

# CPC COOPERATIVE PATENT CLASSIFICATION

## B61C LOCOMOTIVES; MOTOR RAILCARS (vehicles in general [B60](#); frames or bogies [B61F](#); special railroad equipment for locomotives [B61J](#), [B61K](#))

### NOTE

This subclass covers :

- general design features or items of locomotives and motor railcars not otherwise provided for;
- non-electric features of electric locomotives

### Locomotives or motor railcars in general or characterised by the types of motive power plant used

- 1/00** Steam locomotives or railcars (engines [F01](#); characterised by power transmissions [B61C 9/00](#); boilers [F22B](#))
- 1/02 . of articulated construction; with two or more engines (appliances of booster engines [B61C 15/02](#))
- 1/04 . with steam accumulators (steam accumulators [F01K](#))
- 1/06 . Streamlining (of coachwork [B61D](#))
- 1/08 . Arrangement or disposition of combustion apparatus or accessories therefor
- 1/10 . Arrangement or disposition of steam generators
- 1/12 . Arrangement or disposition of condensers
- 1/14 . Arrangement or disposition of exhaust apparatus
- 3/00** Electric locomotives or railcars (characterised by power transmission [B61C 9/00](#); electrical features [B60L](#); [H02](#))
- 3/02 . with electric accumulators
- 5/00** Locomotives or motor railcars with IC engines or gas turbines (characterised by power transmission [B61C 9/00](#); engines [F02](#))
- 5/02 . Arrangement or disposition of intakes and apparatus for supplying, circulating, and filtering air for combustion and engine-cooling purposes
- 5/04 . Arrangement or disposition of exhaust apparatus
- 7/00** Other locomotives or motor railcars
- 7/02 . Locomotives or motor railcars with pneumatic accumulators
- 7/04 . Locomotives or motor railcars with two or more different kinds or types of engine, e.g. steam and IC engines
- 8/00** Filling stations for steam- or pneumatic-accumulator locomotives or motor railcars
- 9/00** Locomotives or motor railcars characterised by the type of transmission system used; Transmission systems specially adapted for locomotives or motor railcars (machine elements [F16](#))
- 9/02 . Transmission systems in or for locomotives or motor railcars with reciprocating piston steam engines
- 9/04 . . consisting of cranked axles and coupling rods
- 9/06 . . having toothed, chain, friction, or belt gearing
- 9/08 . Transmission systems in or for locomotives or motor railcars with IC reciprocating piston engines
- 9/10 . . mechanical (combined with hydraulic gearing [B61C 9/14](#))

- 9/12 . . . with change-speed gearing
- 9/14 . . hydraulic, including combinations with mechanical gearing
- 9/16 . . . using gearing of the hydrostatic type
- 9/18 . . . using gearing of the hydrokinetic type
- 9/20 . . . . with mechanical change-speed gearing
- 9/22 . . pneumatic
- 9/24 . . electric ([B61C 9/38](#) takes precedence)
- 9/26 . . with transmission shafts at an angle to the driving axles
- 9/28 . Transmission systems in or for locomotives or motor railcars with rotary prime movers, e.g. turbines
- 9/30 . . mechanical (combined with hydraulic gearing [B61C 9/34](#))
- 9/32 . . . with change-speed gearing
- 9/34 . . hydraulic, including combinations with mechanical gearing
- 9/36 . . electric ([B61C 9/38](#) takes precedence)
- 9/38 . Transmission systems in or for locomotives or motor railcars with electric motor propulsion (electrical features [B60L](#))
- 9/40 . . with cranked axles and coupling rods
- 9/42 . . hydraulic
- 9/44 . . with hollow transmission shaft concentric with wheel axis
- 9/46 . . with motors forming parts of wheels
- 9/48 . . with motors supported on vehicle frames and driving axles, e.g. axle or nose suspension
- 9/50 . . . in bogies
- 9/52 . . with transmission shafts at an angle to the driving axles

### Locomotives or motor railcars characterised by the type of means applying the tractive effort, or by their application to special railway systems or purposes

- 11/00** Locomotives or motor railcars characterised by the type of means applying the tractive effort; Arrangement or disposition of running gear other than normal driving wheel (constructions wheels [B60B](#))
- 11/005 . {tractive effort applied by a transported road vehicle (railway wagons or vans adapted for carrying vehicles in general [B61D 3/18](#); vehicles for use both on rail and road, e.g. with rail and road wheels on the same axle [B60F](#))}
- 11/02 . tractive effort applied to cables or chains
- 11/04 . tractive effort applied to racks

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| <p>11/06</p> <ul style="list-style-type: none"> <li>• tractive effort applied or supplied by aerodynamic force or fluid reaction, e.g. air-screws and jet or rocket propulsion</li> </ul> <p><b>13/00</b></p> <p><b>Locomotives or motor railcars characterised by their application to special systems or purposes</b> (<a href="#">B61C 11/00</a> takes precedence; self-propelled scaffold cars, break-down cranes, inspection trolleys <a href="#">B61D 15/00</a>; general design of track recording vehicles <a href="#">B61K 9/00</a>)</p> <p>13/02</p> <ul style="list-style-type: none"> <li>• for towing or transporting ships or for like special purposes</li> </ul> <p>13/04</p> <ul style="list-style-type: none"> <li>• for elevated railways with rigid rails (<a href="#">B61C 13/08</a> takes precedence)</li> </ul> <p>13/06</p> <ul style="list-style-type: none"> <li>• for railways with suspended flexible tracks, i.e. rope railways</li> </ul> <p>13/08</p> <ul style="list-style-type: none"> <li>• for saddle or like balanced type railways</li> </ul> | <p>17/06</p> <ul style="list-style-type: none"> <li>• Power storing devices</li> </ul> <p>17/08</p> <ul style="list-style-type: none"> <li>• Lubrication systems (<a href="#">in general F16N</a>)</li> </ul> <p>17/10</p> <ul style="list-style-type: none"> <li>• Connecting-rods for driving wheels; Arrangements of their bearings (<a href="#">connection-rods or bearings, in general F16C 7/00, B61C 9/04</a>)</li> </ul> <p>17/12</p> <ul style="list-style-type: none"> <li>• Control gear; Arrangements for controlling locomotives from remote points in the train or when operating in multiple units (<a href="#">control from points outside the train B61L 3/00</a>; fluid-actuated telemotors, servomotors <a href="#">F15B</a>; control devices in general <a href="#">G05</a>)</li> </ul> |
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**Details or accessories not otherwise provided for**

- 15/00**
- Maintaining or augmenting the starting or braking power by auxiliary devices and measures; Preventing wheel slippage; Controlling distribution of tractive effort between driving wheels** ([propelling locomotives or motor railcars by special means B61C 11/00](#); [driving wheels with non-slipping devices B60B](#); [brakes B61H](#); [wetting or lubricating rails B61K](#))
- 15/02
- by auxiliary driving wheels; by temporary coupling or use of fly wheels or booster engines
- 15/04
- by controlling wheel pressure, e.g. by movable weights or heavy parts or by magnetic devices ([magnetic brakes B61H](#))
- 15/045
- . {Specially adapted for tunnel systems vehicles, e.g. with pressure increasing arrangements}
- 15/06
- . by displacing fuel, ballast, or the like
- 15/08
- Preventing wheel slippage ([adjusting wheel-braking force to prevent wheel slippage B60T 8/00](#); {[removing undesirable matter from the permanent way of railways E01H 8/00](#)})
- 15/085
- . {by dispersion of a fluid, e.g. containing chemicals}
- 15/10
- . by depositing sand or like friction increasing materials ([for vehicles in general B60B](#); [combined control of sanding apparatus and brakes B61H](#))
- 15/102
- . . {with sanding equipment of mechanical or fluid type, e.g. by means of steam}
- 15/105
- . . {with gravity activated sanding equipment}
- 15/107
- . . {with electrically or electromagnetically controlled sanding equipment}
- 15/12
- . by reducing the driving power
- 15/14
- controlling distribution of tractive effort between driving wheels
- 17/00**
- Arrangement or disposition of parts; Details or accessories not otherwise provided for; Use of control gear and control systems**
- 17/02
- Bunkers; Tanks; Tenders ([coachwork B61D](#)); Water or fuel pick-up or scoop apparatus; Water or fuel supply fittings ([track-side installations, e.g. bunkers, tanks, for filling locomotives with sand or water B61K 11/00](#))
- 17/04
- Arrangement or disposition of driving cabins, footplates or engine rooms; Ventilation thereof ([driving cabins and accessories B61D](#))