

**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**

- |                  |  |
|------------------|--|
| <b>B61C 1/00</b> | <b>Steam locomotives or railcars</b> (engines <a href="#">F01</a> ; characterised by power transmissions <a href="#">B61C 9/00</a> ; boilers <a href="#">F22B</a> )  |
| B61C 1/02        | <ul style="list-style-type: none"> <li>• of articulated construction; with two or more engines (appliances of booster engines <a href="#">B61C 15/02</a>)</li> </ul>   |
| B61C 1/04        | <ul style="list-style-type: none"> <li>• with steam accumulators (steam accumulators <a href="#">F01K</a>)</li> </ul>  |
| B61C 1/06        | <ul style="list-style-type: none"> <li>• Streamlining (of coachwork <a href="#">B61D</a>)</li> </ul>   |
| B61C 1/08        | <ul style="list-style-type: none"> <li>• Arrangement or disposition of combustion apparatus or accessories therefor</li> </ul>   |
| B61C 1/10        | <ul style="list-style-type: none"> <li>• Arrangement or disposition of steam generators</li> </ul>   |
| B61C 1/12        | <ul style="list-style-type: none"> <li>• Arrangement or disposition of condensers</li> </ul>   |
| B61C 1/14        | <ul style="list-style-type: none"> <li>• Arrangement or disposition of exhaust apparatus</li> </ul>  |
| <b>B61C 3/00</b> | <b>Electric locomotives or railcars</b> (characterised by power transmission <a href="#">B61C 9/00</a> ; electrical features <a href="#">B60L</a> ; <a href="#">H02</a> )                                    |
| B61C 3/02        | <ul style="list-style-type: none"> <li>• with electric accumulators</li> </ul>   |
| <b>B61C 5/00</b> | <b>Locomotives or motor railcars with IC engines or gas turbines</b> (characterised by power transmission <a href="#">B61C 9/00</a> ; engines <a href="#">F02</a> )  |
| B61C 5/02        | <ul style="list-style-type: none"> <li>• Arrangement or disposition of intakes and apparatus for supplying, circulating, and filtering air for combustion and engine-cooling purposes</li> </ul>             |
| B61C 5/04        | <ul style="list-style-type: none"> <li>• Arrangement or disposition of exhaust apparatus</li> </ul>  |
| <b>B61C 7/00</b> | <b>Other locomotives or motor railcars</b>   |
| B61C 7/02        | <ul style="list-style-type: none"> <li>• Locomotives or motor railcars with pneumatic accumulators</li> </ul>  |
| B61C 7/04        | <ul style="list-style-type: none"> <li>• Locomotives or motor railcars with two or more different kinds or types of engine, e.g. steam and IC engines</li> </ul>   |
| <b>B61C 8/00</b> | <b>Filling stations for steam- or pneumatic-accumulator locomotives or motor railcars</b>  |
| <b>B61C 9/00</b> | <b>Locomotives or motor railcars characterised by the type of transmission system used; Transmission systems specially adapted for locomotives or motor railcars</b> (machine elements <a href="#">F16</a> ) |

- B61C 9/02
  - Transmission systems in or for locomotives or motor railcars with reciprocating piston steam engines
- B61C 9/04
  - . . consisting of cranked axles and coupling rods
- B61C 9/06
  - . . having toothed, chain, friction, or belt gearing
- B61C 9/08
  - Transmission systems in or for locomotives or motor railcars with IC reciprocating piston engines
- B61C 9/10
  - . . mechanical ([combined with hydraulic gearing B61C 9/14](#))
- B61C 9/12
  - . . . with change-speed gearing
- B61C 9/14
  - . . hydraulic, including combinations with mechanical gearing
- B61C 9/16
  - . . . using gearing of the hydrostatic type
- B61C 9/18
  - . . . using gearing of the hydrokinetic type
- B61C 9/20
  - . . . . with mechanical change-speed gearing
- B61C 9/22
  - . . pneumatic
- B61C 9/24
  - . . electric ([B61C 9/38 takes precedence](#))
- B61C 9/26
  - . . with transmission shafts at an angle to the driving axles
- B61C 9/28
  - Transmission systems in or for locomotives or motor railcars with rotary prime movers, e.g. turbines
- B61C 9/30
  - . . mechanical ([combined with hydraulic gearing B61C 9/34](#))
- B61C 9/32
  - . . . with change-speed gearing
- B61C 9/34
  - . . hydraulic, including combinations with mechanical gearing
- B61C 9/36
  - . . electric ([B61C 9/38 takes precedence](#))
- B61C 9/38
  - Transmission systems in or for locomotives or motor railcars with electric motor propulsion ([electrical features B60L](#))
- B61C 9/40
  - . . with cranked axles and coupling rods
- B61C 9/42
  - . . hydraulic
- B61C 9/44
  - . . with hollow transmission shaft concentric with wheel axis
- B61C 9/46
  - . . with motors forming parts of wheels
- B61C 9/48
  - . . with motors supported on vehicle frames and driving axles, e.g. axle or nose suspension
- B61C 9/50
  - . . . in bogies
- B61C 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**

- B61C 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](#))**
- B61C 11/005
  - {[tractive effort applied by a transported road vehicle \(railway wagons or vans adapted for carrying vehicles in general B61D 3/18; vehicles for use both on rail and road, e.g. with rail and road wheels on the same axle B60F\)](#)}
- B61C 11/02
  - tractive effort applied to cables or chains
- B61C 11/04
  - tractive effort applied to racks

- B61C 11/06**
- tractive effort applied or supplied by aerodynamic force or fluid reaction, e.g. air-screws and jet or rocket propulsion

**B61C 13/00**      **Locomotives or motor railcars characterised by their application to special systems or purposes** ([B61C 11/00](#) takes precedence; self-propelled scaffold cars, break-down cranes, inspection trolleys [B61D 15/00](#); general design of track recording vehicles [B61K 9/00](#))

- B61C 13/02**      • for towing or transporting ships or for like special purposes
- B61C 13/04**      • for elevated railways with rigid rails ([B61C 13/08](#) takes precedence)
- B61C 13/06**      • for railways with suspended flexible tracks, i.e. rope railways
- B61C 13/08**      • for saddle or like balanced type railways

**Details or accessories not otherwise provided for**

**B61C 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](#))

- B61C 15/02**      • by auxiliary driving wheels; by temporary coupling or use of fly wheels or booster engines
- B61C 15/04**      • by controlling wheel pressure, e.g. by movable weights or heavy parts or by magnetic devices ([magnetic brakes B61H](#))
- B61C 15/045**      • . {Specially adapted for tunnel systems vehicles e.g. with pressure increasing arrangements}
- B61C 15/06**      • . by displacing fuel, ballast, or the like
- B61C 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](#)})
- B61C 15/085**      • . {[by dispersion of a fluid, e.g. containing chemicals](#)}
- B61C 15/10**      • . by depositing sand or like friction increasing materials ([for vehicles in general B60B](#); [combined control of sanding apparatus and brakes B61H](#))
- B61C 15/102**      • . . {[with sanding equipment of mechanical or fluid type, e.g. by means of steam](#)}
- B61C 15/105**      • . . {[with gravity activated sanding equipment](#)}
- B61C 15/107**      • . . {[with electrically or electromagnetically controlled sanding equipment](#)}
- B61C 15/12**      • . by reducing the driving power
- B61C 15/14**      • controlling distribution of tractive effort between driving wheels

**B61C 17/00**      **Arrangement or disposition of parts; Details or accessories not otherwise provided for; Use of control gear and control systems**

- B61C 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](#))
- B61C 17/04**      • Arrangement or disposition of driving cabins, footplates or engine rooms; Ventilation thereof ([driving cabins and accessories B61D](#))

- B61C 17/06
  - Power storing devices
- B61C 17/08
  - Lubrication systems (in general [F16N](#))
- B61C 17/10
  - Connecting-rods for driving wheels; Arrangements of their bearings (connection-rods or bearings, in general [F16C 7/00](#), [B61C 9/04](#))
- B61C 17/12
  - Control gear; Arrangements for controlling locomotives from remote points in the train or when operating in multiple units (control from points outside the train [B61L 3/00](#); fluid-actuated telemotors, servomotors [F15B](#); control devices in general [G05](#))