

**CPC****COOPERATIVE PATENT CLASSIFICATION****B60T**

**VEHICLE BRAKE CONTROL SYSTEMS OR PARTS THEREOF;  
BRAKE CONTROL SYSTEMS OR PARTS THEREOF, IN  
GENERAL**(electrodynamic brake systems for vehicle, in general [B60L](#); brakes  
per se, i.e. devices where braking effect occurs, including ultimate brake actuators,  
[F16D](#)); **ARRANGEMENT OF BRAKING ELEMENTS ON VEHICLES IN  
GENERAL; PORTABLE DEVICES FOR PREVENTING UNWANTED  
MOVEMENT OF VEHICLES; VEHICLE MODIFICATIONS TO  
FACILITATE COOLING OF BRAKES**

**NOTE**

In this subclass, the term "brake control systems" includes brake control systems for vehicles or of general applicability

**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:

[B60T 8/20](#) covered by [B60T 8/18](#)  
[B60T 8/22](#) covered by [B60T 8/18](#)  
[B60T 8/60](#) - [B60T 8/70](#) covered by [B60T 8/17](#)  
[B60T 8/78](#) - [B60T 8/84](#) covered by [B60T 8/17](#)  
[B60T 13/122](#) covered by [B60T 13/147](#) , [B60T 13/167](#)  
[B60T 13/125](#) covered by [B60T 13/141](#)  
[B60T 13/128](#) covered by [B60T 13/145](#) , [B60T 13/165](#)  
[B60T 13/13](#) covered by [B60T 13/146](#) , [B60T 13/166](#)  
[B60T 13/132](#) covered by [B60T 13/143](#) , [B60T 13/162](#)  
[B60T 13/135](#) covered by [B60T 13/144](#) , [B60T 13/163](#)  
[B60T 13/138](#) covered by [B60T 13/148](#) , [B60T 13/168](#)  
[B60T 13/60](#) covered by [B60T 13/58](#)  
[B60T 15/06](#) covered by [B60T 15/04](#)  
[B60T 15/08](#) covered by [B60T 15/04](#)

**B60T 1/00**

**Arrangements of braking elements, i.e. of those parts where braking effect occurs{[specially for vehicles](#)}**

**B60T 1/005**

. {by locking of wheel or transmission rotation}

**B60T 1/02**

. acting by retarding wheels

**B60T 1/04**

.. acting directly on tread

**B60T 1/06**

.. acting otherwise than on tread, e.g. employing rim, drum, disc, or transmission{[or on double wheels](#)}

**B60T 1/062**

... {acting on transmission parts}

**B60T 1/065**

... {employing disc( [B60T 1/062](#) takes precedence )}

**B60T 1/067**

... {employing drum( [B60T 1/062](#) takes precedence )}

**B60T 1/08**

.. using fluid or powdered medium

**B60T 1/087**

... in hydrodynamic, i.e. non-positive displacement, retarders

- B60T 1/093 . . . in hydrostatic, i.e. positive displacement, retarders
- B60T 1/10 . . by utilising wheel movement for accumulating energy, e.g. driving air compressors( [using propulsion unit as braking means, see the relevant class](#) )
- B60T 1/12 . acting otherwise than by retarding wheels, e.g. jet action
- B60T 1/14 . . directly on road( [portable devices, e.g. chocks B60T 3/00](#) )
- B60T 1/16 . . by increasing air resistance, e.g. flaps

**B60T 3/00** **Portable devices for preventing unwanted movement of vehicles, e.g. chocks**

**B60T 5/00** **Vehicle modifications to facilitate cooling of brakes**

**Guidance heading:** **Brake control systems or parts thereof**

**B60T 7/00** **Brake-action initiating means**

- B60T 7/02 . for personal initiation
- B60T 7/04 . . foot actuated
  - B60T 7/042 . . . {by electrical means, e.g. using travel or force sensors}
  - B60T 7/045 . . . {with locking and release means, e.g. providing parking brake application}
  - B60T 7/047 . . . . {Hand-actuated release means}
- B60T 7/06 . . . Disposition of pedal
  - B60T 7/065 . . . . {with means to prevent injuries in case of collision( for vehicle pedals in general by moving them from an operative to an out-of-the way position [B60R 21/09](#) )}
- B60T 7/08 . . hand actuated
  - B60T 7/085 . . . {by electrical means, e.g. travel, force sensors}
  - B60T 7/10 . . . Disposition of hand control
    - B60T 7/101 . . . . {by means of a pull rod}
    - B60T 7/102 . . . . {by means of a tilting lever}
    - B60T 7/104 . . . . . {with a locking mechanism}
    - B60T 7/105 . . . . . {the lock being released by means of a push button}
    - B60T 7/107 . . . . {with electrical power assistance}
    - B60T 7/108 . . . . {with mechanisms to take up slack in the linkage to the brakes}
- B60T 7/12 . for automatic initiation; for initiation not subject to will of driver or passenger{( [limiting speed of vehicles other than rail vehicles B60K 31/00](#) )}
- B60T 7/122 . . {for locking of reverse movement}
- B60T 7/124 . . {Brakes for railway vehicles coming into operation in case of accident, derailment or damage of rolling stock or superstructure( [self-acting brakes in general F16D 59/00](#) )}
- B60T 7/126 . . {Brakes for railway vehicles coming into operation in case of exceeding a predetermined speed( [self-acting brakes in general F16D 59/00](#) )}
- B60T 7/128 . . {Self-acting brakes of different types for railway vehicles( [B60T 7/12](#) takes precedence; [self-acting brakes in general F16D 59/00](#) )}
- B60T 7/14 . . operated upon collapse of driver( [deadman`s devices for electrically propelled vehicles B60L 3/02](#) )

- B60T 7/16 . . . operated by remote control, i.e. initiating means not mounted on vehicle
- B60T 7/18 . . . . . operated by wayside apparatus
- B60T 7/20 . . . specially for trailers, e.g. in case of uncoupling of{or overrunning by}trailer( inertia-actuated over-run brakes [B60T 13/08](#) )
- B60T 7/203 . . . . . {with automatic brake release or reduction in case of reverse travel, e.g. by means of mechanisms mounted on the draw bar}
- B60T 7/206 . . . . . {by means of mechanisms mounted on trailer drum brakes}
- B60T 7/22 . . . initiated by contact of vehicle, e.g. bumper, with an external object, e.g. another vehicle{, or by means of contactless obstacle detectors mounted on the vehicle}
  
- B60T 8/00** **Arrangements for adjusting wheel-braking force to meet varying vehicular or ground-surface conditions, e.g. limiting or varying distribution of braking force( by changing number of effective brake cylinders in power brake systems [B60T 17/10](#) )**
- B60T 8/17 . . . Using electrical or electronic regulation means to control braking{( detecting or indicating faulty operation [B60T 8/885](#) )}
- B60T 8/1701 . . . {Braking or traction control means specially adapted for particular types of vehicles( for vehicles having more than one drive axle [B60T 8/1769](#) )}
- B60T 8/1703 . . . . . {for aircrafts}
- B60T 8/1705 . . . . . {for rail vehicles}
- B60T 8/1706 . . . . . {for single-track vehicles, e.g. motorcycles}
- B60T 8/1708 . . . . . {for lorries or tractor-trailer combinations}
- B60T 8/171 . . . Detecting parameters used in the regulation; Measuring values used in the regulation
- B60T 8/172 . . . Determining control parameters used in the regulation, e.g. by calculations involving measured or detected parameters{( [B60T 8/17551](#) takes precedence )}
- B60T 8/1725 . . . . . {Using tyre sensors, e.g. Sidewall Torsion sensors (SWT)( for tyre pressure and temperature detection [B60C 23/00](#) )}
- B60T 8/173 . . . Eliminating or reducing the effect of unwanted signals, e.g. due to vibrations or electrical noise
- B60T 8/174 . . . characterised by using special control logic, e.g. fuzzy logic{,neural computing}
- B60T 8/175 . . . Brake regulation specially adapted to prevent excessive wheel spin during vehicle acceleration, e.g. for traction control( safety devices for propulsion unit control responsive to, or preventing, skidding of wheels [B60K 28/16](#) )
- B60T 8/1755 . . . Brake regulation specially adapted to control the stability of the vehicle, e.g. taking into account yaw rate or transverse acceleration in a curve( road vehicle drive control systems for control of driving stability otherwise than by controlling a particular sub-unit [B60W 30/02](#) )
- B60T 8/17551 . . . . . {determining control parameters related to vehicle stability used in the regulation, e.g. by calculations involving measured or detected parameters}
- B60T 8/17552 . . . . . {responsive to the tire sideslip angle or the vehicle body slip angle}
- B60T 8/17554 . . . . . {specially adapted for enhancing stability around the vehicles longitudinal axle, i.e. roll-over prevention( road vehicle drive control systems for roll-over prevention otherwise than by controlling a particular sub-unit [B60W 30/04](#) )}
- B60T 8/17555 . . . . . {specially adapted for enhancing driver or passenger comfort, e.g. soft intervention or pre-actuation strategies}

B60T 8/17557	...	{specially adapted for lane departure prevention( road vehicle drive control systems for lane keeping otherwise than by controlling a particular sub-unit <a href="#">B60W 30/12</a> )}
B60T 8/17558	...	{specially adapted for collision avoidance or collision mitigation( road vehicle drive control systems for collision avoidance otherwise than by controlling a particular sub-unit <a href="#">B60W 30/09</a> )}
B60T 8/176	..	Brake regulation specially adapted to prevent excessive wheel slip during vehicle deceleration, e.g. ABS( <a href="#">B60T 8/1755</a> takes precedence )
B60T 8/1761	...	responsive to wheel or brake dynamics, e.g. wheel slip, wheel acceleration or rate of change of brake fluid pressure
B60T 8/17613	....	{based on analogue circuits or digital circuits comprised of discrete electronic elements}
B60T 8/17616	....	{Microprocessor-based systems}
B60T 8/1763	...	responsive to the coefficient of friction between the wheels and the ground surface( <a href="#">B60T 8/1764</a> takes precedence )
B60T 8/17633	....	{based on analogue circuits or digital circuits comprised of discrete electronic elements}
B60T 8/17636	....	{Microprocessor-based systems}
B60T 8/1764	...	Regulation during travel on surface with different coefficients of friction, e.g. between left and right sides, mu-split{or between front and rear}
B60T 8/1766	...	Proportioning of brake forces according to vehicle axle loads, e.g. front to rear of vehicle
B60T 8/1769	...	specially adapted for vehicles having more than one driven axle, e.g. four-wheel drive vehicles
B60T 8/18	.	responsive to vehicle weight or load, e.g. load distribution({ using electrical circuitry on regulation means <a href="#">B60T 8/17</a> ; } <a href="#">B60T 8/30</a> takes precedence; responsive to weight and speed condition <a href="#">B60T 8/58</a> )

**NOTE**

[B60T 8/1887](#) and [B60T 8/1893](#) take precedence over [B60T 8/1806](#) to [B60T 8/1881](#)

B60T 8/1806	..	{characterised by the calibration process or the means therefor}
B60T 8/1812	..	{characterised by the means for pressure reduction}
B60T 8/1818	...	{Lever mechanism}
B60T 8/1825	...	{Means for changing the diaphragm area submitted to pressure}
B60T 8/1831	...	{pressure reducing or limiting valves}
B60T 8/1837	..	{characterised by the load-detecting arrangements}
B60T 8/1843	...	{Arrangements for detecting air spring pressure}
B60T 8/185	...	{Arrangements for detecting vehicle level}
B60T 8/1856	...	{Arrangements for detecting suspension spring load( <a href="#">B60T 8/1843</a> takes precedence )}
B60T 8/1862	....	{comprising sensors of the type providing a fluid output signal representing the load on the vehicle suspension}
B60T 8/1868	....	{comprising sensors of the type providing a mechanical output signal representing the load on the vehicle suspension}

- B60T 8/1875 . . . . {comprising sensors of the type providing an electrical output signal representing the load on the vehicle suspension}
- B60T 8/1881 . . {characterised by failure-responsive means}
- B60T 8/1887 . . {especially adapted for tractor-trailer combinations}
- B60T 8/1893 . . {especially adapted for railway vehicles}
- B60T 8/24 . responsive to vehicle inclination or change of direction, e.g. negotiating bends{( using electrical circuitry or regulation means [B60T 8/17](#) )}
- B60T 8/241 . . {Lateral vehicle inclination}
- B60T 8/243 . . . {for roll-over protection}
- B60T 8/245 . . {Longitudinal vehicle inclination}
- B60T 8/246 . . {Change of direction}
- B60T 8/248 . . {Trailer sway, e.g. for preventing jackknifing}
- B60T 8/26 . responsive to vehicle inclination or change of direction, e.g. negotiating bends{( using electrical circuitry or regulation means [B60T 8/17](#) )}
- B60T 8/261 . . {specially adapted for use in motorcycles}
- B60T 8/262 . . {using valves with stepped characteristics( [B60T 8/261](#) , [B60T 8/266](#) take precedence )}
- B60T 8/263 . . . {for pneumatic brake systems}
- B60T 8/265 . . . {for hydraulic brake systems}
- B60T 8/266 . . {using valves or actuators with external control means( [B60T 8/261](#) takes precedence )}
- B60T 8/267 . . . {for hybrid systems with different kind of brakes on different axles}
- B60T 8/268 . . . {using the valves of an ABS, ASR or ESP system}
- B60T 8/28 . responsive to deceleration{( [B60T 8/261](#) , [B60T 8/262](#) , [B60T 8/266](#) take precedence )}
- B60T 8/282 . . . {using ball and ramp}
- B60T 8/285 . . . {using horizontal moving mass}
- B60T 8/287 . . . {using pendulums}
- B60T 8/30 . responsive to load{( [B60T 8/261](#) , [B60T 8/262](#) , [B60T 8/266](#) take precedence )}
- B60T 8/303 . . . {using pneumatic valves}
- B60T 8/306 . . . {using hydraulic valves}
- B60T 8/32 . responsive to a speed condition, e.g. acceleration or deceleration{( using electrical circuitry or regulation means [B60T 8/17](#) ) ; [B60T 8/28](#) takes precedence; electric devices on electrically propelled vehicles indicating the wheel slip [B60L 3/10](#) ; measuring linear or angular speed per se [G01P 3/00](#) )}
- B60T 8/3205 . . {acceleration( [B60T 8/34](#) , [B60T 8/52](#) , [B60T 8/54](#) , [B60T 8/56](#) , [B60T 8/58](#) , [B60T 8/72](#) , [B60T 8/86](#) , [B60T 8/88](#) take precedence )}
- B60T 8/321 . . {deceleration( [B60T 8/34](#) , [B60T 8/52](#) , [B60T 8/54](#) , [B60T 8/56](#) , [B60T 8/58](#) , [B60T 8/72](#) , [B60T 8/86](#) , [B60T 8/88](#) take precedence )}
- B60T 8/3215 . . . {Systems characterised by having means acting on components of the drive line, e.g. retarder, clutch or differential gear( [B60T 8/322](#) takes precedence )}
- B60T 8/322 . . . {Systems specially adapted for vehicles driven by more than one axle, e.g. Four Wheel-Drive vehicles}

B60T 8/3225	...	{Systems specially adapted for single-track vehicles, e.g. motorcycles( <a href="#">B60T 8/3235 takes precedence</a> )}
B60T 8/323	...	{Systems specially adapted for tractor-trailer combinations}
B60T 8/3235	...	{Systems specially adapted for rail vehicles}
B60T 8/324	....	{Speed measurement by means of centrifugal governors or the like}
B60T 8/3245	....	{responsive to the speed difference between wheels and rail, or between two wheels or two axles}
B60T 8/325	...	{Systems specially adapted for aircraft}
B60T 8/3255	...	{Systems in which the braking action is dependent on brake pedal data}
B60T 8/326	....	{Hydraulic systems}
B60T 8/3265	.....	{with control of the booster( <a href="#">B60T 8/3275 takes precedence</a> )}
B60T 8/327	....	{Pneumatic systems}
B60T 8/3275	....	{Systems with a braking assistant function, i.e. automatic full braking initiation in dependence of brake pedal velocity}
B60T 8/328	...	{Systems sharing components with other fluid systems onboard the vehicle}
B60T 8/3285	....	{the other fluid systems being suspension elements}
B60T 8/329	...	{Systems characterised by their speed sensor arrangements}
B60T 8/3295	...	{Systems in which there is a pulsating signal superposed on the command signal}
B60T 8/34	..	having a fluid pressure regulator responsive to a speed condition
B60T 8/341	...	{Systems characterised by their valves( <a href="#">B60T 8/36</a> , <a href="#">B60T 8/38 take precedence</a> )}
B60T 8/342	....	{Pneumatic systems}
B60T 8/343	...	{Systems characterised by their lay-out( <a href="#">B60T 8/349 takes precedence</a> )}
B60T 8/344	....	{Hydraulic systems}
B60T 8/345	.....	{having more than one brake circuit per wheel}
B60T 8/346	.....	{2 Channel systems( <a href="#">B60T 8/345 takes precedence</a> )}
B60T 8/347	.....	{3 Channel systems( <a href="#">B60T 8/345 takes precedence</a> )}
B60T 8/348	.....	{4 Channel systems( <a href="#">B60T 8/345 takes precedence</a> )}
B60T 8/349	...	{Systems adapted to control a set of axles, e.g. tandem axles}
B60T 8/36	...	including a pilot valve responding to an electromagnetic force
B60T 8/3605	....	{wherein the pilot valve is mounted in a circuit controlling the working fluid system}
B60T 8/361	....	{wherein the pilot valve is mounted in a circuit controlling an auxiliary fluid system}
B60T 8/3615	....	{Electromagnetic valves specially adapted for anti-lock brake and traction control systems( <a href="#">electromagnetic valves in general F16K 31/06</a> )}
B60T 8/362	.....	{in pneumatic systems( <a href="#">B60T 8/3655</a> , <a href="#">B60T 8/3675</a> and <a href="#">B60T 8/369 take precedence</a> )}
B60T 8/3625	.....	{having at least one vacuum connection}
B60T 8/363	.....	{in hydraulic systems( <a href="#">B60T 8/3655</a> , <a href="#">B60T 8/3675</a> and <a href="#">B60T 8/369 take precedence</a> )}

B60T 8/3635	.....	{switching between more than two connections, e.g. 3/2-valves( <a href="#">B60T 8/364</a> , <a href="#">B60T 8/3645</a> and <a href="#">B60T 8/365</a> take precedence )}
B60T 8/364	.....	{switching between a number of discrete positions as a function of the applied signal, e.g. 3/3-valves( <a href="#">B60T 8/3645</a> takes precedence )}
B60T 8/3645	.....	{having more than one electromagnetic coil inside a common housing}
B60T 8/365	.....	{combining a plurality of functions in one unit, e.g. pressure relief}
B60T 8/3655	.....	{Continuously controlled electromagnetic valves}
B60T 8/366	.....	{Valve details}
B60T 8/3665	.....	{Sliding valves}
B60T 8/367	.....	{Seat valves, e.g. poppet valves}
B60T 8/3675	.....	{integrated in modulator units}
B60T 8/368	.....	{combined with other mechanical components, e.g. pump units, master cylinders}
B60T 8/3685	.....	{characterised by the mounting of the modulator unit onto the vehicle}
B60T 8/369	.....	{Valves using piezo-electric elements( in general <a href="#">F16K 31/004</a> )}
B60T 8/3695	.....	{wherein the pilot valve is mounted separately from its power section( <a href="#">B60T 8/3605</a> , <a href="#">B60T 8/361</a> and <a href="#">B60T 8/3615</a> take precedence )}
B60T 8/38	...	including valve means of the relay or driver controlled type
B60T 8/40	...	comprising an additional fluid circuit including fluid pressurising means for modifying the pressure of the braking fluid, e.g. including wheel driven pumps for detecting a speed condition, or pumps which are controlled by means independent of the braking system
B60T 8/4004	....	{Repositioning the piston(s) of the brake control means by means of a fluid pressurising means in order to reduce the brake pressure}
B60T 8/4009	.....	{the brake control means being the wheel cylinders}
B60T 8/4013	....	{Fluid pressurising means for more than one fluid circuit, e.g. separate pump units used for hydraulic booster and anti-lock braking}
B60T 8/4018	....	{Pump units characterised by their drive mechanisms( <a href="#">B60T 8/4095</a> takes precedence )}
B60T 8/4022	.....	{Pump units driven by an individual electric motor( <a href="#">B60T 8/4027</a> takes precedence )}
B60T 8/4027	.....	{Pump units driven by (parts of) the vehicle propulsion unit}
B60T 8/4031	....	{Pump units characterised by their construction or mounting( pump units in combination with valve blocks <a href="#">B60T 8/36</a> )}
B60T 8/4036	....	{Pump units characterised by their failure-responsive means( <a href="#">B60T 8/88</a> takes precedence )}
B60T 8/404	....	{Control of the pump unit}
B60T 8/4045	.....	{involving ON/OFF switching}
B60T 8/405	.....	{involving the start-up phase}
B60T 8/4054	.....	{involving the delivery pressure control( <a href="#">B60T 8/4072</a> takes precedence )}
B60T 8/4059	.....	{involving the rate of delivery}
B60T 8/4063	.....	{involving the direction of fluid flow}



B60T 8/4068	....	{the additional fluid circuit comprising means for attenuating pressure pulsations}
B60T 8/4072	....	{Systems in which a driver input signal is used as a control signal for the additional fluid circuit which is normally used for braking}
B60T 8/4077	.....	{Systems in which the booster is used as an auxiliary pressure source}
B60T 8/4081	.....	{Systems with stroke simulating devices for driver input( <a href="#">B60T 8/4077</a> takes precedence )}
B60T 8/4086	.....	{the stroke simulating device being connected to, or integrated in the driver input device}
B60T 8/409	.....	{characterised by details of the stroke simulating device}
B60T 8/4095	....	{including wheel driven pumps for detecting a speed condition}
B60T 8/42	...	having expanding chambers for controlling pressure{i.e. closed systems}
B60T 8/4208	....	{Debooster systems}
B60T 8/4216	.....	{having a mechanically actuated expansion unit( <a href="#">B60T 8/4225</a> and <a href="#">B60T 8/4266</a> take precedence )}
B60T 8/4225	.....	{having a fluid actuated expansion unit}
B60T 8/4233	.....	{with brake pressure relief by introducing fluid pressure into the expansion unit( <a href="#">B60T 8/4241</a> takes precedence )}
B60T 8/4241	.....	{pneumatically}
B60T 8/425	.....	{using a vacuum}
B60T 8/4258	.....	{with brake pressure relief by creating vacuum inside the expansion unit}
B60T 8/4266	.....	{having an electro-mechanically actuated expansion unit, e.g. solenoid, electric motor, piezo stack}
B60T 8/4275	....	{Pump-back systems}
B60T 8/4283	.....	{having a pressure sensitive inlet valve}
B60T 8/4291	.....	{having means to reduce or eliminate pedal kick-back}
B60T 8/44	...	co-operating with a power-assist booster means associated with a master cylinder for controlling the release and reapplication of brake pressure through an interaction with the power assist device{i.e. open systems}
B60T 8/441	....	{using hydraulic boosters( <a href="#">B60T 8/445</a> , <a href="#">B60T 8/446</a> , <a href="#">B60T 8/447</a> take precedence )}
B60T 8/442	.....	{the booster being a fluid return pump, e.g. in combination with a brake pedal force booster}
B60T 8/443	....	{using compressed air( <a href="#">B60T 8/445</a> , <a href="#">B60T 8/446</a> , <a href="#">B60T 8/448</a> take precedence )}
B60T 8/444	....	{using vacuum( <a href="#">B60T 8/445</a> , <a href="#">B60T 8/446</a> , <a href="#">B60T 8/448</a> take precedence )}
B60T 8/445	....	{replenishing the released brake fluid volume into the brake piping}
B60T 8/446	....	{replenishing the released brake fluid volume via the master cylinder}
B60T 8/447	....	{Reducing the boost of the power-assist booster means to reduce brake pressure}
B60T 8/448	.....	{the power-assist booster means being a vacuum or compressed air booster}
B60T 8/449	.....	{of the multiple booster type}



B60T 8/46	...	the pressure being reduced by exhausting fluid
B60T 8/48	...	connecting the brake actuator to an alternative or additional source of fluid pressure{e.g. traction control systems}
B60T 8/4809	....	{Traction control, stability control, using both the wheel brakes and other automatic braking systems}
B60T 8/4818	.....	{in pneumatic brake systems}
B60T 8/4827	.....	{in hydraulic brake systems}
B60T 8/4836	.....	{wherein a booster output pressure is used for normal or anti lock braking( <a href="#">B60T 8/4845</a> , <a href="#">B60T 8/4863</a> , <a href="#">B60T 8/489</a> take precedence )}
B60T 8/4845	.....	{using a booster or a master cylinder for traction control}
B60T 8/4854	.....	{pneumatic boosters}
B60T 8/4863	.....	{closed systems( <a href="#">B60T 8/4845</a> , <a href="#">B60T 8/489</a> take precedence )}
B60T 8/4872	.....	{pump-back systems}
B60T 8/4881	.....	{having priming means}
B60T 8/489	.....	{using separate traction control modulators}
B60T 8/50	...	having means for controlling the rate at which pressure is reapplied to{or released from}the brake
B60T 8/5006	....	{Pressure reapplication by pulsing of valves( <a href="#">B60T 8/5012</a> , <a href="#">B60T 8/5018</a> , <a href="#">B60T 8/505</a> , <a href="#">B60T 8/5056</a> take precedence )}
B60T 8/5012	....	{Pressure reapplication using a plurality of valves in parallel}
B60T 8/5018	....	{Pressure reapplication using restrictions( <a href="#">B60T 8/5012</a> , <a href="#">B60T 8/505</a> take precedence )}
B60T 8/5025	.....	{in hydraulic brake systems}
B60T 8/5031	.....	{open systems}
B60T 8/5037	.....	{closed systems}
B60T 8/5043	.....	{debooster systems}
B60T 8/505	....	{Pressure reapplication in a mu-split situation, i.e. a situation with different coefficients of friction on both sides of the vehicle}
B60T 8/5056	....	{Pressure reapplication using memory devices}
B60T 8/5062	.....	{using memory chambers}
B60T 8/5068	.....	{having decay means}
B60T 8/5075	....	{Pressure release by pulsing of valves( <a href="#">B60T 8/5081</a> , <a href="#">B60T 8/5087</a> take precedence )}
B60T 8/5081	....	{Pressure release using a plurality of valves in parallel}
B60T 8/5087	....	{Pressure release using restrictions( <a href="#">B60T 8/5081</a> takes precedence )}
B60T 8/5093	.....	{in hydraulic brake systems}
B60T 8/52	..	Torque sensing, i.e. wherein the braking action is controlled by forces producing or tending to produce a twisting or rotating motion on a braked rotating member
B60T 8/54	..	by mechanical means
B60T 8/56	..	having means for changing the coefficient of friction
B60T 8/58	..	responsive to speed and another condition or to plural speed conditions

**NOTE**

In this group, a single condition which is itself responsive to, or representative of, another single condition is not regarded as plural conditions

- B60T 8/72      ..      responsive to a difference between a speed condition, e.g. deceleration, and a fixed reference
- B60T 8/74      ...      sensing a rate of change of velocity
- B60T 8/76      ...      two or more sensing means from different wheels indicative of the same type of speed condition
- B60T 8/86      ..      wherein the brakes are automatically applied in accordance with a speed condition and having means for overriding the automatic braking device when a skid condition occurs
- B60T 8/88      ..      with failure responsive means, i.e. means for detecting and indicating faulty operation of the speed responsive control means
- B60T 8/885      ...      {using electrical circuitry}
- B60T 8/90      ...      using a simulated speed signal to test speed responsive control means
- B60T 8/92      ...      automatically taking corrective action
- B60T 8/94      ....      on a fluid pressure regulator
- B60T 8/96      ....      on speed responsive control means
  
- B60T 10/00      Control or regulation for continuous braking making use of fluid or powdered medium, e.g. for use when descending a long slope**
- B60T 10/02      .      with hydrodynamic brake
- B60T 10/04      .      with hydrostatic brake
  
- B60T 11/00      Transmitting braking action from initiating means to ultimate brake actuator without power assistance or drive or where such assistance or drive is irrelevant( the power assistance or drive being essential [B60T 13/00](#) )**
- B60T 11/04      .      transmitting mechanically
- B60T 11/043      ..      {in case of steerable wheels}
- B60T 11/046      ..      {Using cables( [B60T 11/043](#) takes precedence )}
- B60T 11/06      ..      Equalising arrangements
- B60T 11/08      ..      providing variable leverage
- B60T 11/10      .      transmitting by fluid means, e.g. hydraulic
- B60T 11/101      ..      {equalising arrangements}
- B60T 11/102      ..      {in combination with mechanical elements}
- B60T 11/103      ..      {in combination with other control devices( conjoint control of brake system and at least another sub-unit [B60K 41/00](#) )}
- B60T 11/105      ...      {with brake locking after actuation, release of the brake by a different control device, e.g. gear lever}
- B60T 11/106      ....      {locking and release of the brake by the clutch}
- B60T 11/107      ..      {overrun brakes with fluid means}
- B60T 11/108      ..      {to a trailer fluid system}
- B60T 11/12      ..      the transmitted force being varied therein( [B60T 11/16](#) to [B60T 11/26](#) take precedence )
- B60T 11/14      ..      the transmitted force being substantially unchanged

B60T 11/16	..	Master control, e.g. master cylinders( <a href="#">master cylinders associated with vacuum boosters B60T 13/565</a> )
B60T 11/165	...	{ <a href="#">Single master cylinders for pressurised systems</a> }
B60T 11/18	...	Connection thereof to initiating means
B60T 11/20	...	Tandem, side-by-side, or other multiple master cylinder units
B60T 11/203	....	{ <a href="#">Side-by-side configuration</a> }
B60T 11/206	.....	{ <a href="#">with control by a force distributing lever</a> }
B60T 11/21	....	with two pedals operating on respective circuits, pressures therein being equalised when both pedals are operated together, e.g. for steering( <a href="#">steering non-deflectable wheels or endless tracks by differentially driving ground-engaging elements on opposite vehicle sides using brakes as main steering effecting means B62D 11/08</a> )
B60T 11/22	...	characterised by being integral with reservoir
B60T 11/224	...	with pressure-varying means, e.g. with two stage operation provided by use of different piston diameters including continuous variation from one diameter to another
B60T 11/228	...	Pressure-maintaining arrangements, e.g. for replenishing the master cylinder chamber with fluid from a reservoir( <a href="#">B60T 11/232 takes precedence</a> )
B60T 11/232	...	Recuperation valves
B60T 11/236	...	Piston sealing arrangements
B60T 11/24	..	Single initiating means operating on more than one circuit e.g. dual circuits( <a href="#">multiple master cylinder units B60T 11/20</a> )
B60T 11/26	..	Reservoirs( <a href="#">integral with master controls B60T 11/22</a> )
B60T 11/28	..	Valves specially adapted therefor( <a href="#">recuperation valves B60T 11/232</a> )
B60T 11/30	...	Bleed valves for hydraulic brake systems
B60T 11/32	...	Automatic cut-off valves for defective pipes
B60T 11/323	....	{ <a href="#">in hydraulic systems</a> }
B60T 11/326	....	{ <a href="#">in pneumatic systems</a> }
B60T 11/34	...	Pressure reducing or limiting valves{( <a href="#">for arrangements for adjusting wheel-braking force responsive to vehicle weight or load B60T 8/1831</a> )}
<b>B60T 13/00</b>		<b>Transmitting braking action from initiating means to ultimate brake actuator with power assistance or drive; Brake systems incorporating such transmitting means, e.g. air-pressure brake systems( <a href="#">arrangements for adjusting wheel-braking force to meet varying vehicular or ground-surface conditions B60T 8/00</a> ; valves incorporated in such systems <a href="#">B60T 15/00</a> )</b>
B60T 13/02	.	with mechanical assistance or drive{( <a href="#">combined with fluid pressure B60T 13/588</a> )}
B60T 13/04	..	by spring or weight( <a href="#">fluid released B60T 13/10</a> )
B60T 13/06	..	by inertia, e.g. flywheel
B60T 13/065	...	{ <a href="#">of the propulsion system</a> }
B60T 13/08	...	Over-run brakes
B60T 13/10	.	with fluid assistance, drive, or release
B60T 13/12	..	the fluid being liquid
B60T 13/14	...	using accumulators or reservoirs{ <a href="#">fed by pumps</a> }

B60T 13/141	....	{Systems with distributor valve( <a href="#">B60T 13/147</a> takes precedence )}
B60T 13/142	....	{Systems with master cylinder}
B60T 13/143	.....	{Master cylinder mechanically coupled with booster}
B60T 13/144	.....	{Pilot valve provided inside booster piston}
B60T 13/145	.....	{Master cylinder integrated or hydraulically coupled with booster}
B60T 13/146	.....	{Part of the system directly actuated by booster pressure}
B60T 13/147	.....	{In combination with distributor valve}
B60T 13/148	....	{Arrangements for pressure supply}
B60T 13/16	...	using pumps directly, i.e. without interposition of accumulators or reservoirs
B60T 13/161	....	{Systems with master cylinder}
B60T 13/162	.....	{Master cylinder mechanically coupled with booster}
B60T 13/163	.....	{Pilot valve provided inside booster piston}
B60T 13/165	.....	{Master cylinder integrated or hydraulically coupled with booster}
B60T 13/166	.....	{Part of the system directly actuated by booster pressure}
B60T 13/167	.....	{In combination with distributor valve}
B60T 13/168	....	{Arrangements for pressure supply}
B60T 13/18	....	with control of pump output delivery{e.g. by distributor valves( <a href="#">B60T 13/167</a> takes precedence )}
B60T 13/20	....	with control of pump driving means
B60T 13/22	...	Brakes applied by springs or weights and released hydraulically
B60T 13/24	..	the fluid being gaseous
B60T 13/241	...	{Differential pressure systems}
B60T 13/242	....	{The control valve is provided as one unit with the servomotor cylinder}
B60T 13/243	.....	{Mechanical command of the control valve, mechanical transmission to the brakes}
B60T 13/244	.....	{Mechanical command of the control valve, hydraulic transmission to the brakes}
B60T 13/245	.....	{Hydraulic command of the control valve, hydraulic transmission to the brake}
B60T 13/246	....	{The control valve is provided apart from the servomotor cylinder}
B60T 13/247	.....	{Mechanical command of the control valve, mechanical transmission to the brakes}
B60T 13/248	.....	{Mechanical command of the control valve, hydraulic transmission to the brakes}
B60T 13/249	.....	{Hydraulic command of the control valve, hydraulic transmission to the brakes}
B60T 13/26	...	Compressed-air systems
B60T 13/261	....	{systems with both indirect application and application by springs or weights and released by compressed air}
B60T 13/263	.....	{specially adapted for coupling with dependent systems, e.g. tractor-trailer systems}
B60T 13/265	.....	{dependent systems e.g. trailer systems}

B60T 13/266	....	{Systems with both direct and indirect application, e.g. in railway vehicles}
B60T 13/268	....	{using accumulators or reservoirs}
B60T 13/36	....	direct, i.e. brakes applied directly by compressed air
B60T 13/365	.....	{for railway vehicles}
B60T 13/38	....	Brakes applied by springs or weights and released by compressed air({ <a href="#">B60T 13/261</a> takes precedence })
B60T 13/385	.....	{Control arrangements therefor}
B60T 13/40	....	indirect i.e. compressed air booster units{indirect systems}
B60T 13/403	.....	{specially adapted for coupling with dependent systems, e.g. tractor-trailer systems}
B60T 13/406	.....	{specially adapted for transfer of two or more command signals e.g. railway systems( with electrical control <a href="#">B60T 13/665</a> )}
B60T 13/44	.....	with two-chamber booster units
B60T 13/45	.....	with multiple booster units, e.g. tandem booster units
B60T 13/46	...	Vacuum systems
B60T 13/465	....	{for railway vehicles}
B60T 13/48	....	direct, i.e. brakes applied directly by vacuum
B60T 13/50	....	Brakes applied by springs or weights and released by vacuum
B60T 13/52	....	indirect, i.e. vacuum booster units
B60T 13/56	.....	with two-chamber booster units
B60T 13/563	.....	with multiple booster units, e.g. tandem booster units
B60T 13/565	.....	characterised by being associated with master cylinders, e.g. integrally formed
B60T 13/567	.....	characterised by constructional features of the casing or by its strengthening or mounting arrangements
B60T 13/5675	.....	{Supportstruts}
B60T 13/569	.....	characterised by piston details, e.g. construction, mounting of diaphragm
B60T 13/57	.....	characterised by constructional features of control valves
B60T 13/573	.....	characterised by reaction devices
B60T 13/575	.....	using resilient discs or pads
B60T 13/577	.....	using levers
B60T 13/58	..	Combined or convertible systems
B60T 13/581	...	{both hydraulic and pneumatic}
B60T 13/583	....	{using converters}
B60T 13/585	...	{comprising friction brakes and retarders}
B60T 13/586	....	{the retarders being of the electric type}
B60T 13/588	...	{both fluid and mechanical assistance or drive}
B60T 13/62	...	both straight and automatic
B60T 13/64	...	both single and multiple, e.g. single and tandem
B60T 13/66	..	Electrical control in fluid-pressure brake systems
B60T 13/662	...	{characterised by specified functions of the control system components}

- B60T 13/665 . . . {the systems being specially adapted for transferring two or more command signals, e.g. railway systems( [B60T 13/662](#) takes precedence )}
- B60T 13/667 . . . . {and combined with electro-magnetic brakes}
- B60T 13/68 . . . by electrically-controlled valves{( [B60T 13/662](#) and [B60T 13/665](#) take precedence )}
- B60T 13/683 . . . . {in pneumatic systems or parts thereof( in vacuum systems [B60T 13/72](#) )}
- B60T 13/686 . . . . {in hydraulic systems or parts thereof}
- B60T 13/70 . . . by fluid-controlled switches
- B60T 13/72 . . . in vacuum systems{or vacuum booster units}
- B60T 13/74 . with electrical assistance or drive
- B60T 13/741 . . {acting on an ultimate actuator}
- B60T 13/743 . . . {with a spring accumulator}
- B60T 13/745 . . {acting on a hydraulic system, e.g. a master cylinder}
- B60T 13/746 . . {and mechanical transmission of the braking action}
- B60T 13/748 . . {acting on electro-magnetic brakes( combined with fluid-pressure brake systems [B60T 13/667](#) )}

**B60T 15/00 Construction arrangement, or operation of valves incorporated in power brake systems and not covered by groups [B60T 11/00](#) or [B60T 13/00](#) ( valve structures responsive to a speed condition [B60T 8/34](#) ; valves in general [F16K](#) )**

- B60T 15/02 . Application and release valves
- B60T 15/021 . . {Railway control or brake valves}
- B60T 15/022 . . . {with one slide valve, e.g. an emergency slide valve}
- B60T 15/024 . . . . {with quick braking action and evacuation of air to a reservoir, to the atmosphere or to the brake cylinder}
- B60T 15/025 . . {Electrically controlled valves}
- B60T 15/027 . . . {in pneumatic systems}
- B60T 15/028 . . . {in hydraulic systems}
- B60T 15/04 . . Driver`s valves
- B60T 15/041 . . . {controlling auxiliary pressure brakes, e.g. parking or emergency brakes( [B60T 15/048](#) takes precedence )}
- B60T 15/043 . . . {controlling service pressure brakes( [B60T 15/048](#) takes precedence )}
- B60T 15/045 . . . . {in multiple circuit systems, e.g. dual circuit systems}
- B60T 15/046 . . . . . {with valves mounted in tandem}
- B60T 15/048 . . . {Controlling pressure brakes of railway vehicles}
- B60T 15/10 . . . for vacuum brakes
- B60T 15/12 . . . combined with relay valves or the like
- B60T 15/14 . . . influencing electric control means
- B60T 15/16 . . . Arrangements enabling systems to be controlled from two or more positions
- B60T 15/18 . . Triple or other relay valves which allow step-wise application or release and which are actuated by brake-pipe pressure variation to connect brake cylinders or equivalent to compressed air or vacuum source or atmosphere
- B60T 15/181 . . . {Trailer control valves( [B60T 15/20](#) and [B60T 15/243](#) take precedence )}



B60T 15/182	...	{Trailer brake valves( <a href="#">B60T 15/20</a> and <a href="#">B60T 15/246</a> take precedence )}
B60T 15/184	...	{Railway control or brake valves}
B60T 15/185	....	{with one slide valve}
B60T 15/187	.....	{with a slide valve for initiation and a second slide valve for control of the braking}
B60T 15/188	.....	{with a slide valve for initiation and annular valves for control of the braking}
B60T 15/20	...	controlled by two fluid pressures
B60T 15/203	....	{Trailer control valves( <a href="#">B60T 15/223</a> takes precedence )}
B60T 15/206	....	{Trailer brake valves( <a href="#">B60T 15/226</a> takes precedence )}
B60T 15/22	....	with one or more auxiliary valves, for braking, releasing, filling reservoirs
B60T 15/223	.....	{Trailer control valves}
B60T 15/226	.....	{Trailer brake valves}
B60T 15/24	...	controlled by three fluid pressures
B60T 15/243	....	{Trailer control valves}
B60T 15/246	....	{Trailer brake valves}
B60T 15/26	....	without a quick braking action
B60T 15/28	.....	and having auxiliary valves
B60T 15/30	....	with a quick braking action
B60T 15/302	.....	{Railway control or brake valves with evacuation of air to a reservoir, to the atmosphere or to the brake cylinder}
B60T 15/304	.....	{with one slide valve}
B60T 15/306	.....	{with a slide valve for initiation and a second slide valve for control of the braking}
B60T 15/308	.....	{with a slide valve for initiation and annular valves for control of the braking}
B60T 15/32	.....	and having auxiliary valves
B60T 15/34	...	controlled alternatively by two or three fluid pressures
B60T 15/36	..	Other control devices or valves characterised by definite functions{( <a href="#">electrically controlled valves in fluid-pressure brake systems</a> <a href="#">B60T 15/027</a> , <a href="#">B60T 15/028</a> )}
B60T 15/38	...	for quick take-up and heavy braking, e.g. with auxiliary reservoir for taking-up slack
B60T 15/40	....	with separate take-up and applying cylinders
B60T 15/42	...	with a quick braking action, i.e. with accelerating valves actuated by brake-pipe pressure variation
B60T 15/44	....	and operating independently of the main control device
B60T 15/46	...	for retarding braking action to prevent rear vehicles of a vehicle train overtaking the forward ones
B60T 15/48	...	for filling reservoirs
B60T 15/50	....	with means for limiting or relieving pressure in reservoirs
B60T 15/52	...	for quick release of brakes, e.g. for influencing counter- pressure in triple valve or recirculating air from reservoir or brake cylinder to brake pipe
B60T 15/54	...	for controlling exhaust from triple valve or from brake cylinder

B60T 15/56	...	for filling reservoirs by means of a secondary supply pipe
B60T 15/58	...	for supplying control impulses through a secondary air pipe
B60T 15/60	...	for releasing or applying brakes when vehicles of a vehicle train are uncoupled
<b>B60T 17/00</b>	<b>Component parts, details, or accessories of power brake systems not covered by groups <a href="#">B60T 8/00</a> , <a href="#">B60T 13/00</a> or <a href="#">B60T 15/00</a> , or presenting other characteristic features ( air compressors per se <a href="#">F04</a> )</b>	
B60T 17/002	.	{Air treatment devices}
B60T 17/004	..	{Draining and drying devices}
B60T 17/006	..	{Anti-frost devices}
B60T 17/008	..	{Silencer devices}
B60T 17/02	.	Arrangements of pumps or compressors, or control devices therefor
B60T 17/04	.	Arrangements of piping, valves in the piping, e.g. cut-off valves, couplings or air hoses( traction couplings involving joints for supply lines, electric circuits, or the like <a href="#">B60D 1/62</a> ; couplings peculiar to railway vehicles for, or combined with, couplings or connectors for fluid conduits or electric cables <a href="#">B61G 5/06</a> ; pipes, cut-off valves, couplings, air hoses per se <a href="#">F16C</a> , <a href="#">F16K</a> , <a href="#">F16L</a> )
B60T 17/043	..	{Brake line couplings, air hoses and stopcocks}
B60T 17/046	..	{Devices for pipe guiding and fixing}
B60T 17/06	.	Applications or arrangements of reservoirs
B60T 17/08	.	Brake cylinders other than ultimate actuators( with built-in wear-compensating mechanisms, ultimate actuators <a href="#">F16D</a> )
B60T 17/081	..	{Single service brake actuators}
B60T 17/083	..	{Combination of service brake actuators with spring loaded brake actuators}
B60T 17/085	..	{Spring loaded brake actuators}
B60T 17/086	...	{Spring loaded brake actuators with emergency release device}
B60T 17/088	..	{Mounting arrangements}
B60T 17/10	..	Two or more cylinders acting on the same brake with means for rendering them effective selectively or successively, the number of effective cylinders being variable
B60T 17/12	...	according to vehicle weight
B60T 17/14	...	according to vehicle speed
B60T 17/16	..	Locking of brake cylinders
B60T 17/18	.	Safety devices; Monitoring
B60T 17/20	..	Safety devices operable by passengers other than the driver,{e.g. for railway vehicles}
B60T 17/22	..	Devices for monitoring or checking brake systems; Signal devices
B60T 17/221	...	{Procedure or apparatus for checking or keeping in a correct functioning condition of brake systems( hydraulic pressure systems in general <a href="#">F15B 19/00</a> , <a href="#">F15B 21/04</a> ; testing structures or apparatus <a href="#">G01M</a> )}
B60T 17/222	....	{by filling or bleeding of hydraulic systems}
B60T 17/223	.....	{Devices for pressurising brake systems acting on pedal}
B60T 17/225	...	{brake fluid level indicators( level indication in general <a href="#">G01F</a> ; <a href="#">H01H</a> )}

B60T 17/226	...	{using devices being responsive to the difference between the fluid pressions in conduits of multiple braking systems}
B60T 17/227	....	{With additional functions, e.g. by-pass}
B60T 17/228	...	{for railway vehicles}

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**B60T 2201/00**      **Particular use of vehicle brake systems; Special systems using also the brakes; Special software modules within the brake system controller**

B60T 2201/02	.	Active or adaptive cruise control system; Distance control
B60T 2201/022	..	Collision avoidance systems
B60T 2201/024	..	Collision mitigation systems
B60T 2201/03	.	Brake assistants
B60T 2201/04	.	Hill descent control
B60T 2201/06	.	Hill holder; Start aid systems on inclined road
B60T 2201/08	.	Lane monitoring; Lane Keeping Systems
B60T 2201/081	..	using distance control
B60T 2201/082	..	using alarm actuation
B60T 2201/083	..	using active brake actuation
B60T 2201/084	..	using suspension control
B60T 2201/085	..	using several actuators; Coordination of the lane keeping system with other control systems
B60T 2201/086	..	using driver related features
B60T 2201/087	..	using active steering actuation
B60T 2201/088	..	using transmission control
B60T 2201/089	..	using optical detection
B60T 2201/09	.	Engine drag compensation
B60T 2201/10	.	Automatic or semi-automatic parking aid systems
B60T 2201/12	.	Pre-actuation of braking systems without significant braking effect; Optimizing brake performance by reduction of play between brake pads and brake disc
B60T 2201/122	..	Pre-actuation in case of ESP control
B60T 2201/124	..	Rain brake support (RBS); Cleaning or drying brake discs, e.g. removing water or dirt
B60T 2201/14	.	Electronic locking-differential
B60T 2201/16	.	Curve braking control, e.g. turn control within ABS control algorithm

**B60T 2210/00**      **Detection or estimation of road or environment conditions; Detection or estimation of road shapes**

B60T 2210/10	.	Detection or estimation of road conditions
B60T 2210/12	..	Friction
B60T 2210/122	...	using fuzzy logic, neural computing
B60T 2210/124	...	Roads with different friction levels
B60T 2210/13	..	Aquaplaning, hydroplaning
B60T 2210/14	..	Rough roads, bad roads, gravel roads

B60T 2210/16	.. Off-road driving conditions
B60T 2210/20	. Road shapes
B60T 2210/22	.. Banked curves
B60T 2210/24	.. Curve radius
B60T 2210/30	. Environment conditions or position therewithin
B60T 2210/32	.. Vehicle surroundings
B60T 2210/34	.. Blind spots
B60T 2210/36	.. Global Positioning System (GPS)
<b>B60T 2220/00</b>	<b>Monitoring, detecting driver behaviour; Signalling thereof; Counteracting thereof</b>
B60T 2220/02	. Driver type; Driving style; Driver adaptive features
B60T 2220/03	. Driver counter-steering; Avoidance of conflicts with ESP control
B60T 2220/04	. Pedal travel sensor, stroke sensor; Sensing brake request
B60T 2220/06	. Adjustment of accelerator pedal reaction forces
<b>B60T 2230/00</b>	<b>Monitoring, detecting special vehicle behaviour; Counteracting thereof</b>
B60T 2230/02	. Side slip angle, attitude angle, floating angle, drift angle
B60T 2230/03	. Overturn, rollover
B60T 2230/04	. Jerk, soft-stop; Anti-jerk, reduction of pitch or nose-dive when braking
B60T 2230/06	. Tractor-trailer swaying
B60T 2230/08	. Driving in reverse
<b>B60T 2240/00</b>	<b>Monitoring, detecting wheel/tire behaviour; counteracting thereof</b>
B60T 2240/02	. Longitudinal grip( <a href="#">detection of road friction B60T 2210/10</a> )
B60T 2240/03	. Tire sensors
B60T 2240/04	. Tire deformation
B60T 2240/06	. Wheel load; Wheel lift
B60T 2240/07	. Tire tolerance compensation
B60T 2240/08	. Spare wheel detection; Adjusting brake control in case of spare wheel use
<b>B60T 2250/00</b>	<b>Monitoring, detecting, estimating vehicle conditions</b>
B60T 2250/02	. Vehicle mass
B60T 2250/03	. Vehicle yaw rate
B60T 2250/04	. Vehicle reference speed; Vehicle body speed
B60T 2250/042	.. Reference speed calculation in ASR or under wheel spinning condition
B60T 2250/06	. Sensor zero-point adjustment; Offset compensation
B60T 2250/062	.. loosing zero-point calibration of yaw rate sensors when travelling on banked roads or in case of temperature variations
<b>B60T 2260/00</b>	<b>Interaction of vehicle brake system with other systems</b>
B60T 2260/02	. Active Steering, Steer-by-Wire
B60T 2260/022	.. Rear-wheel steering; Four-wheel steering

B60T 2260/024	.. Yawing moment compensation during mu-split braking
B60T 2260/04	. Automatic transmission
B60T 2260/06	. Active Suspension System
B60T 2260/08	. Coordination of integrated systems
B60T 2260/09	. Complex systems; Conjoint control of two or more vehicle active control systems
<b>B60T 2270/00</b>	<b>Further aspects of brake control systems not otherwise provided for</b>
B60T 2270/10	. ABS control systems
B60T 2270/12	.. for all-wheel drive vehicles
B60T 2270/14	.. hydraulic model
B60T 2270/20	. ASR control systems
B60T 2270/202	.. for all-wheel drive vehicles
B60T 2270/203	.. hydraulic system components
B60T 2270/204	.. hydraulic model
B60T 2270/206	.. Monitoring, e.g. parameter monitoring, plausibility check
B60T 2270/208	.. adapted to friction condition
B60T 2270/211	.. Setting or adjusting start-control threshold
B60T 2270/213	.. Driving off under Mu-split conditions
B60T 2270/30	. ESP control system
B60T 2270/302	.. for all-wheel drive vehicles
B60T 2270/303	.. Stability control with active acceleration
B60T 2270/304	.. during driver brake actuation
B60T 2270/306	.. hydraulic system components
B60T 2270/308	.. hydraulic model
B60T 2270/311	.. Predefined control maps, lookup tables
B60T 2270/313	.. with less than three sensors(yaw rate, steering angle, lateral acceleration)
B60T 2270/40	. Failsafe aspects of brake control systems
B60T 2270/402	.. Back-up
B60T 2270/403	.. Brake circuit failure
B60T 2270/404	.. Brake-by-wire or X-by-wire failsafe
B60T 2270/406	.. Test-mode; Self-diagnosis
B60T 2270/408	.. Hierarchical failure detection
B60T 2270/411	.. Offset failure
B60T 2270/413	.. Plausibility monitoring, cross check, redundancy
B60T 2270/414	.. Power supply failure
B60T 2270/415	.. Short-circuit, open circuit failure
B60T 2270/416	.. Wheel speed sensor failure
B60T 2270/60	. Regenerative braking
B60T 2270/602	.. ABS features related thereto
B60T 2270/603	.. ASR features related thereto

B60T 2270/604	. . Merging friction therewith; Adjusting their repartition
B60T 2270/606	. . Axle differential or center differential features related thereto
B60T 2270/608	. . Electronic brake distribution (EBV/EBD) features related thereto
B60T 2270/611	. . Engine braking features related thereto
B60T 2270/613	. . ESP features related thereto
B60T 2270/82	. Brake-by-Wire, EHB
B60T 2270/83	. Control features of electronic wedge brake (EWB)
B60T 2270/84	. Driver circuits for actuating motor, valve and the like
B60T 2270/86	. Optimizing braking by using ESP vehicle or tire model
B60T 2270/88	. Pressure measurement in brake systems
B60T 2270/89	. Criteria for brake release