

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](#))