
2800/18	.	Starting, accelerating
2800/182	. .	Traction
2800/20	.	Stationary vehicle
2800/202	. .	kneeling, e.g. for letting passengers on/off
2800/203	. .	lowering the floor for loading/unloading
2800/204	. .	adjusting floor height to the loading ramp level
2800/2042	. . .	using an anticreep mechanism to lock the height
2800/205	. .	jacking-up for changing tyre or vehicle inspection
2800/21	.	Traction, slip, skid or slide control
2800/212	. .	Transversal; Side-slip during cornering
2800/213	. .	by applying forward/backward torque on each wheel individually
2800/214	. .	by varying the load distribution
2800/215	. .	by applying a braking action on each wheel individually
2800/22	.	Braking, stopping
2800/222	. .	during collision
2800/224	. .	automatically, based on dangerous living style
2800/226	. .	automatically, based on stopping at a preset or target point position
2800/24	.	Steering, cornering
2800/242	. .	Obstacle avoidance manoeuvre
2800/244	. .	Oversteer
2800/246	. .	Understeer

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2800/248	. .	Neutral steering behaviour
2800/70	.	Estimating or calculating vehicle parameters or state variables
2800/702	. .	Improving accuracy of a sensor signal
2800/7022	. . .	Calibration of a sensor, e.g. automatically
2800/704	. .	predicting unorthodox driving conditions for safe or optimal driving
2800/80	.	Detection or control after a system or component failure
2800/802	. .	Diagnostics
2800/85	.	System Prioritisation
2800/87	.	System configuration based on vehicle type or model
2800/90	.	System Controller type
2800/91	. .	Suspension Control
2800/912	. . .	Attitude Control; levelling control
2800/9122	. . . .	ARS - Anti-Roll System Control
2800/9123	. . . .	Active Body Control [ABC]
2800/9124	. . . .	Roll-over protection systems, e.g. for warning or control
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