

CPC**COOPERATIVE PATENT CLASSIFICATION****B61C**

LOCOMOTIVES; MOTOR RAILCARS(vehicles in general [B60](#); frames or bogies [B61E](#); 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 [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](#))