

## SECTION B — PERFORMING OPERATIONS; TRANSPORTING

### B61 RAILWAYS

**B61C LOCOMOTIVES; MOTOR RAILCARS** (vehicles in general B60; frames or bogies B61F; special railroad equipment for locomotives B61J, B61K)

#### Note(s)

This subclass covers:

- general design features or items of locomotives and motor railcars not otherwise provided for;
- non-electric features of electric locomotives.

#### Subclass index

##### LOCOMOTIVES AND RAILCARS IN GENERAL

Characterised by motive power:

steam; electric; IC or gas turbine.....1/00, 3/00, 5/00

other.....7/00

Characterised by transmission system.....9/00

Characterised by type of means applying tractive effort.....11/00

LOCOMOTIVES AND RAILCARS FOR PARTICULAR USES.....13/00

##### DETAILS AND ACCESSORIES

For particular transmission systems.....9/00

For particular propulsion means.....11/00

General and not otherwise provided for.....15/00, 17/00

FILLING STATIONS FOR AIR OR STEAM ACCUMULATORS.....8/00

#### Locomotives or motor railcars in general or characterised by the type of motive power plant used

- 1/00 Steam locomotives or railcars** (characterised by power transmissions B61C 9/00; engines F01; boilers F22B)
- 1/02 • of articulated construction; with two or more engines (appliances of booster engines B61C 15/02)
- 1/04 • with steam accumulators (steam accumulators F01K)
- 1/06 • Streamlining (of coachwork B61D)
- 1/08 • Arrangement or disposition of combustion apparatus or accessories therefor
- 1/10 • Arrangement or disposition of steam generators
- 1/12 • Arrangement or disposition of condensers
- 1/14 • Arrangement or disposition of exhaust apparatus
- 3/00 Electric locomotives or railcars** (characterised by power transmission B61C 9/00; electrical features B60L, H02)
- 3/02 • with electric accumulators
- 5/00 Locomotives or motor railcars with IC engines or gas turbines** (characterised by power transmission B61C 9/00; engines F02)
- 5/02 • Arrangement or disposition of intakes and apparatus for supplying, circulating, or filtering air for combustion or engine-cooling purposes
- 5/04 • Arrangement or disposition of exhaust apparatus

#### **7/00 Other locomotives or motor railcars characterised by the type of motive power plant used; Locomotives or motor railcars with two or more different kinds or types of motive power**

- 7/02 • Locomotives or motor railcars with pneumatic accumulators
- 7/04 • Locomotives or motor railcars with two or more different kinds or types of engines, e.g. steam and IC engines

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

#### **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)

- 9/02 • Transmission systems in or for locomotives or motor railcars with reciprocating-piston steam engines
- 9/04 • • consisting of cranked axles and coupling-rods
- 9/06 • • having toothed, chain, friction, or belt gearing
- 9/08 • Transmission systems in or for locomotives or motor railcars with IC reciprocating-piston engines
- 9/10 • • mechanical (combined with hydraulic gearing B61C 9/14)
- 9/12 • • • with change-speed gearing

## B61C

- 9/14 • • hydraulic, including combinations with mechanical gearing
- 9/16 • • • using gearing of the hydrostatic type
- 9/18 • • • using gearing of the hydrokinetic type
- 9/20 • • • • with mechanical change-speed gearing
- 9/22 • • pneumatic
- 9/24 • • electric (B61C 9/38 takes precedence)
- 9/26 • • with transmission shafts at an angle to the driving axles
- 9/28 • Transmission systems in or for locomotives or motor railcars with rotary prime movers, e.g. turbines
- 9/30 • • mechanical (combined with hydraulic gearing B61C 9/34)
- 9/32 • • • with change-speed gearing
- 9/34 • • hydraulic, including combinations with mechanical gearing
- 9/36 • • electric (B61C 9/38 takes precedence)
- 9/38 • Transmission systems in or for locomotives or motor railcars with electric motor propulsion (electrical features B60L, H02)
- 9/40 • • with cranked axles and coupling-rods
- 9/42 • • hydraulic
- 9/44 • • with hollow transmission shaft concentric with wheel axis
- 9/46 • • with motors forming parts of wheels
- 9/48 • • with motors supported on vehicle frames and driving axles, e.g. axle or nose suspension
- 9/50 • • • in bogies
- 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

- 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 wheels** (construction of wheels B60B)
- 11/02 • tractive effort applied to cables or chains
- 11/04 • tractive effort applied to racks
- 11/06 • tractive effort applied or supplied by aerodynamic force or fluid reaction, e.g. air-screws or jet or rocket propulsion
- 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)

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

### Details or accessories not otherwise provided for

- 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)
- 15/02 • by auxiliary driving wheels; by temporary coupling or use of flywheels or booster engines
- 15/04 • by controlling wheel pressure, e.g. by movable weights or heavy parts or by magnetic devices (magnetic brakes B61H)
- 15/06 • • by displacing fuel, ballast, or the like
- 15/08 • Preventing wheel slippage (adjusting wheel-braking force to prevent wheel slippage B60T 8/00)
- 15/10 • • by depositing sand or like friction-increasing materials (for vehicles in general B60B; combined control of sanding apparatus and brakes B61H)
- 15/12 • • by reducing the driving power
- 15/14 • controlling distribution of tractive effort between driving wheels
- 17/00 Arrangement or disposition of parts; Details or accessories not otherwise provided for; Use of control gear and control systems [2]**
- 17/02 • Bunkers; Tanks; Tenders (coachwork B61D); Water or fuel pick-up or scoop apparatus; Water or fuel supply fittings (trackside installations, e.g. bunkers, tanks, for filling locomotives with sand or water B61K 11/00)
- 17/04 • Arrangement or disposition of driving cabins, footplates, or engine rooms; Ventilation thereof (driving cabins or accessories B61D)
- 17/06 • Power storing devices
- 17/08 • Lubrication systems (in general F16N)
- 17/10 • Connecting-rods for driving wheels; Arrangements of their bearings (connecting-rods or bearings, in general F16C 7/00, F16C 9/04)
- 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)