

CPC COOPERATIVE PATENT CLASSIFICATION

B PERFORMING OPERATIONS; TRANSPORTING (NOTES omitted)

TRANSPORTING

B61 RAILWAYS (NOTE omitted)

B61D BODY DETAILS OR KINDS OF RAILWAY VEHICLES (vehicles in general [B60](#); adaptation of vehicles to special systems [B61B](#); underframes [B61F](#))

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

Kinds of railway or tramway vehicles

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|-------------|--|-------------|---|
| 1/00 | Carriages for ordinary railway passenger traffic
(mine cars B61D 11/00 ; tramcars B61D 13/00) | 3/187 | . . . {Details, e.g. bridges for floor connections} |
| 1/02 | . General arrangements in sleeping or couchette carriages (B61D 1/08 takes precedence) | 3/188 | {Wheel guides for the vehicles being carried} |
| 1/04 | . General arrangements of seats (B61D 1/06 takes precedence; seats <i>per se</i> B61D 33/00) | 3/20 | . . for forwarding containers |
| 1/06 | . with multiple deck arrangement | 5/00 | Tank wagons for carrying fluent materials |
| 1/08 | . . of sleeping carriages | 5/002 | . {for particulate or powder materials} |
| 3/00 | Wagons or vans (tank wagons B61D 5/00 ; hopper wagons B61D 7/00 ; tipping wagons B61D 9/00 ; mine cars B61D 11/00 ; vehicles specially adapted for animal transportation B60P 3/04 ; {container traffic B65G }) | 5/004 | . . {with loading and unloading means using fluids or vacuum} |
| 3/005 | . {convertible (B61D 3/04 , B61D 3/06 , B61D 15/04 take precedence)} | 5/006 | . . . {with porous walls} |
| 3/02 | . with multiple deck arrangements (for carrying vehicles B61D 3/18) | 5/008 | . {Trackside means for assisting charge or discharge (for hopper cars B61D 7/32)} |
| 3/04 | . with movable floors, e.g. rotatable or floors which can be raised or lowered | 5/02 | . having more than one tank |
| 3/06 | . Flat-bottomed cars convertible into hoppers | 5/04 | . {with means for cooling, heating, or insulating} |
| 3/08 | . Flat wagons including posts or standards ({open loading compartments for load-carrying vehicles, in general B62D 33/02 ; movable or detachable racks or stanchions B62D 33/0207 }) | 5/06 | . Mounting of tanks; Integral bodies and frames |
| 3/10 | . Articulated vehicles | 5/08 | . {Covers or access openings; Arrangements thereof} |
| 3/12 | . . comprising running gear interconnected by loads | 7/00 | Hopper cars (flat bottomed cars convertible into hoppers B61D 3/06) |
| 3/14 | . . comprising running gear interconnected by load supports facilitating low-level load transport | 7/02 | . with discharge openings in the bottoms (with body in two halves and discharge by tipping the halves B61D 9/00) |
| 3/16 | . adapted for carrying special loads | 7/04 | . . the openings being above axle level during discharge |
| 3/163 | . . {for carrying animals} | 7/06 | . with openings capable of discharging both between and outside the wheels |
| 3/166 | . . {for carrying very heavy loads} | 7/08 | . with openings capable of discharging only outside the wheels |
| 3/18 | . . for vehicles ({vehicles adapted to carry other vehicles, in general, B60P 3/06 }) | 7/10 | . . the discharge being assisted by tipping the bottom |
| 3/181 | . . . {with special accommodation for the motor vehicle driver or passengers (B61D 1/06 takes precedence)} | 7/12 | . the hoppers being movable (B61D 9/00 takes precedence) |
| 3/182 | . . . {specially adapted for heavy vehicles, e.g. public work vehicles, trucks, trailers} | 7/14 | . Adaptations of hopper elements to railways |
| 3/184 | {the heavy vehicles being of the trailer or semi-trailer type} | 7/16 | . . Closure elements for discharge openings |
| 3/185 | {Railway vehicles} | 7/18 | . . . pivoted |
| | | 7/20 | . . . sliding |
| | | 7/22 | . . . Sealing means thereof |
| | | 7/24 | . . . Opening or closing means |
| | | 7/26 | mechanical |
| | | 7/28 | hydraulic or pneumatic |
| | | 7/30 | controlled by means external to cars |
| | | 7/32 | . . Means for assisting charge or discharge |
| | | 9/00 | Tipping wagons |
| | | 9/02 | . characterised by operating means for tipping |

9/04	. Adaptations of rail vehicle elements to tipping wagons	17/06	. . End walls
9/06	. . Bodies	17/08	. . Sides
9/08	. . Frames; Supporting or guiding means for the bodies	17/10	. . Floors
9/10	. . Devices preventing overturning when tipping	17/12	. . Roofs (movable or foldable roofs, covers or tarpaulins B61D 39/00)
9/12	. . Body fittings or devices facilitating or controlling outflow on discharge	17/14	. . . with gangways
9/14	. Tipping systems controlled by trackside means	17/16	. . . Hatches in roofs
		17/18	. . Internal lining, e.g. insulating
		17/185	. . . { for sound insulating (arrangement of engine rooms B61C 17/04; sound insulating elements for road vehicles B60R 13/08) }
11/00	Mine cars (B61D 5/00 - B61D 9/00 take precedence)		
11/02	. Body construction	17/20	. . Communication passages between coaches; Adaptation of coach ends therefor
13/00	Tramway vehicles	17/22	. . . flexible, e.g. bellows
13/02	. Double-deckers	17/24	. with body structures of wood
		17/26	. with body structures of concrete
15/00	Other railway vehicles, e.g. scaffold cars; Adaptations of vehicles for use on railways (conveyor frames mounted for movement on rail tracks B65G 41/02; wheeled machines used in permanent way construction or maintenance E01B)	19/00	Door arrangements specially adapted for rail vehicles (locks for vehicles E05B 77/00 - E05B 85/00; door-operating mechanisms E05F)
15/02	. Breakdown cranes (crane gear B66C)		
15/04	. convertible into other non-vehicular apparatus, e.g. exhibition stands	19/001	. { for wagons or vans (closure elements for hopper car discharge openings B61D 7/16; doors convertible into loading and unloading ramps B61D 47/00; B61D 19/003 takes precedence) }
15/06	. Buffer cars; Arrangements or construction of railway vehicles for protecting them in case of collisions (buffers B61G 11/00)	19/002	. . {specially adapted for grain cars}
15/08	. Railway inspection trolleys	19/003	. {characterised by the movements of the door}
15/10	. . hand or foot propelled	19/004	. . {swinging (B61D 19/008 takes precedence)}
15/105	. . . { for cableways }	19/005	. . {sliding (B61D 19/008 , B61D 19/009 take precedence)}
15/12	. . power propelled	19/006	. . . {vertically (B61D 19/006 takes precedence)}
15/125	. . . { for cableways }	19/007	. . . {The doors being wall panels enabling complete opening of the wagon sides, e.g. for quick loading or unloading}

Body details of railway or tramway vehicles

17/00	Construction details of vehicle bodies (for tank wagons B61D 5/00; for hopper cars B61D 7/00; body details specially adapted for tipping wagons B61D 9/06; for mine cars B61D 11/00)	19/008	. . {both swinging and sliding}
		19/009	. . {both sliding and plugging, (e.g. for refrigerator cars)}
		19/02	. for carriages (B61D 19/003 takes precedence)
		19/023	. . {Emergency exits}
		19/026	. . {Safety devices for preventing passengers from being injured by movements of doors or variations in air pressure (safety devices in passenger lifts for preventing trapping of passengers between closing doors B66B 13/26 ; acting on power-operated mechanisms for wings E05F 15/00)}
NOTE	{B61D 17/005 takes precedence over B61D 17/048 - B61D 17/16}		
17/005	. {with bodies characterised by use of plastics materials (B61D 17/005 takes precedence ; bogie frames comprising parts made from fibre reinforced matrix material B61F 5/523)}	23/00	Construction of steps for railway vehicles (ladders in general E06C)
17/02	. reducing air resistance by modifying contour {; Constructional features for fast vehicles sustaining sudden variations of atmospheric pressure, e.g. when crossing in tunnels }	23/02	. Folding steps for railway vehicles {, e.g. hand or mechanically actuated}
17/04	. with bodies of metal; with composite, e.g. metal and wood body structures	23/025	. . {electrically or fluid actuated}
17/041	. . {with bodies characterised by use of light metal, e.g. aluminium (B61D 17/045 takes precedence)}	25/00	Window arrangements peculiar to rail vehicles (vehicle window arrangements in general B60J; cleaning vehicle windows B60S; heating arrangements specially adapted for transparent or reflecting areas H05B 3/84)
17/043	. . {connections between superstructure sub-units (for road vehicles B62D 27/00)}		
17/045	. . . {The sub-units being construction modules (modular super-structures for vehicles carrying a large number of passengers B62D 31/025)}		
17/046	. . . {readily releasable, i.e. dismantlable or collapsible sub-units, e.g. for shipping (convertible wagons B61D 3/005)}		
17/048	. . {Interior walls, e.g. separation walls between compartments (B61D 17/06 , B61D 17/08 , B61D 17/18 take precedence)}		

Heating, cooling, ventilating, lighting, or air-conditioning, peculiar to rail vehicles (for vehicles in general [B60](#))

- 27/00 Heating, cooling, ventilating, or air-conditioning** {(heating, cooling or ventilating devices for vehicles in general [B60H 1/00](#); devices for moistening air in vehicles [B60H 3/02](#); devices for filtering air in vehicles [B60H 3/06](#))}
- 27/0009 . {Means for controlling or equalizing air pressure shocks in trains, e.g. when passing or crossing in tunnels}
- 27/0018 . {Air-conditioning means, i.e. combining at least two of the following ways of treating or supplying air, namely heating, cooling or ventilating ([air-conditioning in general F24F](#))}
- 27/0027 . . {for freight cars; Isothermic wagons}
- 27/0036 . {Means for heating only ([heating in general F24](#))}
- 27/0045 . . {Electric heating (for vehicles in general [B60H 1/2215](#); supplying electric power to electric heating circuits of electrically-propelled vehicles [B60L 1/02](#))}
- 27/0054 . . {combined with heating means using recuperated energy from other sources, e.g. from the brakes}
- 27/0063 . . {the heat being derived from independent means, i.e. autonomous devices, e.g. stoves}
- 27/0072 . {Means for cooling only ([cooling in general F25](#))}
- 27/0081 . . {of wagons for transporting refrigerated goods (vehicles for transporting refrigerated goods [B60P 3/20](#))}
- 27/009 . {Means for ventilating only ([ventilation in general F24F](#))}

29/00 Lighting**Furniture or furnishings peculiar to rail vehicles** (for vehicles in general [B60](#))**31/00 Sleeping accommodation****33/00 Seats**

- 33/0007 . {Details; Accessories}
- 33/0014 . . {Seat frames ([B61D 33/0092](#) takes precedence)}
- 33/0021 . . . {for adjustable or reclining seats}
- 33/0028 . . . {for reversible seats}
- 33/0035 . . {Cushions or the like; Covers}
- 33/0042 . . . {Spring cushions}
- 33/005 . . {Head, arm or footrests}
- 33/0057 . {characterised by their mounting in vehicles ([B61D 33/0028](#) and [B61D 33/0092](#) take precedence)}
- 33/0064 . . {not adjustably mounted; supports therefor}
- 33/0071 . . . {Removable seats}
- 33/0078 . . {adjustably mounted}
- 33/0085 . . . {rotatably}
- 33/0092 . {Safety seats, e.g. comprising safety locking means; Seats for children}

35/00 Sanitation

- 35/002 . {Washing facilities}
- 35/005 . {Toilet facilities}
- 35/007 . . {comprising toilet waste receiving, treatment, storage, disposal or removal devices}

37/00 Other furniture or furnishings

- 37/003 . {luggage rack and umbrella-stand for rail vehicles (luggage racks within vehicle bodies in general, e.g. busses [B60R 5/003](#))}
- 37/006 . {for restaurant cars or the like}

Other details peculiar to rail vehicles (for vehicles in general [B60](#))**39/00 Wagon or like covers; Tarpaulins; Movable or foldable roofs**

- 39/001 . {Tiltable roofs}
- 39/002 . {Sliding or folding roofs}
- 39/003 . . {telescopic}
- 39/005 . . {for articulated wagons}
- 39/006 . {Opening and closing means}
- 39/007 . . {Controlled by trackside means (systems for tipping wagons controlled by trackside means [B61D 9/14](#))}
- 39/008 . {Sealing means}

41/00 Indicators for reserved seats; Warning or like signs; Devices or arrangements in connection with tickets, e.g. ticket holders; Holders for cargo tickets or the like

- 41/02 . Holders or devices for cargo tickets or the like
- 41/04 . Indicators for reserved seats
- 41/06 . Holders for fare tickets

43/00 Devices for using the energy of the movements of the vehicles**45/00 Means or devices for securing or supporting the cargo, including protection against shocks** (for vehicles in general [B60P 7/00](#))

- 45/001 . {Devices for fixing to walls or floors}
- 45/002 . . {Fixing sheet metal, boxes, or the like}
- 45/003 . . {Fixing of logs, beams, barrels, pipes, or the like}
- 45/004 . . {Fixing semi-trailers (wagons for transporting semi-trailers [B61D 3/184](#))}
- 45/005 . . . {by using fifth wheel locks}
- 45/006 . {Fixing by movable walls}
- 45/007 . {Fixing containers (vehicles for transporting containers [B61D 3/20](#))}
- 45/008 . {Shock absorbing devices}

47/00 Loading or unloading devices combined with vehicles, e.g. loading platforms, {doors convertible into loading and unloading ramps}(combined with vehicles in general [B60P](#))

- 47/005 . {Loading or unloading devices combined with road vehicles carrying wagons, e.g. ramps, turntables, lifting means (wagons for carrying road vehicles in general: [B61D 3/18](#))}

49/00 Other details