

# CPC COOPERATIVE PATENT CLASSIFICATION

## B PERFORMING OPERATIONS; TRANSPORTING

(NOTES omitted)

### TRANSPORTING

#### B60 VEHICLES IN GENERAL

(NOTE omitted)

#### B60K ARRANGEMENT OR MOUNTING OF PROPULSION UNITS OR OF TRANSMISSIONS IN VEHICLES; ARRANGEMENT OR MOUNTING OF PLURAL DIVERSE PRIME-MOVERS IN VEHICLES; AUXILIARY DRIVES FOR VEHICLES; INSTRUMENTATION OR DASHBOARDS FOR VEHICLES; ARRANGEMENTS IN CONNECTION WITH COOLING, AIR INTAKE, GAS EXHAUST OR FUEL SUPPLY OF PROPULSION UNITS, IN VEHICLES

##### NOTES

- In this subclass, the following terms or expressions are used with the meanings indicated:
  - "conjoint control of drive units" includes such control for vehicles or of general applicability;
  - "auxiliary drives" means drives of auxiliary or external machines or devices from the propulsion unit, transmission, or other parts of the vehicle, and includes the control of such drives;
  - "transmission" means all propulsion parts linking propulsion units, e.g. engines, to ultimate propulsive elements, e.g. wheels;
  - "drive unit" means propulsion unit conjoint with transmission, a "drive unit" can additionally include the ultimate driven unit;
  - "sub-unit" means, e.g. propulsion unit, clutch, gearing or brake system;
  - "hybrid vehicle" means vehicles with plural diverse prime-movers for mutual or common propulsion
- Attention is drawn to the Note following the title of class [B60](#)

**Arrangement or mounting of propulsion units in vehicles** (of control devices for such units [B60K 26/00](#); elastic mountings [per se F16F](#); propulsion units or their control [per se](#), see the relevant classes)

**1/00 Arrangement or mounting of electrical propulsion units** ([B60K 7/00](#) takes precedence; arrangement or mounting of plural diverse prime-movers for mutual or common propulsion [B60K 6/00](#); electric transmission arrangements [B60K 17/12](#); electric equipment or propulsion of electrically-propelled vehicles [per se B60L](#); current-collectors for power supply lines of electrically-propelled vehicles [B60L 5/00](#))

- |           |   |
|-----------|---|
| 2001/001  | . {one motor mounted on a propulsion axle for rotating right and left wheels of this axle}  |
| 2001/003  | . {with means for cooling the electrical propulsion units}  |
| 2001/005  | . . {the electric storage means}  |
| 2001/006  | . . {the electric motors}   |
| 2001/008  | . {with means for heating the electrical propulsion units}  |
| 1/02      | . comprising more than one electric motor   |
| 1/04      | . of the electric storage means for propulsion (for auxiliary purposes only <a href="#">B60R 16/04</a> ; supplying batteries to, or removing batteries from, vehicles <a href="#">B60S 5/06</a> ) |
| 2001/0405 | . . {characterised by their position}   |
| 2001/0411 | . . . {Arrangement in the front part of the vehicle}  |
| 2001/0416 | . . . {Arrangement in the rear part of the vehicle}   |
| 2001/0422 | . . . {Arrangement under the front seats}   |

- |           |   |
|-----------|---|
| 2001/0427 | . . . {Arrangement between the seats}               |
| 2001/0433 | . . . {Arrangement under the rear seats}            |
| 2001/0438 | . . . {Arrangement under the floor}                 |
| 2001/0444 | . . . {Arrangement on a trailer}                    |
| 2001/045  | . . . {Arrangement in a wheel, e.g. a spare wheel}  |
| 2001/0455 | . . {Removal or replacement of the energy storages} |
| 2001/0461 | . . . {from the side}                               |
| 2001/0466 | . . . {from above}                                  |
| 2001/0472 | . . . {from below}                                  |
| 2001/0477 | . . . {from the back}                               |
| 2001/0483 | . . . {from the front}                              |
| 2001/0488 | . . . {with arrangements for pivoting}              |
| 2001/0494 | . . . {with arrangements for sliding}               |

**3/00 Arrangement or mounting of steam or gaseous-pressure propulsion units** ([B60K 7/00](#) takes precedence; arrangement or mounting of plural diverse prime-movers for mutual or common propulsion [B60K 6/00](#); gaseous-pressure transmission arrangements [B60K 17/10](#))

- |      |                   |
|------|-------------------|
| 3/02 | . of piston type  |
| 3/04 | . of turbine type |

**5/00 Arrangement or mounting of internal-combustion or jet-propulsion units** ([B60K 7/00](#) takes precedence; arrangement or mounting of plural diverse prime-movers for mutual or common propulsion [B60K 6/00](#))

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|----------|--|
| 2005/003 | . {the internal combustion or jet propulsion unit is arranged between the front and the rear axle} |
|----------|--|

2005/006	<ul style="list-style-type: none"> <li>• {the internal combustion or jet propulsion unit is arranged behind the rear axle}</li> </ul>				
5/02	<ul style="list-style-type: none"> <li>• with the engine main axis, e.g. crankshaft axis, substantially in or parallel to the longitudinal centre line of the vehicle</li> </ul>				
5/04	<ul style="list-style-type: none"> <li>• with the engine main axis, e.g. crankshaft axis, transversely to the longitudinal centre line of the vehicle</li> </ul>				
5/06	<ul style="list-style-type: none"> <li>• . . with the engine main axis substantially vertical</li> </ul>				
5/08	<ul style="list-style-type: none"> <li>• comprising more than one engine</li> </ul>				
5/10	<ul style="list-style-type: none"> <li>• providing for ready detachment of engine</li> </ul>				
5/12	<ul style="list-style-type: none"> <li>• Arrangement of engine supports {(supports comprising both a plastic spring and a fluid damper <a href="#">F16F 13/06</a>)}</li> </ul>				
5/1208	<ul style="list-style-type: none"> <li>• . . {Resilient supports (<a href="#">B60K 5/1241</a> - <a href="#">B60K 5/1291</a> take precedence)}</li> </ul>				
5/1216	<ul style="list-style-type: none"> <li>• . . . {characterised by the location of the supports relative to the motor or to each other (<a href="#">B60K 5/1225</a> takes precedence)}</li> </ul>	6/08			
5/1225	<ul style="list-style-type: none"> <li>• . . . {comprising resilient rings surrounding a part of the unit}</li> </ul>	6/10			
5/1233	<ul style="list-style-type: none"> <li>• . . . {comprising protective elements, e.g. for protecting against heat, dust}</li> </ul>	6/105			
5/1241	<ul style="list-style-type: none"> <li>• . . {Link-type support (<a href="#">B60K 5/125</a>, <a href="#">B60K 5/1275</a> take precedence)}</li> </ul>	6/12			
5/125	<ul style="list-style-type: none"> <li>• . . {Telescopic supports, e.g. telescopic dampers (<a href="#">B60K 5/1275</a> takes precedence)}</li> </ul>	2006/123			
5/1258	<ul style="list-style-type: none"> <li>• . . {Wire-type supports (<a href="#">B60K 5/1275</a> takes precedence)}</li> </ul>	2006/126			
5/1266	<ul style="list-style-type: none"> <li>• . . {Supports comprising friction damping devices (<a href="#">B60K 5/125</a>, <a href="#">B60K 5/1283</a> take precedence)}</li> </ul>	6/20			
5/1275	<ul style="list-style-type: none"> <li>• . . {Plastically deformable supports}</li> </ul>				
5/1283	<ul style="list-style-type: none"> <li>• . . {Adjustable supports, e.g. the mounting or the characteristics being adjustable}</li> </ul>				
5/1291	<ul style="list-style-type: none"> <li>• . . {Supports comprising stoppers}</li> </ul>				
<b>6/00</b>	<p><b>Arrangement or mounting of plural diverse prime-movers for mutual or common propulsion, e.g. hybrid propulsion systems comprising electric motors and internal combustion engines ; Control systems therefor, i.e. systems controlling two or more prime movers, or controlling one of these prime movers and any of the transmission, drive or drive units (arrangement or mounting in vehicles of electrical gearing, in which an electrical machine serves only as reduction gearing and not as the prime mover and in which no electrical storing means are used <a href="#">B60K 17/12</a>; control and regulation of purely electrical prime movers <a href="#">B60L</a>; prime-movers comprising electrical and internal combustion motors in a common engine block or housing <i>per se</i> <a href="#">F02B 65/00</a>; electric motors or motor-generators used for starting the combustion engine <a href="#">F02N 11/04</a>; electric motors for synchronising gearing <a href="#">F16H 3/12</a> )}{<b>Informative references: mechanical gearings with secondary electric drive <a href="#">F16H 3/72</a>; arrangements for handling mechanical energy structurally associated with the dynamo-electric machine <a href="#">H02K 7/00</a>; machines comprising structurally interrelated motor and generator parts <a href="#">H02K 51/00</a>; dynamo-electric machines not otherwise provided for in <a href="#">H02K</a> see <a href="#">H02K 99/00</a></b>}</b></p>				
	<b>NOTE</b>				
	In this subgroup, the following expressions are used, with the meanings indicated :				
		6/22	<ul style="list-style-type: none"> <li>• . . characterised by apparatus, components or means specially adapted for HEVs</li> </ul>		
		6/24	<ul style="list-style-type: none"> <li>• . . . characterised by the combustion engines</li> </ul>		
		6/26	<ul style="list-style-type: none"> <li>• . . . characterised by the motors or the generators</li> </ul>		
		2006/262	<ul style="list-style-type: none"> <li>• . . . . {the motor or generator are used as clutch, e.g. between engine and driveshaft}</li> </ul>		
		2006/264	<ul style="list-style-type: none"> <li>• . . . . {with outer rotor and inner stator}</li> </ul>		
		2006/266	<ul style="list-style-type: none"> <li>• . . . . {with two coaxial motors or generators}</li> </ul>		
		2006/268	<ul style="list-style-type: none"> <li>• . . . . {Electric drive motor starts the engine, i.e. used as starter motor}</li> </ul>		
		6/28	<ul style="list-style-type: none"> <li>• . . . characterised by the electric energy storing means, e.g. batteries or capacitors</li> </ul>		
		6/30	<ul style="list-style-type: none"> <li>• . . . characterised by chargeable mechanical accumulators, e.g. flywheels</li> </ul>		
		6/32	<ul style="list-style-type: none"> <li>• . . . characterised by the fuel cells</li> </ul>		
		6/34	<ul style="list-style-type: none"> <li>• . . . characterised by the absence of energy storing means</li> </ul>		
		6/36	<ul style="list-style-type: none"> <li>• . . . characterised by the transmission gearings</li> </ul>		
		6/365	<ul style="list-style-type: none"> <li>• . . . . with the gears having orbital motion</li> </ul>		
		6/38	<ul style="list-style-type: none"> <li>• . . . characterised by the driveline clutches (<i>shift clutches within the gearing or transmission <a href="#">B60K 6/36</a> {, <a href="#">B60K 6/54</a>}</i>)</li> </ul>		
		2006/381	<ul style="list-style-type: none"> <li>• . . . . {characterized by driveline brakes (<i>shift brakes in transmission <a href="#">B60K 6/54</a></i>)}</li> </ul>		
		6/383	<ul style="list-style-type: none"> <li>• . . . . One-way clutches or freewheel devices</li> </ul>		

**NOTE**

When classifying in one of groups [B60K 6/22](#), [B60K 6/42](#) or [B60K 6/50](#), further technical information, which is considered to represent information of interest for search, should also be classified in the other subgroups of main group [B60K 6/00](#) to enable searching using a combination of classification symbols

6/387	. . . . Actuated clutches, i.e. clutches engaged or disengaged by electric, hydraulic or mechanical actuating means	11/02	. with liquid cooling
6/40	. . . characterised by the assembly or relative disposition of components	11/04	. . Arrangement or mounting of radiators, radiator shutters, or radiator blinds ( <a href="#">B60K 11/085</a> takes precedence)
6/405	. . . . Housings	11/06	. with air cooling
6/42	. . characterised by the architecture of the hybrid electric vehicle	11/08	. Air inlets for cooling; Shutters or blinds therefor ( <a href="#">radiator or grille guards B60R 19/52</a> )
6/44	. . . Series-parallel type	11/085	. . {with adjustable shutters or blinds}
6/442	. . . . Series-parallel switching type	<b>13/00</b>	<b>Arrangement in connection with combustion air intake or gas exhaust of propulsion units</b> (extensions for melting snow or ice on roads or like surfaces <a href="#">E01H 5/00</a> , <a href="#">E01H 6/00</a> ; forming part of the engine <a href="#">F01N</a> ; supplying combustion engines with combustible mixtures or constituents <a href="#">F02M</a> )
6/445	. . . . Differential gearing distribution type	13/02	. concerning intake
6/448	. . . . Electrical distribution type	13/04	. concerning exhaust ({collecting exhaust gases with central suction systems not forming part of vehicles, e.g. in workshops or tunnels <a href="#">B08B 15/002</a> , otherwise along carriageways <a href="#">E01C 1/005</a> ;} extensions for melting snow on roads <a href="#">E01H 5/00</a> , <a href="#">E01H 6/00</a> ; exhaust or silencing apparatus for internal combustion engines <i>per se</i> <a href="#">F01N</a> ; {pipes, joints or supports therefor <a href="#">F16L</a> })
6/46	. . . Series type		
6/48	. . . Parallel type		
2006/4808	. . . . {Electric machine connected or connectable to gearbox output shaft}		
2006/4816	. . . . {Electric machine connected or connectable to gearbox internal shaft}		
2006/4825	. . . . {Electric machine connected or connectable to gearbox input shaft}		
2006/4833	. . . . {Step up or reduction gearing driving generator, e.g. to operate generator in most efficient speed range}		
2006/4841	. . . . . {the gear provides shifting between multiple ratios}	13/06	. using structural parts of the vehicle as ducts, e.g. frame parts
6/485	. . . . Motor-assist type	<b>15/00</b>	<b>Arrangement in connection with fuel supply of combustion engines {or other fuel consuming energy converters, e.g. fuel cells}; Mounting or construction of fuel tanks</b> (tanks in general <a href="#">B65D</a> , <a href="#">F17C</a> ; supplying combustion engines with combustible mixtures or constituents <a href="#">F02M</a> )
6/50	. . Architecture of the driveline characterised by arrangement or kind of transmission units	15/01	. Arrangement of fuel conduits (chassis frame forming fluid conduit means <a href="#">B62D 21/17</a> )
6/52	. . . Driving a plurality of drive axles, e.g. four-wheel drive	15/013	. . {of gas conduits}
6/54	. . . Transmission for changing ratio	2015/016	. . {Fuel conduits having more than one internal passage, e.g. for different types of fuel}
2006/541	. . . . {without reverse ratio using instead electric reversing}	15/03	. Fuel tanks (chassis frame comprising fluid storage compartment <a href="#">B62D 21/16</a> {; Details of the fuel feeding system related to the fuel tank <a href="#">F02M 37/0076</a> })
2006/542	. . . . {with overdrive ratio}		
6/543	. . . . the transmission being a continuously variable transmission	15/03006	. . {Gas tanks ( <a href="#">B60K 15/07</a> takes precedence)}
6/547	. . . . the transmission being a stepped gearing	2015/03013	. . . {Control systems for LPG tanks}
<b>7/00</b>	<b>Disposition of motor in, or adjacent to, traction wheel</b> ( <a href="#">roller-skate driving mechanisms A63C 17/12</a> )	2015/03019	. . . {Filling of gas tanks}
7/0007	. {the motor being electric}	2015/03026	. . . {comprising a valve}
7/0015	. {the motor being hydraulic}	2015/03032	. . {Manufacturing of fuel tanks}
7/0023	. {the motor being pneumatic}	2015/03039	. . . {made of a combination of non metallic and metallic materials}
2007/003	. {with two or more motors driving a single wheel}	2015/03046	. . . {made from more than one layer}
2007/0038	. {the motor moving together with the wheel axle}	2015/03052	. . . {Fuel tanks made of two balloons, one inside the other}
2007/0046	. {the motor moving together with the vehicle body, i.e. moving independently from the wheel axle}	2015/03059	. . . {Fuel tanks with double shells or more}
2007/0053	. {the motor moving relative to the vehicle body and to the wheel axle}	2015/03065	. . . . {with material filled between the walls}
2007/0061	. {the motor axle being parallel to the wheel axle}	2015/03072	. . {Arrangements for reducing evaporation}
2007/0069	. {the motor axle being perpendicular to the wheel axle}	2015/03078	. . . {Membranes, layers or the like covering the surface of the fuel}
2007/0076	. . {the motor axle being horizontal}	2015/03085	. . . . {using inflatable bags or bladders in the tanks}
2007/0084	. . {the motor axle being vertical}	2015/03092	. . {with latent heat storages to reduce the evaporation of fuel}
2007/0092	. {the motor axle being coaxial to the wheel axle}	2015/03098	. . {with a device for mixing liquids in the fuel tank, e.g. for mixing oil and fuel}
<b>8/00</b>	<b>Arrangement or mounting of propulsion units not provided for in one of the preceding main groups</b>	2015/03105	. . {with supplementary interior tanks inside the fuel tank}
<b><u>Arrangements in connection with cooling, air intake, gas exhaust, fuel supply, or power supply of propulsion units in vehicles</u></b>			
<b>11/00</b>	<b>Arrangement in connection with cooling of propulsion units</b> (heating the interior space <a href="#">B60H</a> ; cooling internal combustion engines <i>per se</i> <a href="#">F01P</a> )		

- 2015/03111 . . {Swirl pots}
- 2015/03118 . . {Multiple tanks, i.e. two or more separate tanks ([supplementary tanks inside the fuel tank B60K 2015/03105](#))}
- 2015/03125 . . . {Suction lines for dual tanks}
- 2015/03131 . . . {Systems for filling dual tanks}
- 2015/03138 . . . {Pumping means between the compartments}
- 2015/03144 . . . {Fluid connections between the tanks}
- 2015/03151 . . . {Mechanical connection between the tanks}
- 2015/03157 . . . {for supply different types of fuel to the motor}
- 2015/03164 . . {Modular concepts for fuel tanks}
- 2015/03171 . . {Expansion tanks}
- 15/03177 . . {made of non-metallic material, e.g. plastics, or of a combination of non-metallic and metallic material ([B60K 15/03006 takes precedence](#))}
- 2015/03184 . . {Exchangeable tanks, i.e. the empty tank is replaced by refilled tank}
- 2015/0319 . . {with electronic systems, e.g. for controlling fuelling or venting ([for LPG tanks B60K 2015/03013](#))}
- 2015/03197 . . . {Systems for exchanging data}
- 2015/03203 . . . . {during refueling}
- 2015/0321 . . {characterised by special sensors, the mounting thereof}
- 2015/03217 . . . {Fuel level sensors}
- 2015/03223 . . . . {comprising at least two level fuel sensors}
- 2015/0323 . . . {Sensors for detecting presence or absence of the filling nozzle}
- 2015/03236 . . {characterised by special filters, the mounting thereof}
- 2015/03243 . . {characterised by special pumps, the mounting thereof}
- 2015/0325 . . . {Jet pumps}
- 2015/03256 . . {characterised by special valves, the mounting thereof}
- 2015/03263 . . . {Ball valves}
- 2015/03269 . . . {Flap valves}
- 2015/03276 . . . {Valves with membranes}
- 2015/03282 . . . {Umbrella type valves}
- 2015/03289 . . . {Float valves; Floats therefor}
- 2015/03296 . . . {Pressure regulating valves}
- 2015/03302 . . . {Electromagnetic valves}
- 2015/03309 . . {Tanks specially adapted for particular fuels}
- 2015/03315 . . . {for hydrogen}
- 2015/03322 . . . {for methanol}
- 2015/03328 . . {Arrangements or special measures related to fuel tanks or fuel handling}
- 2015/03335 . . . {for fast filling of fuel tanks, e.g. specific filler pipes for pressurised fuelling}
- 2015/03342 . . . {to allow automatic or robotised filling of the tank}
- 2015/03348 . . . {for supplying additives to fuel}
- 2015/03355 . . . {for supplying different types of fuel}
- 2015/03361 . . . {for checking the quality or quantity of fuel during filling of fuel tank}
- 2015/03368 . . . {for preventing overfilling of tanks}
- 2015/03375 . . . {to improve security}
- 2015/03381 . . . {for preventing explosions}
- 2015/03388 . . . {in case of a roll over of the vehicle}
- 2015/03394 . . . {for preventing expulsion of fuel during filling of the tank}
- 2015/03401 . . . {for preventing electrostatic charges}
- 2015/03407 . . . {to protect tanks against projectiles}
- 2015/03414 . . . . {associated with the fuel tank for cooling heated fuel}
- 2015/03421 . . . . {to protect the fuel tank against heat}
- 2015/03427 . . . . {for heating fuel, e.g. to avoiding freezing}
- 2015/03434 . . . . {for preventing theft of fuel ([locks for filler caps B60K 15/0409](#); [locking of the inlet cover B60K 2015/0561](#))}
- 2015/0344 . . . . {comprising baffles}
- 2015/03447 . . . . {for improving the sealing}
- 2015/03453 . . . . {for fixing or mounting parts of the fuel tank together}
- 2015/0346 . . . . . {by welding}
- 2015/03467 . . . . . {by clip or snap fit fittings}
- 2015/03473 . . . . {for draining or emptying a fuel tank}
- 2015/0348 . . . . {for returning the fuel from the motor}
- 2015/03486 . . {characterised by the materials the tank or parts thereof are essentially made from}
- 2015/03493 . . . . {made of plastics}
- 15/035 . . . characterised by venting means
- 15/03504 . . . . {adapted to avoid loss of fuel or fuel vapour, e.g. with vapour recovery systems}
- 2015/03509 . . . . . {with a droplet separator in the vent line}
- 2015/03514 . . . . . {with vapor recovery means}
- 15/03519 . . . . {Valve arrangements in the vent line}
- 2015/03523 . . . . {Arrangements of the venting tube}
- 2015/03528 . . . . . {Mounting of venting tubes}
- 2015/03533 . . . . . {the venting tube being movable with the fuel level}
- 2015/03538 . . . . . {the venting tube being connected with the filler tube}
- 2015/03542 . . . . {Mounting of the venting means ([mounting of venting tubes B60K 2015/03528](#))}
- 2015/03547 . . . . . {the venting means are integrated in the fuel cap or inlet cover}
- 2015/03552 . . . . . {the venting means are integrated into the fuel filler pipe}
- 2015/03557 . . . . . {comprising elements of the venting device integrated in the fuel tank, e.g. vapor recovery means}
- 2015/03561 . . . . {Venting means working at specific times}
- 2015/03566 . . . . . {comprising means for stopping the venting of fuel vapor, e.g. during refueling or engine stop}
- 2015/03571 . . . . . {Venting during driving}
- 2015/03576 . . . . . {Venting during filling the reservoir}
- 2015/0358 . . . . {the venting is actuated by specific signals or positions of particular parts}
- 2015/03585 . . . . . {by gas pressure}
- 2015/0359 . . . . . {by filler cap or inlet cover position}
- 2015/03595 . . . . . {by filler nozzle}
- 15/04 . . . Tank inlets ([B60K 15/077 takes precedence](#))
- 15/0403 . . . . {Anti-siphoning devices}
- 15/0406 . . . . {Filler caps for fuel tanks}
- 15/0409 . . . . . {Provided with a lock}
- 2015/0412 . . . . . {the key can only be withdrawn when the cap is placed on the filler neck}
- 2015/0416 . . . . . {electrically actuated}
- 2015/0419 . . . . . {Self-sealing closure caps, e.g. that don't have to be removed manually}
- 2015/0422 . . . . . {actuated by the inlet cover}
- 2015/0425 . . . . . {actuated by a motor}
- 2015/0429 . . . . . {actuated by the nozzle}



- 2015/0432 . . . . {having a specific connection between the cap and the vehicle or tank opening}
- 2015/0435 . . . . . {using a sliding connection}
- 2015/0438 . . . . . {using screw or bayonet}
- 2015/0441 . . . . . {with torque control}
- 2015/0445 . . . . . {using hinges}
- 2015/0448 . . . . {comprising spherical valve type closures}
- 2015/0451 . . . . {Sealing means in the closure cap}
- 2015/0454 . . . . {combined closing of the fuel inlet and bodywork inlet by one element which is visible from outside}
- 2015/0458 . . . {Details of the tank inlet}
- 2015/0461 . . . . {comprising a filler pipe shutter, e.g. trap, door or flap for fuel inlet}
- 2015/0464 . . . . {comprising a flexible or extendable filler pipes, e.g. corrugated, foldable or with bellows}
- 2015/0467 . . . . {Fuel tanks with more than one filler pipe}
- 2015/047 . . . . {Manufacturing of the fuel inlet or connecting elements to fuel inlet, e.g. pipes or venting tubes}
- 2015/0474 . . . . {Arrangement of fuel filler pipes in relation to vehicle body}
- 2015/0477 . . . . {Details of the filler neck tank side}
- 2015/048 . . . . {Arrangements for sealing the fuel inlet during filling}
- 2015/0483 . . . . {Means to inhibit the introduction of too small or too big filler nozzles}
- 2015/0487 . . . . {Means to shield vehicle bodywork from fuel, e.g. during filling}
- 2015/049 . . . . {Means for determining the position of the filler nozzle in the filler pipe}
- 2015/0493 . . . . {Means for checking absence or presence of closure cap}
- 2015/0496 . . . . {the fuel inlet being arranged on the top of the fuel tank}
- 15/05 . . . . Inlet covers
- 2015/0507 . . . . {Arrangements for adjusting the inlet cover}
- 2015/0515 . . . . {Arrangements for closing or opening of inlet cover ([locking means B60K 2015/0561](#))}
- 2015/0523 . . . . . {with sliding connection to the vehicle body}
- 2015/053 . . . . . {with hinged connection to the vehicle body}
- 2015/0538 . . . . . {with open or close mechanism automatically actuated}
- 2015/0546 . . . . {Arrangements for checking the position of the inlet cover}
- 2015/0553 . . . . {Details concerning the inlet box or bowl in the vehicle car body panel}
- 2015/0561 . . . . {Locking means for the inlet cover}
- 2015/0569 . . . . . {with actuator fixed to the inlet cover}
- 2015/0576 . . . . . {with actuator fixed to the vehicle body}
- 2015/0584 . . . . . {the locking bolt is linearly moved to lock or unlock}
- 2015/0592 . . . . {with storage means for the cap}
- 15/06 . . . . characterised by fuel reserve systems
- 15/061 . . . . {with level control}
- 2015/062 . . . . {Arrangement for filling the fuel reserve systems}
- 15/063 . . . . Arrangement of tanks

- 2015/0631 . . . . {the fuel tank forming at least part of the vehicle floor}
- 2015/0632 . . . . {the fuel tank is arranged below the front seat}
- 2015/0633 . . . . {the fuel tank is arranged below the rear seat}
- 2015/0634 . . . . {the fuel tank is arranged below the vehicle floor}
- 2015/0635 . . . . {the fuel tank is arranged between the seats}
- 2015/0636 . . . . {the fuel tank being part of the chassis or frame}
- 2015/0637 . . . . {the fuel tank is arranged in the front of the vehicle}
- 2015/0638 . . . . {the fuel tank is arranged in the rear of the vehicle}
- 2015/0639 . . . . {the fuel tank is arranged near or in the roof}
- 15/067 . . . . Mounting of tanks
- 2015/0675 . . . . . {allowing deflection movements of the tank in case of a crash}
- 15/07 . . . . . of gas tanks
- 15/073 . . . . Tank construction specially adapted to the vehicle ([B60K 15/077](#) takes precedence)
- 15/077 . . . . with means modifying or controlling distribution or motion of fuel, e.g. to prevent noise, surge, splash or fuel starvation
- 2015/0772 . . . . {Floats in the fuel tank ([float valves B60K 2015/03289](#))}
- 2015/0775 . . . . {for reducing movement or slash noise of fuel}
- 2015/0777 . . . . {in-tank reservoirs or baffles integrally manufactured with the fuel Tank}
- 15/10 . . . . concerning gas-producing plants

**16/00 Arrangements in connection with power supply of propulsion units in vehicles from force of nature, e.g. sun or wind** ([electric propulsion with power supply from force of nature, e.g. sun or wind, B60L 8/00](#); effecting propulsion by wind motors driving water-engaging propulsive elements [B63H 13/00](#); wind motors specially adapted for installation on vehicles [F03D 9/32](#))

**WARNING**

Group [B60K 16/00](#) is impacted by reclassification into group [F03D 9/32](#).  
Groups [B60K 16/00](#) and [F03D 9/32](#) should be considered in order to perform a complete search.

- 2016/003 . . . {solar power driven}
- 2016/006 . . . {wind power driven}

**Arrangement or mounting of transmissions or their control in vehicles** ([torque-transmitting axles B60B](#); [combined transmission and steering gear for steering non-deflectable wheels B62D](#))

- 17/00 Arrangement or mounting of transmissions in vehicles** ([clutches per se, e.g. construction thereof, F16D](#); [gearing per se, e.g. construction thereof, F16H](#))
- 17/02 . . . characterised by arrangement, location, or kind of clutch
- 17/04 . . . characterised by arrangement, location, or kind of gearing ([electric equipment or propulsion of electrically-propelled vehicles B60L](#))
- 17/043 . . . {Transmission unit disposed in on near the vehicle wheel, or between the differential gear unit and the wheel}
- 17/046 . . . . {with planetary gearing having orbital motion}

17/06	. . of change-speed gearing ( <a href="#">B60K 17/10</a> - <a href="#">B60K 17/16</a> take precedence)	17/354	. . having separate mechanical assemblies for transmitting drive to the front or to the rear wheels or set of wheels
17/08	. . . of mechanical type	17/356	. . having fluid or electric motor, for driving one or more wheels ( <a href="#">disposition of motor in, or adjacent to, traction wheel B60K 7/00</a> )
17/10	. . of fluid gearing ( <a href="#">of fluid clutches B60K 17/02</a> )	17/358	. . {all driven wheels being steerable}
17/105	. . . {Units comprising at least a part of the gearing and a torque-transmitting axle, e.g. transaxles ( <a href="#">B60K 17/14</a> takes precedence)}	17/36	. for driving tandem wheels
17/12	. . of electric gearing ( <a href="#">of electrically-actuated clutches B60K 17/02</a> )	<b>20/00</b>	<b>Arrangement or mounting of change-speed gearing control devices in vehicles (movable cabs having special adaptations of vehicle control devices <a href="#">B62D 33/06</a>; such control devices per se <a href="#">F16H</a>)</b>
17/14	. . the motor of fluid or electric gearing being disposed in or adjacent to traction wheel ( <a href="#">B60K 7/00</a> takes precedence)	20/02	. of initiating means ( <a href="#">control mechanisms in general G05G</a> )
17/145	. . . {the electric gearing being disposed in or adjacent to traction wheel}	20/04	. . floor mounted
17/16	. . of differential gearing	20/06	. . mounted on steering column or the like
17/165	. . . {provided between independent half axles ( <a href="#">B60K 17/18</a> , <a href="#">B60K 17/20</a> take precedence)}	20/08	. . Dashboard means
17/18	. . . {in which the differential movement is obtained by resilient means}		<b><u>WARNINGS</u></b>
17/20	. . . {in which the differential movement is limited}		1. The groups <a href="#">F16H 59/00</a> - <a href="#">F16H 63/00</a> were introduced on 1 May, 1988. These groups include the subject matter of <a href="#">B60K 20/14</a> , which from this date is no longer used for the classification of new documents
17/22	. characterised by arrangement, location, or type of main drive shafting, e.g. cardan shaft		2. Documents from the backlog of group <a href="#">B60K 20/14</a> are in the process of being systematically transferred to groups <a href="#">F16H 59/00</a> - <a href="#">F16H 63/00</a>
17/24	. . Arrangements of mountings for shafting	20/14	. . {fluid}
17/26	. characterised by arrangement, location, of type of freewheel device	<b>23/00</b>	<b>Arrangement or mounting of control devices for vehicle transmissions, or parts thereof, not otherwise provided for (movable cabs having special adaptations of vehicle control devices <a href="#">B62D 33/06</a>; such control devices per se <a href="#">F16D</a>, <a href="#">F16H</a>)</b>
17/28	. characterised by arrangement, location, or type of power take-off	2023/005	. {Adjusting multiple pedals, e.g. for their initial position}
17/30	. the ultimate propulsive elements, e.g. ground wheels, being steerable	23/02	. for main transmission clutches
17/303	. . {with a gearwheel on the steering knuckle or kingpin axis}	2023/025	. . {Adjusting of clutch pedal positions ( <a href="#">clutch adjustment for removing slack F16D 13/75</a> )}
17/306	. . {with a universal joint in the axis of the steering knuckle}	23/04	. for differential gearing
17/32	. the ultimate propulsive elements, e.g. ground wheels, being rockable about a horizontal pivot	2023/043	. . {Control means for varying left-right torque distribution, e.g. torque vectoring}
17/34	. for driving both front and rear wheels, e.g. four wheel drive vehicles ( <a href="#">arrangement or mounting of control devices for changing number of driven wheels B60K 23/08</a> )	2023/046	. . {Axle differential locking means}
17/342	. . having a longitudinal, endless element, e.g. belt or chain, for transmitting drive to wheels	23/06	. for freewheel devices
17/344	. . having a transfer gear	23/08	. for changing number of driven wheels {, for switching from driving one axle to driving two or more axles ( <a href="#">B60K 17/3515</a> takes precedence)}
17/346	. . . the transfer gear being a differential gear	23/0808	. . {for varying torque distribution between driven axles, e.g. by transfer clutch}
17/3462	. . . . {with means for changing distribution of torque between front and rear wheels}	2023/0816	. . . {for varying front-rear torque distribution with a central differential}
17/3465	. . . . . {self-actuated means, e.g. differential locked automatically by difference of speed}	2023/0825	. . . . {for adding torque to the front wheels}
17/3467	. . . . . {combined with a change speed gearing, e.g. range gear}	2023/0833	. . . . {for adding torque to the rear wheels}
17/348	. . having differential means for driving one set of wheels, e.g. the front, at one speed and the other set, e.g. the rear, at a different speed ( <a href="#">B60K 17/346</a> takes precedence)	2023/0841	. . . . {for locking a central differential, e.g. by using a lock-up clutch}
17/35	. . . including arrangements for suppressing or influencing the power transfer, e.g. viscous clutches ( <a href="#">differential gearing with locking devices F16H 48/20</a> )	2023/085	. . {automatically actuated}
17/3505	. . . . . {with self-actuated means, e.g. by difference of speed}	2023/0858	. . . {with electric means, e.g. electro-hydraulic means}
17/351	. . . . . {comprising a viscous clutch}	2023/0866	. . . {with hydraulic means only}
17/3515	. . . . . {with a clutch adjacent to traction wheel, e.g. automatic wheel hub}	2023/0875	. . . {with mechanical means only}
17/352	. . . . . {manually operated}	2023/0883	. . {manually actuated}

2023/0891	. . . {with actuator levers, e.g. shift levers or linkage for changing two-wheel to four-wheel drive}	28/04	. . responsive to presence or absence of the driver, e.g. to weight or lack thereof
<b>25/00</b>	<b>Auxiliary drives</b> ( <a href="#">B60K 16/00</a> takes precedence; arrangements of tyre-inflating pumps mounted on vehicles <a href="#">B60C 23/10</a> ; driving tyre-inflating pumps <a href="#">B60C</a> ; driving engine auxiliaries <a href="#">F02B</a> )	28/06	. . responsive to incapacity of driver
2025/005	. {driven by electric motors forming part of the propulsion unit}	28/063	. . . {preventing starting of vehicles}
25/02	. directly from an engine shaft	28/066	. . . {actuating a signalling device ( <a href="#">B60K 28/063</a> takes precedence)}
2025/022	. . {by a mechanical transmission}	28/08	. responsive to conditions relating to the cargo, e.g. overload {(see provisionally also <a href="#">B60K 28/00</a> )}
2025/024	. . . {with variable ratio}	28/10	. responsive to conditions relating to the vehicle {(see provisionally also <a href="#">B60K 28/00</a> )}
2025/026	. . {by a hydraulic transmission}	28/12	. . responsive to conditions relating to doors or doors locks, e.g. open door {(see provisionally also <a href="#">B60K 28/00</a> )}
2025/028	. . {by a pneumatic transmission}	28/14	. . responsive to accident or emergency, e.g. deceleration, tilt of vehicle
25/04	. from static or dynamic pressure or vacuum, developed by the engine	28/16	. . responsive to, or preventing, skidding of wheels ( <a href="#">brake control systems for vehicle drive stability B60T 8/1755</a> ; arrangements responsive to a speed condition for adjusting wheel braking force <a href="#">B60T 8/32</a> ; control of vehicle driving stability otherwise than by controlling the propulsion unit only <a href="#">B60W 30/02</a> ; preventing wheel slippage by reducing power in rail vehicles <a href="#">B61C 15/00</a> )
2025/065	. . {the transmission being fluidic, e.g. hydraulic}	28/165	. . . {acting on elements of the vehicle drive train other than the propulsion unit and brakes, e.g. transmission, clutch, differential (acting on brakes <a href="#">B60T 8/17</a> )}
25/08	. from a ground wheel, e.g. engaging the wheel tread or rim		
25/10	. directly from oscillating movements due to vehicle running motion, e.g. suspension movement ( <a href="#">resilient suspensions having dampers accumulating utilisable energy, e.g. compressing air, B60G 13/14</a> )	<b>31/00</b>	<b>Vehicle fittings, acting on a single sub-unit only, for automatically controlling, i.e. preventing speed from exceeding an arbitrarily established velocity or maintaining speed at a particular velocity, as selected by the vehicle operator (fittings acting on two or more sub-units <a href="#">B60W 30/14</a>; propulsion unit control in general, see the relevant classes or subclasses, e.g. <a href="#">F02D</a>; speedometers <a href="#">G01P</a>; systems or devices for controlling speed in general <a href="#">G05D 13/00</a>; {in traffic anti-collision system for road vehicles <a href="#">G08G 1/16</a>)}</b>
2025/103	. . {by electric means}		
2025/106	. . {by fluid means}		
<b>26/00</b>	<b>Arrangements or mounting of propulsion unit control devices in vehicles</b>		
26/02	. of initiating means or elements		
26/021	. . {with means for providing feel, e.g. by changing pedal force characteristics}		
2026/022	. . . {with tactile feedback from a controller, e.g. vibrations}		
2026/023	. . . {with electrical means to generate counter force or torque}		
2026/024	. . {Adjustable consoles, e.g. for changing position of mounting casings}		
2026/025	. . {Input devices for controlling electric drive motors}		
2026/026	. . {Adjusting of accelerator pedal positions}		
2026/027	. . {Acceleration input members mounted on a seat}		
2026/028	. . {Acceleration input members mounted on steering wheel or column}		
2026/029	. . {Joystick type control devices for acceleration}		
26/04	. of means connecting initiating means or elements to propulsion unit		
2026/043	. . {with mechanical gearings}		
2026/046	. . {with electrical transmission means}		
<b>28/00</b>	<b>Safety devices for propulsion-unit control, specially adapted for, or arranged in, vehicles, e.g. preventing fuel supply or ignition in the event of potentially dangerous conditions (for electrically-propelled vehicles <a href="#">B60L 3/00</a>; road vehicle drive control systems for purposes not related to the control of a particular sub-units <a href="#">B60W 30/00</a>)</b>		
2028/003	. {inhibiting the starter motor, e.g. by controlling ignition or park lock circuits}	31/0008	. {including means for detecting potential obstacles in vehicle path}
2028/006	. {disconnecting the electric power supply, e.g. the vehicle battery}	2031/0016	. . {Identification of obstacles; Selection of a target vehicle}
28/02	. responsive to conditions relating to the driver {(see provisionally also <a href="#">B60K 28/00</a> )}	2031/0025	. . {Detecting position of target vehicle, e.g. vehicle driving ahead from host vehicle}
		2031/0033	. . {Detecting longitudinal speed or acceleration of target vehicle}
		2031/0041	. . {Detecting lateral speed of target vehicle}

**NOTE**

In this group:

- the means ordinarily includes a device, e.g. a servomechanism, for operating a velocity-affecting element of the vehicle, e.g. the throttle;
- a means for preventing a vehicle from exceeding a particular speed is often referred to as a "governor", whereas a means for maintaining the vehicle within a relatively narrow speed range is generally designated as "speed control". Since these two functions are frequently interrelated, no attempt has been made to identify such means as being particularly adapted to perform only one, or the other of the functions.

2031/005	. . {Selecting more than one target vehicle, e.g. using several preceding vehicles as target}	37/02	. Arrangement of instruments ( <a href="#">arrangement of lighting devices for dashboards B60Q 3/10</a> )
31/0058	. {responsive to externally generated signalling}	37/04	. Arrangement of fittings on dashboard ( <a href="#">of instruments B60K 37/02</a> )
31/0066	. {responsive to vehicle path curvature}	37/06	. . of controls, e.g. controls knobs
31/0075	. . {responsive to vehicle steering angle}	<b>41/00</b>	<b>{Conjoint control of drive units; Conjoint control of at least two sub-units thereof}</b> ( <a href="#">arrangement of plural diverse prime-movers for mutual or common propulsion B60K 6/00</a> )
31/0083	. . {responsive to centrifugal force acting on vehicle due to the path it is following}		<b>NOTES</b>
2031/0091	. {Speed limiters or speed cutters}		1. The control of a single sub-unit is classified in the relevant class for the sub-unit. Where a single sub-unit is controlled by means of signals or commands from other sub-units the control of this single sub-unit is classified in the relevant class for this sub-unit. For instance, the control of variable-ratio gearing by means of signals from the engine or { from another sub-unit influenced by } the accelerator is classified in subclass <a href="#">F16H</a>
31/02	. including electrically actuated servomechanism {including an electric control system or a servomechanism in which the vehicle velocity affecting element is actuated electrically}		2. Conjoint control of drive units, e.g. propulsion units, and variable-ratio gearing occurring only transiently during ratio shift and being also characterised by the control of the gearing is classified in subclass <a href="#">F16H</a>
31/04	. . and means for comparing one electrical quantity, e.g. voltage, pulse, waveform, flux, or the like, with another quantity of a like kind, which comparison means is involved in the development of an electrical signal which is fed into the controlling means		<b>WARNING</b>
31/042	. . . {where at least one electrical quantity is set by the vehicle operator}		This group and its subgroups are no longer used for the classification of new documents as from January 1st, 2006. The backlog of these groups is being continuously reclassified to the relevant groups of <a href="#">B60W</a> .
31/045	. . . . {in a memory, e.g. a capacitor}		
31/047	. . . . {the memory being digital}		
31/06	. including fluid pressure actuated servomechanism {in which the vehicle velocity affecting element is actuated by fluid pressure}		
31/08	. . and one or more electrical components for establishing or regulating input pressure		
31/10	. . and means for comparing one electrical quantity, e.g. voltage, pulse, waveform, flux, or the like, with another quantity of a like kind, which comparison means is involved in the development of a pressure which is fed into the controlling means		
31/102	. . . {where at least one electrical quantity is set by the vehicle operator}	41/002	. {Changing foot controls into hand controls, e.g. for invalid people}
31/105	. . . . {in a memory, e.g. a capacitor}	41/004	. {using electrical means}
31/107	. . . . {the memory being digital}	41/006	. . {with analogue circuits, relays and switches}
31/12	. including a device responsive to centrifugal forces {(centrifugal force acting on the vehicle due to the path it is following <a href="#">B60K 31/0083</a> , motor speed limiting by governors <a href="#">G05D 13/10</a> )}	41/008	. {using hydraulic or pneumatic means}
31/14	. . having an electrical switch which is caused to function by the centrifugal force	41/02	. {of propulsion unit and clutch}
31/16	. having means to prevent or discourage unauthorised use or adjusting of the controlling means {(vehicle theft prevention in general <a href="#">B60R 25/00</a> )}	41/022	. . {using electrical means}
31/18	. including a device to audibly, visibly, or otherwise signal the existence of unusual or unintended speed {to the driver of the vehicle (devices primarily intended for indicating speed to other traffic <a href="#">B60Q 1/54</a> )}	41/025	. . . {with analogue circuits, relays and switches}
31/185	. . {connected to the speedometer display, e.g. by sensors or switches responsive to the position of the indicator needle ( <a href="#">arrangement of pointers in automobile speedometers for indicating predetermined speeds by the detection of the position of the indicator needle G01P 1/11</a> )}	41/027	. . {using hydraulic or pneumatic means}
		41/04	. {of propulsion unit and gearing}
		41/042	. . {using electrical means}
		41/045	. . . {with analogue circuits, relays and switches}
		41/047	. . {using hydraulic or pneumatic means}
		41/06	. . {the gearing being stepped}
		41/062	. . . {using electrical means}
		41/065	. . . . {with analogue circuits, relays and switches}
		41/067	. . . {using hydraulic or pneumatic means}
		41/08	. . . {with interruption of the drive}
		41/082	. . . . {using electrical means}
		41/085	. . . . . {with analogue circuits, relays and switches}
		41/087	. . . . . {using hydraulic or pneumatic means}
		41/10	. . . {without interruption of the drive}
		41/102	. . . . {using electrical means}
		41/105	. . . . . {with analogue circuits, relays and switches}
		41/107	. . . . . {using hydraulic or pneumatic means}
		41/12	. . {the gearing being infinitely variable}
		41/14	. . . {of mechanical type}
		41/142	. . . . {using electrical means}
<b>Arrangement of adaptations of instruments specially for vehicles; Dashboards</b>			
<b>35/00</b>	<b>Arrangement of adaptations of instruments</b> ( <a href="#">arrangements on dashboard B60K 37/02</a> )		
<b>37/00</b>	<b>Dashboards</b> (as road-vehicle superstructure sub-unit <a href="#">B62D</a> )		



- 41/145 . . . . . {with analogue circuits, relays and switches}
- 41/147 . . . . . {using hydraulic or pneumatic means}
- 41/16 . . . . . {of fluid type}
- 41/162 . . . . . {using electrical means}
- 41/165 . . . . . {with analogue circuits, relays and switches}
- 41/167 . . . . . {using hydraulic or pneumatic means}
- 41/18 . . . . . {of electric type, e.g. electromagnetic}
- 41/20 . . . . . {of propulsion unit and brake system}
- 41/202 . . . . . {using electrical means}
- 41/205 . . . . . {with analogue circuits, relays and switches}
- 41/207 . . . . . {using hydraulic or pneumatic means}
- 41/22 . . . . . {of clutch and gearing (control of torque converter lock-up clutches F16H 61/14)}
- 41/222 . . . . . {using electrical means}
- 41/225 . . . . . {with analogue circuits, relays and switches}
- 41/227 . . . . . {using hydraulic or pneumatic means}
- 41/24 . . . . . {of clutch and brake system}
- 41/242 . . . . . {using electrical means}
- 41/245 . . . . . {with analogue circuits, relays and switches}
- 41/247 . . . . . {using hydraulic or pneumatic means}
- 41/26 . . . . . {of gearing and brake system}
- 41/262 . . . . . {using electrical means}
- 41/265 . . . . . {with analogue circuits, relays and switches}
- 41/267 . . . . . {using hydraulic or pneumatic means}
- 41/28 . . . . . {of three or more sub-units}
- 41/282 . . . . . {using electrical means}
- 41/284 . . . . . {the sub-units being engine, clutch and gearing}
- 41/286 . . . . . {with analogue circuits, relays and switches}
- 41/288 . . . . . {using hydraulic or pneumatic means}

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**2310/00 Arrangements, adaptations or methods for cruise controls**

- 2310/20 . . . . . Operator actuated switches or levers for cruise control or speed limiting systems
- 2310/22 . . . . . Displays for target speed
- 2310/24 . . . . . Speed setting methods
- 2310/242 . . . . . setting initial target speed, e.g. initial algorithms
- 2310/244 . . . . . changing target speed or setting a new target speed, e.g. changing algorithms
- 2310/246 . . . . . releasing speed control, e.g. inhibiting speed control if a brake pedal is depressed
- 2310/248 . . . . . resuming speed control, e.g. returning to old target speed
- 2310/26 . . . . . Distance setting methods, e.g. determining target distance to target vehicle
- 2310/262 . . . . . setting initial distance to preceding vehicle, e.g. initial algorithms
- 2310/264 . . . . . changing distance, e.g. reducing the distance for overtaking
- 2310/266 . . . . . releasing distance control, e.g. inhibiting control if target vehicle lost or changing lane
- 2310/268 . . . . . resuming distance control, e.g. changing target vehicle
- 2310/28 . . . . . Following time setting methods, e.g. elapsed delay between preceding and host vehicle
- 2310/30 . . . . . Mode switching, e.g. changing from one cruise control mode to another

**Arrangement or mounting of propulsion units in vehicles** (of control devices for such units [B60K 26/00](#); elastic mountings [per se F16E](#); propulsion units or their control [per se](#), [see the relevant classes](#))

**2350/00 Arrangements or adaptations of instruments; Dashboards**

- 2350/10 . . . . . Input/output devices or features thereof
- 2350/1004 . . . . . Graphical user interfaces or menu aspects
- 2350/1008 . . . . . Input devices or features thereof
- 2350/1012 . . . . . Controls by an approaching finger
- 2350/1016 . . . . . with reconfigurable control functions
- 2350/102 . . . . . Rotary controllers
- 2350/1024 . . . . . Touch sensitive control means or buttons
- 2350/1028 . . . . . Touch screens
- 2350/1032 . . . . . Emulation of control buttons
- 2350/1036 . . . . . Touch switches
- 2350/104 . . . . . Input by combination of touch screen and control button
- 2350/1044 . . . . . Input by voice
- 2350/1048 . . . . . Joysticks
- 2350/1052 . . . . . Input by gesture
- 2350/1056 . . . . . Output devices of features thereof
- 2350/106 . . . . . Video screens
- 2350/1064 . . . . . Combined instruments with analogue meters and additional displays
- 2350/1068 . . . . . the same information is available on different displays
- 2350/1072 . . . . . Virtual instruments
- 2350/1076 . . . . . Type of information
- 2350/108 . . . . . Explanation of functions
- 2350/1084 . . . . . Distance to obstacles or vehicles
- 2350/1088 . . . . . Reversing assist
- 2350/1092 . . . . . Economic driving
- 2350/1096 . . . . . Information displayed according to relevancy
- 2350/20 . . . . . Optical features of instruments
- 2350/2004 . . . . . Displays on a manual operation element
- 2350/2008 . . . . . using color changes
- 2350/2013 . . . . . using a camera
- 2350/2017 . . . . . Three-dimensional displays
- 2350/2021 . . . . . using a filter
- 2350/2026 . . . . . Holographic features
- 2350/203 . . . . . Illumination features
- 2350/2034 . . . . . Electroluminescent elements
- 2350/2039 . . . . . Backlit symbols
- 2350/2043 . . . . . Translucent dashboard skins
- 2350/2047 . . . . . using a laser
- 2350/2052 . . . . . using projection means
- 2350/2056 . . . . . Optical elements for superposition of display information
- 2350/206 . . . . . Optical elements in front of, or behind a dial
- 2350/2065 . . . . . using real or virtual images of components
- 2350/2069 . . . . . Adjustment of brightness
- 2350/2073 . . . . . Fogging prevention
- 2350/2078 . . . . . Glare prevention
- 2350/2082 . . . . . Anti-reflection means
- 2350/2086 . . . . . Instrument cover plate features
- 2350/2091 . . . . . for instruments which should not be visible
- 2350/2095 . . . . . Semi-transparent optical elements
- 2350/30 . . . . . Hardware adaptations for dashboards
- 2350/302 . . . . . Circuit board features
- 2350/305 . . . . . Wiring harness
- 2350/307 . . . . . Electrical connections

- 2350/35 . Control system arrangements
- 2350/352 . . Control of displays
- 2350/355 . . Remote controls
- 2350/357 . . Wireless data transfers
- 2350/40 . Structural details of dashboards
- 2350/401 . . Dashboard parts used as air ducts
- 2350/402 . . Instrument dial features
- 2350/403 . . . with several available dial configurations
- 2350/405 . . Foldable or movable screens
- 2350/406 . . Means to cover or hide instruments
- 2350/407 . . Instruments movable with steering column
- 2350/408 . . Pointers of combined instruments
- 2350/90 . Problems related to user adaptation
- 2350/901 . . the user is the driver
- 2350/903 . . the user is the passenger
- 2350/905 . . Adaptation to left or right steering
- 2350/906 . . Disabling of display functions
- 2350/908 . . Manual selection of display features
- 2350/92 . Mounting positions or locations
- 2350/921 . . characterised by locations other than the dashboard
  - 2350/922 . . . on the ceiling
  - 2350/924 . . . at vehicle exterior
  - 2350/925 . . . on or in the centre console
  - 2350/927 . . . on sun visor or rear view mirror
  - 2350/928 . . . on the steering wheel
- 2350/94 . Mounting process, Fixation means
  - 2350/941 . . Fixation of instruments to dashboard
  - 2350/943 . . Fixation of dashboard to vehicle structure
  - 2350/945 . . using exchangeable modules
  - 2350/946 . . using inserts
  - 2350/948 . . with pluggable connections
- 2350/96 . Perception or visibility of information
  - 2350/962 . . Perception adaptable to driving situations
  - 2350/965 . . Means for improving awareness
  - 2350/967 . . Blocking display functions
- 2700/00 Control mechanisms and elements applying a mechanical movement**
- 2700/02 . regulating mechanisms combined with non-mechanical transmissions
- 2702/00 Control devices wherein the control is combined with or essentially influenced by the engine or coupling, e.g. in an internal combustion engine, the control device is coupled with a carburettor control device or influenced by carburettor depression**
- 2702/02 . Automatic transmission with toothed gearing
- 2702/04 . . Control dependent on speed
- 2702/06 . . Control dependent on torque
- 2702/08 . Semi-automatic or non-automatic transmission with toothed gearing
  - 2702/10 . . without a preselection system
  - 2702/12 . . . the control being mechanical
  - 2702/14 . . . the control being hydraulic or pneumatic
  - 2702/16 . . . the control being electric
  - 2702/18 . . with a preselection system, e.g. semi-automatic
  - 2702/20 . . . using different control members for preselection and actuating, e.g. shift actuation is initiated by clutch pedal with elastic connection for energy accumulation
- 2704/00 Control devices, wherein the control is combined with or mainly influenced by the working of the engine or the main coupling, e.g. control device is linked to the carburettor control and is influenced by depression of pedal, for semi-automatic or non-automatic transmission having toothed wheels**
- 2704/02 . without preselection system, the control being mechanical
- 2704/04 . with preselection system, e.g. for semi-automatic transmission

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- 2741/00 Conjoint control of drive units; Conjoint control of at least two sub-units thereof**
- NOTE**
- These groups are created for temporary back-up of former group [B60K 41/00](#) which will be replaced by [B60W](#)
- 2741/003 . Changing foot controls into hand controls, e.g. for invalid people
- 2741/006 . using electrical means
- 2741/02 . of propulsion unit and clutch
- 2741/025 . . using electrical means
- 2741/04 . of propulsion unit and gearing
- 2741/045 . . using electrical means
- 2741/06 . . the gearing being stepped
- 2741/065 . . . using electrical means
- 2741/08 . . . with interruption of the drive
- 2741/085 . . . . using electrical means
- 2741/10 . . . without interruption of the drive
- 2741/105 . . . . using electrical means
- 2741/12 . . the gearing being infinitely variable
- 2741/14 . . . of mechanical type
- 2741/145 . . . . using electrical means
- 2741/16 . . . of fluid type
- 2741/165 . . . . using electrical means
- 2741/18 . . . of electric type, e.g. electromagnetic
- 2741/20 . of propulsion unit and brake system
- 2741/205 . . using electrical means
- 2741/22 . of clutch and gearing
- 2741/225 . . using electrical means
- 2741/24 . of clutch and brake system
- 2741/245 . . using electrical means
- 2741/26 . of gearing and brake system
- 2741/265 . . using electrical means
- 2741/28 . of three or more sub-units
- 2741/283 . . using electrical means
- 2741/286 . . . the sub-units being engine, clutch and gearing