

**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**

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|------------------|---|
| <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        | . of articulated construction; with two or more engines (appliances of booster engines <a href="#">B61C 15/02</a> )   |
| B61C 1/04        | . with steam accumulators (steam accumulators <a href="#">F01K</a> )  |
| B61C 1/06        | . Streamlining (of coachwork <a href="#">B61D</a> )   |
| B61C 1/08        | . Arrangement or disposition of combustion apparatus or accessories therefor  |
| B61C 1/10        | . Arrangement or disposition of steam generators  |
| B61C 1/12        | . Arrangement or disposition of condensers  |
| B61C 1/14        | . Arrangement or disposition of exhaust apparatus   |
| <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        | . with electric accumulators  |
| <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        | . Arrangement or disposition of intakes and apparatus for supplying, circulating, and filtering air for combustion and engine-cooling purposes                            |
| B61C 5/04        | . Arrangement or disposition of exhaust apparatus   |
| <b>B61C 7/00</b> | <b>Other locomotives or motor railcars</b>  |
| B61C 7/02        | . Locomotives or motor railcars with pneumatic accumulators   |
| B61C 7/04        | . Locomotives or motor railcars with two or more different kinds or types of engine, e.g. steam and IC engines  |
| <b>B61C 8/00</b> | <b>Filling stations for steam- or pneumatic-accumulator locomotives or motor railcars</b>   |

- B61C 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](#))**
- 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](#))