

**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

**Guidance heading:** Locomotives or motor railcars in general or characterised by the types of motive power plant used

**B61C 1/00** **Steam locomotives or railcars** ( engines [F01](#) ; characterised by power transmissions [B61C 9/00](#) ; boilers [F22B](#) )

B61C 1/02 . of articulated construction ; with two or more engines ( appliances of booster engines [B61C 15/02](#) )

B61C 1/04 . with steam accumulators ( steam accumulators [F01K](#) )

B61C 1/06 . Streamlining ( of coachwork [B61D](#) )

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

**B61C 3/00** **Electric locomotives or railcars** ( characterised by power transmission [B61C 9/00](#) ; electrical features [B60L](#) ; [H02](#) )

B61C 3/02 . with electric accumulators

**B61C 5/00** **Locomotives or motor railcars with IC engines or gas turbines** ( characterised by power transmission [B61C 9/00](#) ; engines [F02](#) )

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

**B61C 7/00** **Other locomotives or motor railcars**

- 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
- B61C 8/00 Filling stations for steam- or pneumatic-accumulator locomotives or motor railcars**
- 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

**Guidance heading:** 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

**Guidance heading:** 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

[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](#) )