

CPC**COOPERATIVE PATENT CLASSIFICATION****B60P****VEHICLES ADAPTED FOR LOAD TRANSPORTATION OR TO TRANSPORT, TO CARRY OR TO COMPRISE SPECIAL LOADS OR OBJECTS** (vehicles with special provisions for invalids [A61G 3/00](#))**NOTE**

Attention is drawn to the Explanatory Note following the class title (B60)

WARNING

The following IPC groups are not used in the CPC scheme. Subject matter covered by these groups is classified in the following CPC groups:

[B60P 1/46](#) covered by [B60P 1/4421](#)
[B60P 3/022](#) covered by [E04G 21/14](#)
[B60P 3/325](#) covered by [B60P 3/32](#)
[B60P 3/33](#) covered by [B60P 3/34](#)
[B60P 3/335](#) covered by [B60P 3/32](#)
[B60P 3/345](#) covered by [B60P 3/34](#)
[B60P 3/35](#) covered by [B60P 3/34](#)
[B60P 3/355](#) covered by [B60P 3/34](#)
[B60P 3/363](#) covered by [B60P 3/36](#)
[B60P 3/367](#) covered by [B60P 3/36](#)
[B60P 3/37](#) covered by [B60P 3/343](#)
[B60P 3/373](#) covered by [B60P 3/32](#)
[B60P 3/377](#) covered by [B60P 3/34](#)
[B60P 5/00](#) covered by [G01G 19/08](#)

B60P 1/00

Vehicles predominantly for transporting loads and modified to facilitate loading, consolidating the load, or unloading (vehicles for carrying harvested crops with means for self-loading or self-unloading [A01D 90/00](#); peculiar to refuse collecting-vehicles [B65E](#); loading or unloading vehicles by means not incorporated therein [B65G](#))

B60P 1/003

- { vehicles with loading gates ([B60P 1/43](#) takes precedence) }

B60P 1/006

- { charge and discharge with pusher plates (plates fixed to endless chains or belts [B60P 1/365](#)) }

B60P 1/02

- with parallel up-and-down movement of load supporting or containing element (in combination with tipping [B60P 1/34](#); devices for lifting or lowering bulky or heavy goods for loading or unloading purposes, movable on wheels or the like, e.g. fork-lift trucks, [B66F 9/06](#); { suspensions with electronic levelling control during loading or unloading [B60G 17/015A4](#) })

B60P 1/022

- .. { with a loading platform outside the wheels }

B60P 1/025

- .. { with a loading platform inside the wheels of a same axle and being lowerable below the axle }

B60P 1/027

- .. { with relative displacement of the wheel axles }

B60P 1/04

- with a tipping movement of load-transporting element (dredgers or soil-shifting machines [E02F 3/00](#))

- B60P 1/045 . . { Levelling or stabilising systems for tippers (suspensions with levelling or stabilising means for vehicles in general [B60G 17/00](#), [B60G 21/00](#), using ground-engaging vehicle fittings [B60S 9/00](#)) }
- B60P 1/06 . . actuated by mechanical gearing only
- B60P 1/08 . . . with relative displacement of the wheel axles
- B60P 1/10 . . . with screw and nut
- B60P 1/12 . . . with toothed gears, wheels, or sectors; with links, cams and rollers, or the like
- B60P 1/14 . . . with cables, chains, or the like
- B60P 1/16 . . actuated by fluid-operated mechanisms
- B60P 1/162 . . . { the hydraulic system itself }
- B60P 1/165 . . . { tipping movement about a fore and aft axis }
- B60P 1/167 . . . { three side tipping movement }
- B60P 1/18 . . . with relative displacement of the wheel axles
- B60P 1/20 . . . with toothed gears, wheels, or sectors; with links, cams and rollers, or the like
- B60P 1/22 . . . with cables, chains, or the like
- B60P 1/24 . . using the weight of the load
- B60P 1/26 . . Means for controlling movement of tailboards or sideboards {([Open loading compartments with movable sideboards or tailgates \[B62D 33/027\]\(#\)](#)) }
- B60P 1/267 . . . Controlling degree of tailboard or sideboard movement in dependence upon degree of tipping movement, e.g. by linkage or cam
- B60P 1/273 . . . Providing interdependence between tipping movement and the latching or unlatching of a freely-swingable tailboard or sideboard
- B60P 1/28 . . Tipping body constructions
- B60P 1/283 . . . { Elements of tipping devices }
- B60P 1/286 { Loading buckets }
- B60P 1/30 . . in combination with another movement of the element
- B60P 1/32 . . . the other movement being lateral displacement
- B60P 1/34 . . . the other movement being raising or lowering
- B60P 1/36 . . using endless chains or belts thereon
- B60P 1/365 . . { the chains or belts being fixed to a rigid pusher plate (other charging and discharging devices with pusher plates [B60P 1/006](#)) }
- B60P 1/38 . . forming the main load-transporting element or part thereof {([B60P 1/365 takes precedence](#)) }
- B60P 1/40 . . using screw conveyors thereon
- B60P 1/42 . . mounted on the load-transporting element
- B60P 1/43 . . using a loading ramp mounted on the vehicle ([loading ramps per se \[B65G 69/28\]\(#\)](#))
- B60P 1/431 . . { the ramp being stored under the loading floor when not in use }
- B60P 1/433 . . { the loading floor or a part thereof being movable to form the ramp }
- B60P 1/435 . . { the ramp being attached to or making part of the side- or tailboards of the vehicle }
- B60P 1/436 . . { the ramp being used for more than one height of loading floor }
- B60P 1/438 . . { with means for balancing the weight of the ramp between use and non-use position }

- B60P 1/44 . having a loading platform thereon raising the load to the level of the load-transporting element ({ [Vehicles with special provisions for invalids comprising means for loading or unloading invalid conveyances A61G 3/02](#) })
- B60P 1/4407 . . { and lifting achieved by pivoting of the loading platform }
- B60P 1/4414 . . { and keeping the loading platform parallel to the ground when raising the load }
- B60P 1/4421 . . . { the loading platform being carried in at least one vertical guide }
- B60P 1/4428 { and pivotable in a horizontal plane }
- B60P 1/4435 . . . { the loading platform being suspended by wires, chains or the like from horizontal rails, e.g. the rails forming part of the vehicle floor }
- B60P 1/4442 . . . { the raising device, when not in use, being stored inside the load-transporting compartment }
- B60P 1/445 . . . { the loading platform, when not in use, being stored under the load-transporting surface }
- B60P 1/4457 . . { Means for immobilising the load or preventing it from rolling off during lifting; Man-rails }
- B60P 1/4464 . . { Warning signals, e.g. accoustic or visual }
- B60P 1/4471 . . { General means for controlling movements of the loading platform, e.g. hydraulic systems }
- B60P 1/4478 . . . { Safety stops, switches }
- B60P 1/4485 . . { Attaching the complete loading platform unit to the vehicle }
- B60P 1/4492 . . { Design or construction of the moving platform itself }
- B60P 1/48 . . using pivoted arms raisable above load-transporting element ({ for refuse collecting vehicles [B65F 3/041](#) }; load engaging elements [B66C 1/00](#) to [B66C 3/00](#))
- B60P 1/483 . . { using pivoted arms shifting the load-transporting element in a fore or aft direction }
- B60P 1/486 . . { using pivoted arms shifting the load-transporting element in a crosswise direction }
- B60P 1/50 . . loading from in front of the vehicle
- B60P 1/52 . . using rollers in the load-transporting element
- B60P 1/54 . . using cranes for self-loading or self-unloading (vehicles for transporting cranes [B60P 3/28](#), mobile or traveling cranes [B66C](#))
- B60P 1/5404 . . { with a fixed base ([B60P 1/5485](#) takes precedence) }
- B60P 1/5409 . . . { attached to the roof of the vehicle }
- B60P 1/5414 { and having the first pivot on a horizontal axis }
- B60P 1/5419 { and having the first pivot on a vertical axis }
- B60P 1/5423 . . . { attached to the loading platform or similar }
- B60P 1/5428 { and having the first pivot on a horizontal axis }
- B60P 1/5433 { and having the first pivot on a vertical axis }
- B60P 1/5438 . . { with a moveable base ([B60P 1/5485](#) takes precedence) }
- B60P 1/5442 . . . { attached to the roof of the vehicle }
- B60P 1/5447 { and having the first pivot on a horizontal axis }
- B60P 1/5452 { and having the first pivot on a vertical axis }
- B60P 1/5457 . . . { attached to the loading platform or similar }

- B60P 1/5461 { and having the first pivot on a horizontal axis }
- B60P 1/5466 { and having the first pivot on a vertical axis }
- B60P 1/5471 . . { the crane being detachable from the vehicle }
- B60P 1/5476 . . . { and having a first pivot on a horizontal axis }
- B60P 1/548 . . . { and having a first pivot on a vertical axis }
- B60P 1/5485 . . { with arrangements to fold away the crane out of sight or in order to save space }
- B60P 1/549 . . . { and having a first pivot on a horizontal axis }
- B60P 1/5495 . . . { and having a first pivot on a vertical axis }

- B60P 1/56 . the load-transporting element having bottom discharging openings

- B60P 1/58 . using vibratory effect

- B60P 1/60 . using fluids, e.g. having direct contact between fluid and load ({ for railway wagons [B61D 5/004](#) })
- B60P 1/62 . . with porous walls

- B60P 1/64 . the load supporting or containing element being readily removable ({ [B60P 1/48](#) takes precedence }; caravan, camping, or the like vehicles characterised by living accommodation in the form of a removable body supported by the vehicle unit { [B60P 3/34](#) })

- B60P 1/6409 . . { details, accessories, auxiliary devices }
- B60P 1/6418 . . { the load-transporting element being a container or similar }
- B60P 1/6427 . . . { the load-transporting element being shifted horizontally in a fore and aft direction, combined or not with a vertical displacement }
- B60P 1/6436 . . . { the load-transporting element being shifted horizontally in a crosswise direction, combined or not with a vertical displacement }
- B60P 1/6445 . . . { the load-transporting element being shifted only vertically }
- B60P 1/6454 . . . { the load transporting element being shifted by means of an inclined ramp connected to the vehicle }
- B60P 1/6463 . . . { fitted with articulated beams for longitudinal displacement of the container }
- B60P 1/6472 . . . { fitted with articulated boom load arms for lateral displacement of the container }
- B60P 1/6481 . . . { Specially adapted for carrying different numbers of container or containers of different sizes }
- B60P 1/649 . . . { Guiding means for the load-transporting element }

- B60P 3/00** **Vehicles adapted to transport, to carry or to comprise special loads or objects**
(ambulance aspects, vehicles with special provisions for invalids [A61G 3/00](#); hearses [A61G 21/00](#); fire-fighting land vehicles [A62C 27/00](#); refuse-collecting vehicles [B65F 3/00](#), [B65F 7/00](#); snow-removing vehicles [E01H](#); armoured or armed vehicles [F41H 7/00](#); self-propelled mine-clearing vehicles [F41H 11/16](#))

- B60P 3/002 . { for carrying glass plates }
- B60P 3/005 . { for use in contaminated areas, e.g. N.B.C. intervention vehicles }
- B60P 3/007 . { for delivery of small articles, e.g. milk, frozen articles }

- B60P 3/025 . the object being a shop, cafeteria or display { the object being a theatre or stage } (the object being a workshop [B60P 3/14](#))
- B60P 3/0252 .. { the object being a theater, cinema, auditorium or grandstand }
- B60P 3/0255 .. { the object being a display, i.e. for displaying articles }
- B60P 3/0257 .. { the object being a vending stall, restaurant or food kiosk }
- B60P 3/03 . for transporting money or other valuables
- B60P 3/035 . for transporting reel units
- B60P 3/04 . for transporting animals {([Railway wagons adapted for carrying animals B61D 3/163](#))}
- B60P 3/05 . for transporting meat (for transporting refrigerated goods [B60P 3/20](#))
- B60P 3/055 . for transporting bottles
- B60P 3/06 . for carrying vehicles ([B60P 3/12](#) takes precedence; caravans, camping, or like vehicles with vehicle-carrying means { [B60P 3/36](#) })
- B60P 3/062 .. { Especially adapted for carrying tracked vehicles, e.g. public works machinery, battle tanks, snowmobiles }
- B60P 3/064 .. { Especially adapted for carrying non tracked public work, tractor or combat vehicles }
- B60P 3/066 .. { specially adapted for carrying bulky agricultural material, e.g. combines }
- B60P 3/068 .. { Especially adapted for road transportation of railway stock (vehicles for use both on rail and on road [B60F 1/00](#))}
- B60P 3/07 .. for carrying road vehicles
- B60P 3/071 ... Arrangement of overturned or on-edge vehicles
- B60P 3/073 ... Vehicle retainers {(specially adapted for fixing semi-trailers on railway vehicles [B61D 45/004](#))}
- B60P 3/075 for wheels, hubs, or axle shafts
- B60P 3/077 Wheel cradles, chocks, or wells
- B60P 3/079 Tie-down retainers ([B60P 3/075](#) takes precedence)
- B60P 3/08 .. Multilevel-deck construction carrying vehicles
- B60P 3/10 .. for carrying boats; {(for carrying sailboards [B60R 9/08](#), [B63B 35/7946](#); equipment forming part of or attachable to vessels facilitating transport over land, e.g. wheel units, towing units, [B63C 13/00](#))}
- B60P 3/1008 ... { on the vehicle roof }
- B60P 3/1016 { with the boat or boat-supporting frame pivoting around a horizontal axis when loading on the roof }
- B60P 3/1025 { with a sliding or rolling main movement of the boat or boat-supporting frame when loading on the roof }
- B60P 3/1033 ... { on a loading frame, e.g. the vehicle being a trailer ([B60P 3/1008](#) takes precedence)}
- B60P 3/1041 { comprising a shelter or boat protection, e.g. usable as a camper }
- B60P 3/105 { using a trailer convertible into a multipurpose trailer }
- B60P 3/1058 { with the boat carried on or attached to a sliding subframe on the vehicle frame }

- B60P 3/1066 { Arrangement of supports, rollers or winches on the vehicle }
- B60P 3/1075 { Guiding means for loading the boat (using rollers [B60P 3/20F8](#)) }
- B60P 3/1083 { Means for extending the drawbar; Dollies and skidplates for the tow hitch }
- B60P 3/1091 . . . { by suspending the boat, e.g. straddle trucks or trailers }
- B60P 3/11 . . for carrying aircraft

- B60P 3/12 . for salvaging damaged vehicles
- B60P 3/122 . . { by supporting the whole vehicle }
- B60P 3/125 . . { by supporting only part of the vehicle, e.g. front- or rear-axle }
- B60P 3/127 . . . { on a tow dolly }

- B60P 3/14 . the object being a workshop for servicing, for maintenance, or for carrying workmen during work (lifting devices for movable platforms or cabins for workmen [B66F 11/04](#))

- B60P 3/16 . for carrying mixed concrete, e.g. having rotatable drums (concrete-mixing apparatus specially adapted for being mounted on vehicles with provision for mixing during transport [B28C 5/42](#)) }

- B60P 3/18 . the object being a searchlight (mounting of cameras operating during drive [B60R 11/04](#)) }

- B60P 3/20 . Refrigerated goods vehicles (air treatment of goods space [B60H](#); { air-conditioning means for freight cars, isothermic wagons [B61D 27/0027](#); superstructures for refrigerated goods vehicles [B62D 33/048](#) })
- B60P 3/205 . . { with means for dividing the interior volume, e.g. movable walls or intermediate floors }

- B60P 3/22 . Tank vehicles ({ vehicles convertible from transport of fluids to transport of other types of goods [B60P 3/426](#) }; tank aspects [B65D 86/00](#), [B65D 90/00](#), [F17C](#))
- B60P 3/2205 . . { Constructional features }
- B60P 3/221 . . . { Assembling, e.g. layout of steel plates or reinforcing arrangements }
- B60P 3/2215 . . . { Mounting of tanks to vehicles }
- B60P 3/222 { including resilient means }
- B60P 3/2225 . . . { the tank being part of the vehicle frame }
- B60P 3/223 . . . { the tank itself rolling on the ground }
- B60P 3/2235 . . . { Anti-slosh arrangements (for tank containers [B65D 90/52](#)) }
- B60P 3/224 . . { comprising auxiliary devices, e.g. for unloading or level indicating (catwalks, ladders or safety railings therefor [B60R 3/005](#)) }
- B60P 3/2245 . . . { Adaptations for loading or unloading }
- B60P 3/225 . . . { Adaptations for pumps or valves }
- B60P 3/2255 . . . { Ventilating arrangements }
- B60P 3/226 . . . { Arrangements of access openings or covers therefor }
- B60P 3/2265 . . . { Arrangements for hoses, tubes, or reels }
- B60P 3/227 . . . { Methods for tracing the load (for tracing the vehicle [C08G 1/123](#)) }
- B60P 3/2275 . . . { Prevention of electrostatic electricity }
- B60P 3/228 . . . { Measuring or indicating means, e.g. of level, volume, weight }
- B60P 3/2285 . . . { Warning or prevention means against tilting }

- B60P 3/229 . . . { Anti-theft means (for vehicles [B60R 25/00](#)) }
- B60P 3/2295 . . { Means for heating, cooling, or insulating tanks or equipments (for tank containers [B65D 88/748](#)) }
- B60P 3/24 . . compartmented
- B60P 3/243 . . . { divided by rigid walls }
- B60P 3/246 . . . { divided by flexible walls }
- B60P 3/28 . for transporting cranes (vehicles using cranes for self-loading or self-unloading [B60P 1/54](#); mobile or travelling cranes [B66C](#))
- B60P 3/30 . Spraying vehicles (sprinkling-wagons for fertilising liquid [A01C 23/00](#); for destruction of noxious animals, vermin, or unwanted vegetation [A01M](#); { vehicle-mounted spraying installations for de-icing aircraft [B64F 5/0063](#); } for spraying asphalt, bitumen, tar, or the like [E01C](#); for cleaning streets [E01H](#))
- B60P 3/32 . comprising living accommodation for people, e.g. caravans, camping, or like vehicles (tents or canopies, in general [E04H 15/00](#))
- B60P 3/34 . . the living accommodation being expansible, collapsible or capable of rearrangement ({ [B60P 3/38](#) } takes precedence; tents supported at least partially by vehicles [E04H 15/06](#))
- B60P 3/341 . . . { comprising flexible elements }
- B60P 3/343 { Hoods for caravans }
- B60P 3/36 . . Auxiliary arrangements; Arrangements of living accommodation (toilet or washing arrangements [B60R 15/00](#)); Details
- B60P 3/38 . . . Sleeping arrangements, { e.g. living or sleeping accommodation on the roof of the vehicle }
- B60P 3/39 expansible, collapsible or repositionable elements adapted to support a bed, e.g. wall portions
- B60P 3/40 . for carrying long loads, e.g. with separate wheeled load supporting elements ({ [E04G 21/14](#) takes precedence }; signal devices to be attached to overhanging load [B60Q 7/02](#))
- B60P 3/41 . . for log transport
- B60P 3/42 . convertible from one use to a different one (vehicles capable of travelling in or on different media, rail-and-road vehicles [B60F](#))
- B60P 3/423 . . { from transport of persons to transport of goods }
- B60P 3/426 . . { from transport of fluids to transport of other types of goods }
- B60P 7/00** **Securing or covering of load on vehicles** ({ immobilising the load during lifting a loading platform [B60P 1/4457](#) }; for railway vehicles [B61D 45/00](#))
- B60P 7/02 . Covering of load
- B60P 7/04 . . by tarpaulins or like flexible members
- B60P 7/06 . Securing of load (vehicle retainers [B60P 3/073](#))
- B60P 7/065 . . { by pressurizing or creating a vacuum in a bag, cover or the like }
- B60P 7/08 . . securing to the vehicle floor or sides ({ [B60P 7/065](#) }, [B60P 7/13](#), [B60P 7/135](#) take precedence)

B60P 7/0807	...	{ Attachment points }
B60P 7/0815	....	{ Attachment rails or trellis }
B60P 7/0823	...	{ Straps; Tighteners }
B60P 7/083	....	{ Tensioning by repetitive movement of an actuating member }
B60P 7/0838	....	{ Tensioning by single movement of an actuating member }
B60P 7/0846	....	{ winding up or storing of straps }
B60P 7/0853	....	{ Tools for manipulating straps or tighteners }
B60P 7/0861	....	{ Measuring or identifying the tension in the securing element }
B60P 7/0869	....	{ Protecting the strap or the load from wear }
B60P 7/0876	...	{ using restraining net or tarpaulin in contact with the load }
B60P 7/0884	...	{ by increasing the friction between the load and the surface }
B60P 7/0892	...	{ by preventing lateral movement of the load, e.g. using stop blocks }
B60P 7/10	...	the load being plates, cases, or boxes
B60P 7/12	...	the load being tree-trunks, beams, drums, tubes, or the like
B60P 7/13	..	Securing freight containers or forwarding containers on vehicles
B60P 7/132	...	{ twist-locks for containers or frames }
B60P 7/135	..	Securing or supporting by load bracing means
B60P 7/14	...	the load bracing means comprising a movable bulkhead
B60P 7/15	...	the load bracing means comprising a movable bar
B60P 7/16	..	Protecting against shocks {(B60P 7/065 takes precedence)}
B60P 7/18	...	Protecting freight containers or forwarding containers

B60P 9/00 **Other vehicles predominantly for carrying loads, { e.g. load carrying vehicles convertible for an intended purpose }**