SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B62 LAND VEHICLES FOR TRAVELLING OTHERWISE THAN ON RAILS

B62B HAND-PROPELLED VEHICLES, e.g. HAND CARTS OR PERAMBULATORS; SLEDGES (characterised by animal propulsion B62C; propulsion of sledges by driver or engine B62M)

Note(s)

In this subclass, the following terms or expressions are used with the meanings indicated:

- "hand carts" also embraces hand-propelled wheeled devices in so far as the features thereof are generic to hand carts and also embraces pedestrian controlled power-driven vehicles in so far as the features thereof are generic to hand carts;
- "rollers" is equivalent to wheels.

Subclass index

HAND CARTS	
With one axle; with more than one axle	1/00, 3/00
Details and accessories; runners for travel on ice or snow	5/00, 19/00
CARRIAGES FOR CHILDREN, PERAMBULATORS	7/00, 9/00
SLEDGES	
With runners; other types	13/00, 15/00
Details and accessories	17/00
OTHER HAND-PROPELLED VEHICLES	11/00

Hand carts

1/00 Hand carts having only one axis carrying one or more transport wheels; Equipment therefor

- in which the wheel axis is disposed between the load and the handles
- involving parts being adjustable, collapsible, attachable, detachable, or convertible
- involving means for grappling or securing in place objects to be carried; Loading or unloading equipment
- having auxiliary wheels used during loading or unloading
- in which the load is intended to be transferred totally to the wheels
- 1/12 involving parts being adjustable, collapsible, attachable, detachable, or convertible
- involving means for grappling or securing in place objects to be carried; Loading or unloading equipment
- 1/16 • involving tiltably-mounted containers
- in which the load is disposed between the wheel axis and the handles, e.g. wheelbarrows
- 1/20 involving parts being collapsible, attachable, detachable or convertible
- involving means for grappling or securing in place objects to be carried; Loading or unloading equipment
- 1/24 • involving tiltably-mounted containers
- 1/26 characterised by supports specially adapted to objects of definite shape

3/00 Hand carts having more than one axis carrying transport wheels; Steering devices therefor; Equipment therefor

- involving parts being adjustable, collapsible, attachable, detachable, or convertible (B62B 3/14 takes precedence) [6]
- 3/04 involving means for grappling or securing in place objects to be carried; Load handling equipment
- for simply clearing the load from the ground, e.g. low-lift trucks (devices movable on wheels or the like for lifting or lowering bulky or heavy goods for loading or unloading purposes, e.g. fork-lift trucks, B66F 9/06)
- 3/065 • with hydraulic lifting means [6]
- involving tiltably-mounted containers (B62B 3/14 takes precedence) [6]
- 3/10 characterised by supports specially adapted to objects of definite shape
- 3/12 characterised by three-wheeled construction (B62B 3/14 takes precedence) [6]
- 3/14 characterised by provisions for nesting or stacking,
 e.g. shopping trolleys [6]
- 3/16 • vertically stackable [6]
- nestable by means of pivoted load supports or load support parts, e.g. baskets [6]

5/00 Accessories or details specially adapted for hand carts (B62B 9/00 takes precedence; wheels, axles, or axle bearings for vehicles B60B; castors for vehicles, castors in general B60B 33/00)

5/02 • providing for travelling up or down a flight of stairs (chairs or personal conveyances specially adapted for patients or disabled persons A61G 5/00)

5/04

· Braking mechanisms; Locking devices against

5704	movement	3/24	B62B 9/14; devices for use in guiding or supporting
5/06	Hand moving equipment, e.g. handle bars (for cycles		children, e.g. safety harness, A47D 13/08)
0,00	B62K 11/14, B62K 21/12)	9/26	 Securing devices for bags or toys
5/08	• Children's seats (B62B 3/14 takes precedence) [6]	9/28	Auxiliary dismountable seats
Carriage	es for children; Perambulators	44 (00	
7/00	Carriages for children; Perambulators, e.g. dolls' perambulators	11/00	Hand-propelled vehicles not otherwise provided for (rider propulsion of vehicles B62M 1/00, B62M 6/00)
7/02	 having only a single wheel axis 		
7/04	having more than one wheel axis; Steering devices therefor	<u>Sledges</u>	
7/06	• • collapsible or foldable	13/00	Sledges with runners (ice boats or sailing sledges B62B 15/00)
7/08	• • • in the direction of, or at right angles to, the	13/02	characterised by arrangement of runners
	wheel axes	13/04	arranged in a single line
7/10	• • • by folding down the body to the wheel carriage	13/06	arranged in two or more parallel lines
	or by retracting projecting parts into the box- shaped body	13/08	• • with steering devices
7/12	convertible, e.g. into children's furniture or toy	13/10	• • • with swivelling portions of the runners; with a swivelling middle runner
	(children's chairs convertible to push chairs A47D 1/06)	13/12	• • • with tilting or bending runners
7/14	 with detachable or rotatably-mounted body 	13/14	• • • combined with braking devices
//14	with detachable of rotatably infounced body	13/16	Collapsible or foldable sledges
9/00	Accessories or details specially adapted for children's	13/18	Vehicles having alternatively-usable runners and
	carriages or perambulators (providing for travelling on snow B62B 19/00)	13/ 10	wheels
9/02	 providing for travelling up or down a flight of stairs 	15/00	Other sledges; Ice boats or sailing sledges
9/04	 with runners, e.g. sledge runners 		
9/06	 with spiders or the like 		
9/08	 Braking mechanisms; Locking devices against movement 	17/00	Accessories or details of sledges
9/10	• Perambulator bodies; Equipment therefor (collapsible or foldable B62B 7/06; convertible B62B 7/12)	17/02	 Runners (attachable to, or replacing, vehicle wheels B62B 19/00)
9/12	 involving parts that are adjustable, attachable or 	17/04	 resiliently suspended
37 1 2	detachable	17/06	 Superstructures; Attachments therefor
9/14	 Hoods; Weather screens; Cat nets 	17/08	Braking devices
9/16	 Mud-guards or protecting devices for wheels 	40.400	5 () 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
9/18	Resilient suspensions of bodies	19/00	Runners for carrying wheeled vehicles to facilitate travel on ice or snow
9/20	Handle bars; Handles	19/02	attachable to wheels
9/22	Devices for rocking or oscillating		
	Ç Ç	19/04	 replacing wheels
B62C	VEHICLES DRAWN BY ANIMALS		

9/24

• Safety guards for children, e.g. harness (cat nets

Note(s)

- This subclass covers only vehicles or parts thereof in so far as the relevant features are essential for animal-drawn vehicles.
- 2. This subclass does not cover animal-drawn vehicles which have not the features mentioned in Note (1) above. They are regarded as trailers which are covered by class B60 or subclass B62D, or as sledges which are covered by subclass B62B.

1/00	Types of vehicles	5/00	Draught assemblies (traction harness B68B 3/00)
1/02	Passenger vehicles	5/02	• Shafts, poles, or thills; Mountings thereof, e.g.
1/04	 Load-carrying vehicles 		resilient, adjustable
1/06	 convertible, e.g. with extensible parts, with changeable wheel track 	5/04	 Swingletrees; Mountings thereof; Draught equalisers for a span of draught animals; Mountings for traces
1/08	Racing vehicles, e.g. sulkies	7/00	Braking mechanisms and brake control devices
3/00	Undercarriages or running gear of vehicles; Axle		specially adapted for animal-drawn vehicles
	supports (undercarriages for supporting agricultural	7/02	 Mechanisms for locking ground-engaging wheels,
	tools or apparatus A01B 35/30, A01B 39/24,		e.g. engaging spokes
	A01B 51/00)	7/04	 Automatic brake control devices
3/02	 Front wheel carriers; Bogies; Steering mechanisms for bogies 		

9/00 Carriers or holders for whips; Holders for reins forming part of, or attached to, vehicles (reins or whips per se B68B)

11/00 Safeguarding appliances not otherwise provided for, e.g. for readily-releasing unmanageable draught animals

11/02 • Providing for disengaging thills
11/04 • combined with automatic braking

99/00 Subject matter not provided for in other groups of this subclass [2009.01]

MOTOR VEHICLES; TRAILERS (steering, or guiding on a desired track, of agricultural machines or implements A01B 69/00; wheels, castors, axles, increasing wheel adhesion B60B; vehicle tyres, tyre inflation or tyre changing B60C; connections between vehicles of a train or the like B60D; vehicles for use on rail and road, amphibious or convertible vehicles B60F; suspension arrangements B60G; heating, cooling, ventilating or other air treating devices B60H; windows, windscreens, non-fixed roofs, doors or similar devices, protective coverings for vehicles not in use B60J; propulsion plant arrangements, auxiliary drives, transmissions, controls, instrumentation or dashboards B60K; electric equipment or propulsion of electrically-propelled vehicles B60L; power supply for electrically-propelled vehicles B60M; passenger accommodation not otherwise provided for B60N; adaptations for load transportation or to carry special loads or objects B60P; arrangement of signalling or lighting devices, the mounting or supporting thereof or circuits therefor, for vehicles in general B60Q; vehicles, vehicle fittings or vehicle parts, not otherwise provided for B60R; servicing, cleaning, repairing, supporting, lifting, or manoeuvring, not otherwise provided for B60S; brake arrangements, brake control systems or parts thereof B60T; air-cushion vehicles B60V; motorcycles, accessories therefor B62J, B62K; testing of vehicles G01M)

Note(s)

In this subclass, the following terms are used with the meanings indicated:

ELINCTIONAL OD CTDUCTUDAL CHADACTEDICTICS, DADTS OD ACCESCODIES THEREOF NOT

- "vehicles" includes motor vehicles and trailers;
- "trailers" includes forecars or sidecars.

Subclass index

FUNCTIONAL OR STRUCTURAL CHARACTERISTICS; PARTS OR ACCESSORIES THEREOF NO	DΤ
OTHERWISE PROVIDED FOR	
Predominantly for passengers; load carrying	31/00, 47/00, 33/00
Tractors; tractor-trailer combinations or road trains; vehicles with no seat for the driver	49/00, 53/00, 51/00
Endless-track vehicles and their tracks; vehicles with ground engagement other than by tracks or when	els 55/00, 57/00
Trailers with driven ground wheels; Motor vehicles or trailers, characterised by the arrangement or	
number of wheels	59/00, 61/00
Other types of vehicles; designing, manufacturing, assembling, disassembling of vehicles	63/00, 65/00, 67/00
CHASSIS FRAME, SUPERSTRUCTURE, AND BODY	
Chassis frame; monocoque construction; connections between body and frame	21/00, 23/00, 24/00
Superstructure and body	
characterised	
by material	29/00
the function of the vehicle	31/00, 33/00
streamlining; stabilising	35/00, 37/00, 17/00
superstructure sub-units and connections thereof; arrangements for spare wheel	
radius rods	19/00
other vehicle bodies	39/00
STEERING	
Initiating means; gears; response to driving conditions; linkage; adjusting	1/00, 3/00, 6/00, 7/00, 17/00
Power-assisted; automatically influencing; for endless-track vehicles; for trailers	5/00, 6/00, 11/00, 13/00
Tandem vehicles or pivotally connected frames	12/00
Other	
ACCESSORIES FOR COLLISION MARKING	41/00

Steering of motor vehicles or trailers [3]

1/00	Steering controls, i.e. means for initiating a change of
	direction of the vehicle [4, 5]

1/02 • vehicle-mounted

1/04 • • Hand wheels

1/06 • • • Rims, e.g. with heating means; Rim covers (B62D 1/11 takes precedence) [5]

1/08 • • • Spokes, e.g. resilient (B62D 1/11 takes precedence) [5]

- 1/10 • Hubs; Connecting hubs to steering columns, e.g. adjustable (B62D 1/11 takes precedence) [5]
- 1/11

 • incorporating energy-absorbing arrangements, e.g. by being yieldable or collapsible (padded linings associated with the steering wheel B60R 21/05; shock absorbers using plastic deformation of members in general F16F 7/12) [5]

1/12 • • Hand levers

1/14	• • Tillers, i.e. hand levers operating on steering	5/087	• • • Sliding spool valves [4]
	columns	5/09	 characterised by means for actuating valves [4]
1/16	Steering columns	5/093	 • Telemotor driven by steering wheel movement
1/18	 • yieldable or adjustable, e.g. tiltable (padded 		(hydraulic steering gear B62D 3/14) [4]
	linings associated with the steering column	5/097	• • • gerotor type [4]
	B60R 21/05)	5/10	 characterised by type of power unit [4]
	Note(s)	5/12	 Piston and cylinder [4]
	Group B62D 1/181 takes precedence over groups	5/14	• • • Rotary motor [4]
	B62D 1/183-B62D 1/187.	5/16	 Expansible chamber with flexible wall [4]
1/181	• • • with power actuated adjustment, e.g. with	5/18	 characterised by power transmitting means [4]
1,101	position memory [7]	5/20	 specially adapted for particular type of steering
1/183	• • • adjustable between in-use and out-of-use		gear or particular application (steering gears per se
	positions, e.g. to improve access [7]		B62D 3/00; steering linkages not characterised by
1/184	• • • Mechanisms for locking columns at selected		being power-assisted or power-driven B62D 7/00) [4]
	positions [7]	5/22	• • • for rack-and-pinion type [4]
1/185	 • • • adjustable by axial displacement, e.g. 	5/24	• • • for worm type [4]
	telescopically (B62D 1/183, B62D 1/187,	5/26	• • • for pivoted axles [4]
	B62D 1/19 take precedence) [7]	5/28	• • • for pivoted bogies [4]
1/187	• • • with tilt adjustment; with tilt and axial	5/30	Safety devices, e.g. alternate emergency power
	adjustment (B62D 1/183, B62D 1/19 take	3/30	supply or transmission means to ensure steering
1/189	precedence) [7] • • • • the entire steering column being tiltable		upon failure of the primary steering means [4]
1/109	as a unit [7]	5/32	• • • for telemotor systems [4]
1/19	• • incorporating energy-absorbing		·
1715	arrangements, e.g. by being yieldable or	6/00	Arrangements for automatically controlling steering
	collapsible (shock-absorbers using plastic		depending on driving conditions sensed and
	deformation of members in general		responded to, e.g. control circuits (means for initiating a change in direction B62D 1/00; steering valves
	F16F 7/12) [5]		B62D 5/06; combined with means for inclining the
1/20	 Connecting steering column to steering gear 		vehicle body or wheels on bends B62D 9/00) [4, 6]
1/22	Alternative steering-control elements, e.g. for		
	teaching purposes		Note(s)
1/24	not vehicle-mounted		1. When classifying in this group, classification is
1/26	• mechanical, e.g. by a non-load-bearing guide		also made in the appropriate one of groups
1/20	(railways B61) • non-mechanical		B62D 1/00 - B62D 5/00 or B62D 7/00 -
1/28	• • non-mechanical		B62D 19/00 if other aspects of the steering system are of interest.
3/00	Steering gears (power assisted or power driven		
			2. In main group Bb2D b/UU, but excluding its
	B62D 5/00; steering linkages B62D 7/00; for non-		2. In main group B62D 6/00, but excluding its subgroups, it is desirable to add the indexing
	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general		subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00.
	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H)	6/02	subgroups, it is desirable to add the indexing
3/02	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical	6/02 6/04	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. • responsive only to vehicle speed [4] • responsive only to forces disturbing the intended
3/04	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type		subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. • responsive only to vehicle speed [4] • responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely
3/04 3/06	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • • of worm type • • • with screw and nut	6/04	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. • responsive only to vehicle speed [4] • responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4]
3/04 3/06 3/08	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • • with screw and nut • • • using intermediate balls or the like		subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening
3/04 3/06 3/08 3/10	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • • using intermediate balls or the like • with worm engaging in sector or roller gear	6/04	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles
3/04 3/06 3/08 3/10 3/12	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • with worm engaging in sector or roller gear • of rack-and-pinion type	6/04	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4]
3/04 3/06 3/08 3/10	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • • using intermediate balls or the like • with worm engaging in sector or roller gear	6/04 6/06 6/08	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. • responsive only to vehicle speed [4] • responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] • responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] • responsive only to input torque [6]
3/04 3/06 3/08 3/10 3/12 3/14	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • with screw and nut • of with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic	6/04	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4]
3/04 3/06 3/08 3/10 3/12	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • of using intermediate balls or the like • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-	6/04 6/06 6/08 6/10	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6]
3/04 3/06 3/08 3/10 3/12 3/14	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • with screw and nut • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure	6/04 6/06 6/08	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. • responsive only to vehicle speed [4] • responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] • responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] • responsive only to input torque [6]
3/04 3/06 3/08 3/10 3/12 3/14	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • of using intermediate balls or the like • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B)	6/04 6/06 6/08 6/10	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings
3/04 3/06 3/08 3/10 3/12 3/14 5/00	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • with screw and nut • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure	6/04 6/06 6/08 6/10	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. • responsive only to vehicle speed [4] • responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] • responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] • responsive only to input torque [6] • characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] • for pivoted bogies
3/04 3/06 3/08 3/10 3/12 3/14 5/00	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • ousing intermediate balls or the like • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear	6/04 6/06 6/08 6/10 7/00	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. • responsive only to vehicle speed [4] • responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] • responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] • responsive only to input torque [6] • characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] • for pivoted bogies • with more than one wheel
3/04 3/06 3/08 3/10 3/12 3/14 5/00	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • ousing intermediate balls or the like • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins
3/04 3/06 3/08 3/10 3/12 3/14 5/00 5/02	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • • of worm type • • • with screw and nut • • • using intermediate balls or the like • • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear	6/04 6/06 6/08 6/10 7/00 7/02 7/04	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane
3/04 3/06 3/08 3/10 3/12 3/14 5/00	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • • of worm type • • • with screw and nut • • • using intermediate balls or the like • • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear • fluid, i.e. using a pressurised fluid for most or all the	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane transverse to the longitudinal centre line of the
3/04 3/06 3/08 3/10 3/12 3/14 5/00 5/02	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • of using intermediate balls or the like • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear • fluid, i.e. using a pressurised fluid for most or all the force required for steering a vehicle [4]	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06 7/08	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane transverse to the longitudinal centre line of the vehicle
3/04 3/06 3/08 3/10 3/12 3/14 5/00 5/02	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • of using intermediate balls or the like • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear • fluid, i.e. using a pressurised fluid for most or all the force required for steering a vehicle [4] • characterised by specially adapted means for	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane transverse to the longitudinal centre line of the vehicle characterised by means varying the ratio
3/04 3/06 3/08 3/10 3/12 3/14 5/00 5/02	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • of using intermediate balls or the like • with worm engaging in sector or roller gear • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear • fluid, i.e. using a pressurised fluid for most or all the force required for steering a vehicle [4] • characterised by specially adapted means for varying pressurised fluid supply based on need,	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06 7/08	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane transverse to the longitudinal centre line of the vehicle characterised by means varying the ratio between the steering angles of the steered
3/04 3/06 3/08 3/10 3/12 3/14 5/00 5/02 5/04 5/06 5/065	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • of with screw and nut • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear • fluid, i.e. using a pressurised fluid for most or all the force required for steering a vehicle [4] • characterised by specially adapted means for varying pressurised fluid supply based on need, e.g. on-demand, variable assist [7]	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06 7/08	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane transverse to the longitudinal centre line of the vehicle characterised by means varying the ratio between the steering angles of the steered wheels (varying the ratio automatically
3/04 3/06 3/08 3/10 3/12 3/14 5/00 5/02	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • of with screw and nut • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear • fluid, i.e. using a pressurised fluid for most or all the force required for steering a vehicle [4] • characterised by specially adapted means for varying pressurised fluid supply based on need, e.g. on-demand, variable assist [7] • Supply of pressurised fluid for steering also	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06 7/08	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane transverse to the longitudinal centre line of the vehicle characterised by means varying the ratio between the steering angles of the steered
3/04 3/06 3/08 3/10 3/12 3/14 5/00 5/02 5/04 5/06 5/065	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • with screw and nut • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear • fluid, i.e. using a pressurised fluid for most or all the force required for steering a vehicle [4] • characterised by specially adapted means for varying pressurised fluid supply based on need, e.g. on-demand, variable assist [7] • Supply of pressurised fluid for steering also supplying other consumers [4]	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06 7/08	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane transverse to the longitudinal centre line of the vehicle characterised by means varying the ratio between the steering angles of the steered wheels (varying the ratio automatically depending on driving conditions B62D 6/00) [5]
3/04 3/06 3/08 3/10 3/12 3/14 5/00 5/02 5/04 5/06 5/065	B62D 5/00; steering linkages B62D 7/00; for non-deflectable wheels B62D 11/00; gearing in general F16H) • mechanical • of worm type • with screw and nut • of rack-and-pinion type • hydraulic Power-assisted or power-driven steering (for non-deflectable wheels B62D 11/00; fluid-pressure servomotors in general F15B) • mechanical, e.g. using a power-take-off mechanism for taking power from a rotating shaft of the vehicle and applying it to the steering gear • electrical, e.g. using an electric servo-motor connected to, or forming part of, the steering gear • fluid, i.e. using a pressurised fluid for most or all the force required for steering a vehicle [4] • characterised by specially adapted means for varying pressurised fluid supply based on need, e.g. on-demand, variable assist [7] • Supply of pressurised fluid for steering also supplying other consumers [4]	6/04 6/06 6/08 6/10 7/00 7/02 7/04 7/06 7/08	subgroups, it is desirable to add the indexing codes of groups B62D 101/00 - B62D 137/00. responsive only to vehicle speed [4] responsive only to forces disturbing the intended course of the vehicle, e.g. forces acting transversely to the direction of vehicle travel [4] responsive only to vehicle vibration dampening arrangements (steering dampers for cycles B62K 21/08) [4] responsive only to input torque [6] characterised by the means for sensing torque [6] Steering linkage; Stub axles or their mountings (B62D 13/00 takes precedence; power-assisted or power-driven steering B62D 5/00) [5] for pivoted bogies with more than one wheel for individually-pivoted wheels, e.g. on king-pins the pivotal axes being situated in a single plane transverse to the longitudinal centre line of the vehicle characterised by means varying the ratio between the steering angles of the steered wheels (varying the ratio automatically depending on driving conditions

5/083 • • • Rotary valves **[4]**

4

7/14	 the pivotal axes being situated in more than one plane transverse to the longitudinal centre line of the vehicle, e.g. all-wheel steering
7/15	• • • characterised by means varying the ratio between the steering angles of the steered wheels (varying the ratio automatically depending on driving conditions B62D 6/00) [5]
7/16	 Arrangement of linkage connections (pivots <u>per se</u> F16C)
7/18	Steering knuckles; King-pins
7/20	• Links, e.g. track rods (means for adjusting camber, castor, or toe-in B62D 17/00)
7/22	 Arrangements for reducing or eliminating reaction, e.g. vibration, from parts, e.g. wheels, of the steering system [5]
9/00	Steering deflectable wheels not otherwise provided for (steering-position indicators B62D 15/02)
9/02	combined with means for inwardly-inclining vehicle body on bends
9/04	• combined with means for inclining vehicle wheels on bends (B62D 9/02 takes precedence) [5]
11/00	Steering non-deflectable wheels; Steering endless tracks or the like
11/02	by differentially driving ground-engaging elements on opposite vehicle sides
11/04	 by means of separate power sources
11/06	 by means of a single main power source
11/08	using brakes or clutches as main steering- effecting means
11/10	 using gearings with differential power outputs on opposite sides, e.g. twin- differential or epicyclic gears
11/12	 • • using separate change-speed gearings
11/14	 • differential power outputs being effected by additional power supply to one side, e.g. power originating from secondary power source
11/16	• • • • the additional power supply being supplied mechanically
11/18	• • • • the additional power supply being supplied hydraulically
11/20	• Endless-track steering having pivoted bogie carrying track (B62D 11/02 takes precedence)
11/22	 Endless-track steering being effected by deflecting endless-track rollers or the like
11/24	 Endless-track steering specially adapted for vehicles having both steerable wheels and endless track
12/00	Steering specially adapted for vehicles operating in tandem or having pivotally connected frames (steering endless tracks or the like B62D 11/00; steering specially adapted for trailers B62D 13/00) [4]
12/02	• for vehicles operating in tandem [4]
13/00	Steering specially adapted for trailers (combined traction and steering hitches B60D)
13/02	 for centrally-pivoted axles
13/04	 for individually-pivoted wheels

for backing a normally-drawn trailer

Steering not otherwise provided for

• Steering position indicators [4]

13/06

15/00

15/02

17/00 Means on vehicle for adjusting camber, castor, or toe-in

19/00 Radius rods, i.e. distance members

Understructures; Superstructures; Vehicle bodies

21/00 Understructures, i.e. chassis frame on which a vehicle body may be mounted (combined frame and vehicle body B62D 23/00)

21/02 • comprising longitudinally or transversely arranged frame members [4]

21/03 • transverse members providing body support [4]

21/04 • • single longitudinal type

21/05 • pinched frame type, i.e. formed of at least two longitudinal frame sections connected by other longitudinal frame sections of lesser transverse dimension [4]

21/06 • of X-shaped or fork-shaped construction, i.e. having members which form an X or fork as the frame is seen in plan view

21/07 • wide-hipped frame type, i.e. a wide box-shaped mid portion with narrower sections extending from said mid portion in both fore and aft directions [4]

21/08 • built-up with interlaced cross members ("Fachwerkrahmen")

• Means for mounting load bearing surfaces [4]

21/10 • in which the main member is plate-like

• with resilient means for suspension [4]

Note(s)

This group <u>does not cover</u> subject matter primarily relating to the suspension, with only a nominal recitation of frame structure, which is covered by subclass B60G.

21/12 • assembled from readily-detachable parts

• of adjustable length or width

having impact absorbing means, e.g. a frame designed to permanently or temporarily change shape or dimension upon impact with another body (bumpers B60R 19/02; shock absorbers in general F16F) [4]

21/16 • having fluid storage compartment [4]

21/17 • forming fluid or electrical conduit means or having other means to accommodate the transmission of a force or signal [4]

21/18 • characterised by the vehicle type and not provided for in groups B62D 21/02-B62D 21/17 [4]

21/20 • trailer type, i.e. a frame specifically constructed for use in a non-powered vehicle [4]

23/00 Combined superstructure and frame, i.e. monocoque constructions (superstructure sub-units B62D 25/00)

24/00 Connections between vehicle body and vehicle frame (B62D 23/00, B62D 33/077 take precedence) [5]

 Vehicle body, not intended to move relatively to the vehicle frame, and mounted on vibration absorbing mountings, e.g. rubber pads [5]

• Vehicle body mounted on resilient suspension for movement relative to the vehicle frame [5]

25/00 Superstructure sub-units; Parts or details thereof not otherwise provided for

• Side panels

25/04 • Door pillars

25/06	• Fixed roofs (non-fixed roofs or roofs with movable panels B60J 7/00; roof liners B60R 13/02; insulating	33/10	• • comprising means for the suspension of the superstructure on the frame [5]
	elements B60R 13/08)	25/00	Vehicle hadies share storied by streamlining
25/07	 having water drainage or guide means integral with roof structure [4] 	35/00 35/02	Vehicle bodies characterised by streamliningStreamlining the undersurfaces
25/08	 Front or rear portions 	27/00	Stabilising vahisle hadies without controlling
25/10	 Bonnets or lids 	37/00	Stabilising vehicle bodies without controlling suspension arrangements
25/12	 Parts or details thereof (locks E05B; hinges 	37/02	by aerodynamic means
	E05D; counterbalancing means E05F; springs		 by means of movable masses
	F16F)	37/04	•
25/13	• • • Water deflectors [5]	37/06	 using gyroscopes
25/14	 Dashboards as superstructure sub-unit (other dashboard aspects B60K) 	39/00	Vehicle bodies not otherwise provided for
25/16 25/18	 • Mud-guards or wings; Wheel cover panels (equipped with means for freeing wheels or tyres from foreign matter B60S) • Parts or details thereof, e.g. mud-guard flaps 	41/00	Fittings for identifying vehicles in case of collision; Fittings for marking or recording collision areas
25/20	Floors or bottom sub-units		ratings for marring or recording complete areas
25/22	Running-boards, steps, or the like, as superstructure	43/00	Spare wheel stowing, holding, or mounting
25722	sub-unit (other arrangements of steps, ladders, or		arrangements
	running-boards in vehicles B60R)	43/02	 external to the vehicle body
25/24	Superstructure sub-units with access openings having	43/04	 attached beneath the vehicle body
	movable or removable closures (inlet covers for	43/06	within the vehicle body
	vehicle fuel tanks B60K 15/05) [5]	43/08	and arranged substantially vertical
		43/10	and arranged substantially horizontal
27/00	Connections between superstructure sub-units	.5, 10	and artanged substantianly nonzonial
27/02	• rigid		
27/04	 resilient 	Motor ve	chicles or trailers classified according to type; Parts or
27/06	 readily releasable 	<u>accessori</u>	ies thereof not otherwise provided for
20 /00	Construction of the state of the state of the state of	47/00	Market and Males and affect and advantage of the
29/00	Superstructures characterised by material thereof	47/00	Motor vehicles or trailers predominantly for
29/02	• predominantly of wood	47/02	carrying passengers (superstructures B62D 31/00) [3]
29/04	• predominantly of synthetic material (working of	47/02	• for large numbers of passengers, e.g. omnibus
	plastics or substances in a plastic state B29)	49/00	Tractors (of walk type B62D 51/04; endless-track
31/00	Superstructures for passenger vehicles (passenger	15,00	features B62D 55/00)
31/00	vehicles specially adapted to co-operate with aircraft or	49/02	 modified to take lifting devices
	terminal buildings B64F 1/31)	49/04	 modified to take pushing devices
31/02	 for carrying large numbers of passengers, e.g. 	49/06	adapted for multi-purpose use
	omnibus	49/08	 having means for preventing overturning or tipping
31/04	with more than one deck	437 00	(safety devices for propulsion-unit control, specially adapted for, or arranged in, vehicles B60K 28/00) [4]
33/00	Superstructures for load-carrying vehicles (in which		
	a load-carrying element is movable B60P; liners B60R 13/00)	51/00	Motor vehicles characterised by the driver not being seated
33/02	 Platforms; Open load compartments 	51/02	 the driver standing in the vehicle
33/023	 Sideboard or tailgate structures [5] 	51/04	 the driver walking
33/027	• • • movable [5]	51/06	 Uniaxle walk-type tractors
33/03	• • • by swinging down [5]	= 0.400	
33/033	• • • removable [5]	53/00	Tractor-trailer combinations; Road trains (traction
33/037	• • • Latching means therefor [5]	ED /00	couplings other than fifth-wheel couplings B60D)
33/04	 Enclosed load compartments 	53/02	comprising a uniaxle tractor unit and a uniaxle trailer unit
33/06	• Drivers' cabs	ED /0.4	unit
33/063	 movable from one position into at least one other position, e.g. tiltable, pivotable about a vertical 	53/04	 comprising a vehicle carrying an essential part of the other vehicle's load by having supporting means for the front or rear part of the other vehicle
	axis, displaceable from one side of the vehicle to	53/06	Semi-trailers
DD / 5 ==	the other [5]	53/08	Fifth-wheel traction couplings
33/067	• • • tiltable [5]	53/00	• • with means for preventing accidental
33/07	• • • characterised by the device for locking the cab in the tilted or in the driving position [5]	JJ/ 10	uncoupling
33/073	• • characterised by special adaptations of vehicle control devices [5]	53/12	engaging automatically
33/077	characterised by the connection of the superstructure	55/00	Endless-track vehicles (steering aspects B62D 11/00)
JJ/U//	to the vehicle frame [5]	55/02 EE/04	with tracks and additional ground wheels with tracks and alternative ground wheels a g
33/08	 comprising adjustable means (B62D 33/10 takes precedence) [5] 	55/04	 with tracks and alternative ground wheels, e.g. changeable from endless-track vehicle into wheeled vehicle and <u>vice versa</u>

55/06	 with tracks and without ground wheels 	57/02	• with ground-engaging propulsion means, e.g.
55/065	Multi-track vehicles, i.e. more than two tracks [4]	EE /00 4	walking members
55/07	• • Mono-track vehicles [4]	57/024	 specially adapted for moving on inclined or vertical surfaces (endless-track vehicles for
55/075	Tracked vehicles for ascending or descending		ascending or descending stairs B62D 55/075;
	stairs (magnetic or pneumatic ground-engaging parts B62D 55/265; chairs or personal		hand-carts with provision for travelling up or
	conveyances specially adapted for patients or		down stairs B62B 5/02) [5]
	disabled persons A61G 5/00) [4]	57/028	• • having wheels and mechanical legs (B62D 57/024
55/08	Endless-track units; Parts thereof		takes precedence; ground-engaging vehicle fittings
55/084	Endless-track units or carriages mounted		for supporting, lifting or manoeuvring the vehicle,
	separably, adjustably or extensibly on vehicles,	F7/033	wholly or in part B60S 9/00) [5]
	e.g. portable track units (B62D 55/07 takes	57/032	 with alternately or sequentially lifted supporting base and leg; with alternately or sequentially lifted
EE /000	precedence) [4]		feet or skid (B62D 57/024 takes precedence) [5]
55/088	 with means to exclude or remove foreign matter e.g. sealing means, self-cleaning track links or 	57/036	• • screw type, e.g. Archimedian screw (B62D 57/024
	sprockets, deflector plates or scrapers [4]		takes precedence) [5]
55/092	 with lubrication means (lubricating in general 	57/04	 having other than ground-engaging propulsion
337 332	F16N) [4]		means, e.g. having propellers (arrangement of jet-
55/096	• • with noise reducing means [4]		propulsion units B60K)
55/10	• • Bogies; Frames (track-tensioning means	59/00	Trailers with driven ground wheels or the like
	B62D 55/30)	59/02	driven from external propulsion unit
55/104		59/04	 driven from propulsion unit on trailer
	frames (vehicle suspension in general B60G) [4]	337 04	diven from propulsion diffe on duffer
55/108	• • • with mechanical springs, e.g. torsion bars [4]	61/00	Motor vehicles or trailers, characterised by the
55/112	• • with fluid springs, e.g. hydraulic, pneumatic [4]		arrangement or number of wheels, not otherwise
55/116	• • Attitude or position control of chassis by action		provided for, e.g. four wheels in diamond pattern
	on suspension, e.g. to compensate for a slope [4]	61/02	 with two road wheels in tandem on the longitudinal centre line of the vehicle
55/12	Arrangement, location, or adaptation of driving	61/04	 with two other wheels which are coaxial
307 12	sprockets	61/06	 with two other wheels with only three wheels
55/125	• • • Final drives [4]	61/08	 with single front wheel
55/13	• • • readily interchangeable modular type [4]	61/10	with more than four wheels
55/135	• • • with dismountable driving crown [4]	61/12	with variable number of ground-engaging wheels,
55/14	 Arrangement, location, or adaptation of rollers 		e.g. with some wheels arranged higher than others, or
55/15	• • • Mounting devices, e.g. bushings, axles,		with retractable wheels (for manoeuvring purposes
	bearings, sealings [4]		only B60S)
55/18	• Tracks (self-cleaning track links B62D 55/088) [4]	63/00	Motor vehicles or trailers not otherwise provided for
55/20	• • of articulated type, e.g. chains		Motor vehicles
55/205	• • • Connections between track links [4]		 Component parts or accessories
55/21	• • • • Links connected by transverse pivot pins [4]	63/06	Trailers (vehicles comprising living accommodation
55/215	• • • • Resilient connections between links [4]		for people, e.g. caravans, camping or like vehicles,
55/22	Arrangements for preventing or modifying		B60P 3/32)
33/22	back-flexing	63/08	 Component parts or accessories
55/24	• • • of continuously-flexible type, e.g. rubber belts		
55/247	Gas filled or inflatable flexible tracks		
	(connection of valves to inflatable elastic	65/00	Designing, manufacturing, e.g. assembling,
	bodies B60C 29/00) [4]		facilitating disassembly, or structurally modifying
55/253	• • • having elements interconnected by one or		motor vehicles or trailers, not otherwise provided for
FF (D.C.	more cables or like elements [4]	65/02	Joining sub-units or components to, or positioning
55/26	• • • Ground-engaging parts or elements		sub-units or components with respect to, body shell
55/265	• • • having magnetic or pneumatic adhesion [4]	65.404	or other sub-units or components [7]
55/27	 • • having different types of crampons for progression over varying ground [4] 	65/04	Joining preassembled modular units composed of sub-units performing diverse functions, e.g. engine
55/275	• • • with street plate, i.e. means to prevent tread		sub-units performing diverse functions, e.g. engine and bonnet (B62D 65/06-B62D 65/16 take
55,275	from cutting into road surface [4]		precedence) [7]
55/28	• • • detachable	65/06	 the sub-units or components being doors,
55/30	Track-tensioning means		windows, openable roofs, lids, bonnets, or weather
55/32	Assembly, disassembly, repair or servicing of		strips or seals therefor [7]
	endless-track systems [4]	65/08	• • • Weather strips or seals [7]
FF /00	Validas abassastas de la Caracila de	65/10	• the sub-units or components being engines,
57/00	Vehicles characterised by having other propulsion or other ground-engaging means than wheels or endless	CE /40	clutches or transmissions [7]
	track, alone or in addition to wheels or endless track	65/12	 the sub-units or components being suspensions, brakes or wheel units [7]
	(sledges B62B; motor sledges B62M) [5]		orance of wheel ands [7]
	-		

65/14	 the sub-units or components being passenger compartment fittings, e.g. seats, linings, trim, instrument panels [7] 	111/00	Forces disturbing the intended course of the vehicle, e.g. forces acting transversely of the direction of travel [5]
65/16 65/18	 the sub-units or components being exterior fittings, e.g. bumpers, lights, wipers [7] Transportation, conveyor or haulage systems 	113/00	Position of parts of the steering mechanism, e.g. the steered wheels or the steering wheel [5]
05/10	specially adapted for motor vehicle or trailer assembly lines [7]	115/00	Angle of articulation of articulated vehicle; Angle of tow-bar to towing vehicle [5]
67/00	Systematic disassembly of vehicles for recovery of salvageable components, e.g. for recycling (for	117/00	Angular velocity of steering wheel [5]
	disposal of vehicles by destroying or transformation B09B 3/00, B09B 5/00) [7]	119/00	Steering wheel torque [5]
		121/00	Force applied to the steering linkage [5]
excluding	scheme associated with group B62D 6/00, but g groups B62D 6/02-B62D 6/10, relating to driving as sensed and responded to. [5] Road speed [5]	123/00	Fluid pressure supply for vehicle equipment, e.g. for power-assisted steering; Presence, failure or threshold values thereof; Lubricating or other fluid capacities [5]
103/00	Acceleration or deceleration in the direction of	125/00	Particular gear ratio selected [5]
105/00	travel [5]	127/00	Engine speed [5]
105/00	Loss of traction, e.g. wheel spin or skid [5]	131/00	Load, including height of vehicle dependent on load;
107/00	Temperature [5]		State of vehicle vibration damping means [5]
109/00	Presence, absence or inactivity of driver or operator,	133/00	Trim or inclination, including road gradient [5]
	e.g. by sensing the operation of the clutch, brake or throttle [5]	135/00	Air moisture content [5]
		137/00	Conditions not specified in groups B62D 101/00-B62D 135/00 [5]

B62H CYCLE STANDS; SUPPORTS OR HOLDERS FOR PARKING OR STORING CYCLES; APPLIANCES PREVENTING OR INDICATING UNAUTHORISED USE OR THEFT OF CYCLES; LOCKS INTEGRAL WITH CYCLES; DEVICES FOR LEARNING TO RIDE CYCLES

Note(s)

In this subclass, the following term is used with the meaning indicated:

"cycles" includes scooters.

1/00	Supports or stands forming part of, or attached to, cycles	3/06 3/08	collapsibleinvolving recesses or channelled rails for embracing
1/02	• Articulated stands, e.g. in the shape of hinged arms (B62H 1/10 takes precedence)	3/10	the bottom part of a wheelinvolving forked supports or brackets embracing the
1/04	 Substantially U-shaped stands for embracing the rear wheel 	3/12	bottom part of the frameHanging-up devices
1/06	• Extensible stands, e.g. with telescopic parts (B62H 1/10 takes precedence)	5/00	Appliances preventing or indicating unauthorised
1/08 1/10	Pedal supportsinvolving means providing for a stabilised ride		use or theft of cycles; Locks integral with cycles (fittings for preventing or indicating use or theft of
1, 10	(training appliances or apparatus for cycling sport A63B 69/16)		vehicles in general B60R; general features of locks E05B)
1/12	using additional wheels	5/02	 for locking the steering mechanism
1/14	using runners for riding on ice or snow (runners)	5/04	 acting on the handle-bars or equivalent
1,1.	for carrying wheeled vehicles to facilitate travel on ice or snow B62B 19/00)	5/06	 acting on the front wheel fork or steering head tube
3/00	Separate supports or holders for parking or storing	5/08	 preventing the drive (by acting on powered drive B62M)
	cycles (cycle supports used during maintenance B25H;	5/10	 acting on a pedal crank
	building aspects E04H)	5/12	 acting on the chain wheel or the chain
3/02	 involving means for gripping the cycle by the handle- 	5/14	 preventing wheel rotation
	bars or by the upper part of the frame	5/16	 acting on parts of a road wheel
3/04	 involving forked supports or brackets for holding a wheel (B62H 3/08 takes precedence) 	5/18	 acting on a braking device (locking cycle brake actuating mechanisms B62L 3/06)

indicating unauthorised use, e.g. acting on signalling devices

7/00 Devices for learning to ride cycles, not otherwise provided for, e.g. assisting balance

CYCLE SADDLES OR SEATS; ACCESSORIES PECULIAR TO CYCLES AND NOT OTHERWISE PROVIDED FOR, e.g. ARTICLE CARRIERS OR CYCLE PROTECTORS (registration plates B60R 13/10; cyclometers, i.e. wheel-revolution counters, G01C 22/00)

Note(s)

In this subclass, the following term is used with the meaning indicated:

"cycles" includes scooters.

Subclass index

SADDLES, SEATS; FOOT-RESTS, KNEE GRIPS	1/00, 25/00
LIGHTING OR SIGNALLING DEVICES; MIRROR ARRANGEMENTS	
ARTICLE CARRIERS, ACCESSORIES	7/00, 9/00, 11/00
PROTECTING ARRANGEMENTS OR ACCESSORIES	
Chain-guards; mud-guards; parking covers	13/00, 15/00, 19/00
For rider only; weather guards, fairing; dress protectors; warming	17/00, 21/00, 33/00
Other protectors	23/00
SAFETY EQUIPMENT	27/00
INSTALLATIONS OF LUBRICATING DEVICES; OF FUEL TANKS; OF SUPPLY LINES	31/00, 35/00, 37/00
OTHER ACCESSORIES	99/00

1/00	Saddles or other seats for cycles; Arrangement
	thereof; Component parts (arrangements or
	adaptations of vehicle seats in general B60N)

- 1/02 Saddles resiliently mounted on the frame; Equipment therefor, e.g. springs (springs in general F16F)
- 1/04 Saddles capable of swinging about a horizontal pivot
- 1/06 • Saddles capable of parallel motion up and down
- Frames for saddles; Connections between saddle frames and seat pillars; Seat pillars (attaching seat pillars to cycle frames B62K 19/36)
- 1/10 Internal adjustment of saddles
- 1/12 Box-shaped seats; Bench-type seats, e.g. dual or twin seats
- 1/14 Separate pillions
- 1/16 • for children
- Covers for saddles or other seats; Paddings (paddings in general B68G)
- 1/20 Detachable covers; Detachable pads
- 1/22 • Covers with built-in paddings
- 1/24 • Paddings involving torsional or bending springs
- 1/26 Paddings involving other resilient material, e.g. sponge rubber with inflatable compartments
- Other additional equipment, e.g. back rests for children

Signal or lighting devices specially adapted for cycles

- 3/00 Acoustic signal or alarm devices (acoustic signal or alarm devices in general G08); Arrangement of such devices on cycles
- 6/00 Arrangement of optical signalling or lighting devices on cycles, the mounting or supporting thereof or circuits therefor (optical signalling or lighting devices per se F21, G08, H05) [4]
- the devices being headlights [4]
- 6/04 the devices being rear lights [4]

- 6/06 Arrangement of lighting dynamos or drives therefor (dynamo construction H02K) [4]
- 6/08 • Tyre drives [4]
- 6/10 • Gear drives (B62J 6/12 takes precedence) [4]
- 6/12 • Dynamos arranged in the wheel hub [4]
- 6/14 • Belt drives [4]
- 6/16 Arrangement of switches [4]
- 6/18 Arrangement of electric cables [4]
- Arrangement of reflectors (pedals incorporating reflectors B62M 3/12) [4]

Article carriers

- 7/00 Luggage carriers
- 7/02 characterised by the arrangement thereof on cycles
- 7/04 • above or behind the rear wheel
- 7/06 • above the front wheel, e.g. on the handle-bars
- 7/08 Equipment for securing luggage on carriers
- 9/00 Panniers, saddle bags, or other containers specially adapted to be attached to cycles
- 9/02 for tools or spare parts
- 11/00 Supporting devices for attaching articles of definite shape to cycles, e.g. for maps, umbrellas, bottles
- 11/02 for pumps

<u>Protectors; Fairings or streamlining parts not otherwise</u> <u>provided for</u>

- **13/00** Guards for chain, chain drive, or equivalent drive, e.g. belt drive (chain guards forming part of cycle frames B62K 19/44)
- shielding only the upper run of the chain or the like
- 13/04 completely enclosing the chain drive or the like
- 13/06 admitting ready access to the chain or the like
- 15/00 Mud-guards for wheels

15/02 15/04	Fastening means; StaysMud flaps	25/00	Foot-rests; Rigidly-mounted knee grips, e.g. on petrol tank
17/00	Weather guards for riders; Fairings or streamlining parts not otherwise provided for (protective clothing or garments A41D 13/00; crash helmets A42B 3/00; fairings forming part of frames B62K 19/48; fairings for	27/00	Safety equipment, e.g. crash bars (safety belts in general A62B 35/00)
17/02	sidecars B62K 27/04; hoods for sidecars B62K 27/16) • shielding only the rider's front	29/00	Adaptations or arrangements of mirrors for use on cycles (for vehicles in general B60R)
17/04 17/06	• Windscreens• Leg guards	31/00	Installations of lubricating devices
17/08	Hoods protecting the rider		
19/00	Parking covers for cycles (convertible into protective garments for the rider A41D 15/04; convertible into	33/00	Installations peculiar to cycles for warming riders (for vehicles in general B60H)
	camping articles A45F 4/00; for vehicles in general B60J 11/00)	35/00	Fuel tanks specially adapted for motorcycles or engine-assisted cycles; Arrangements thereof
21/00	Dress protectors, e.g. clips attached to the cycle (loose clips for trousers or skirts A41F 17/02)	37/00	Arrangements of fuel supply lines, taps, or the like, on motorcycles or engine-assisted cycles
23/00	Other protectors specially adapted for cycles	99/00	Subject matter not provided for in other groups of this subclass [2009.01]
B62K	CYCLES; CYCLE FRAMES; CYCLE STEERING SPECIALLY ADAPTED FOR CYCLES; CYCLE AXILIKE		
Subclass	<u>index</u>		
	DF CYCLES		
	acterised by construction:		4/00 3/00 5/00
	umber of wheels: unicycle; bicycle; with more than two wheels		
	rith motordecar, forecardecar, forecar		
	onvertible; foldable		
	acterised by purpose: for transport; for children		
	kinds		17/00
	OF CYCLES e; axle suspension		19/00 25/00
	ing; terminal controls		· ·
			<u> </u>
1/00	Unicycles	5/01	 Motorcycles with four or more wheels (specially adapted for disabled riders B62K 5/003) [2013.01]
3/00	Bicycles	5/02	Tricycles (children's tricycles
3/02	• Frames (tandem frames B62K 3/14)		B62K 9/02) [1, 2013.01]
3/04	 having a substantially-horizontal top bar 	5/023	• • specially adapted for disabled riders, e.g. personal
3/06	• • of open type		mobility type vehicles with three wheels
3/08	• • having crossing members	E /00E	(wheelchairs A61G 5/00) [2013.01]
3/10	 of single-beam type, i.e. connecting steering head to rear axle 	5/025 5/027	• power-driven [2013.01]• Motorcycles with three wheels (specially adapted
3/12	Tandems	3/04/	for disabled riders B62K 5/023) [2013.01]
3/12	• • Frames	5/05	• • characterised by a single rear wheel [2013.01]
3/14		5/06	Frames for tricycles
3/10	specially adapted for disabled riders	5/08	 with steering devices acting on two or more wheels
5/00	Cycles with handlebars, equipped with three or more main road wheels (cycle supports or stands equipped with additional wheels for ride stabilisation	5/10	 with means for inwardly inclining the vehicle body on bends [2013.01]
	B62H 1/12) [1, 2013.01]	7/00	Freight- or passenger-carrying cycles
5/003	 Cycles with four or more wheels, specially adapted 	7/02	• Frames
	for disabled riders, e.g. personal mobility type vehicles with four wheels (wheelchairs A61G 5/00) [2013.01]	7/04	 having a carrying platform (article-carrying accessories B62J 7/00-B62J 11/00)
5/007	• • nower-driven [2013 01]	9/00	Children's cycles (toy vehicles A63H 17/00)

9/00

Children's cycles (toy vehicles A63H 17/00)

5/007 • • power-driven [2013.01]

9/02	• Tricycles	19/46	 Luggage carriers forming part of frame (luggage carriers <u>per se</u> B62J 7/00)
11/00	Motorcycles, engine-assisted cycles or motor scooters with one or two wheels (fairings or streamlining parts	19/48	• Fairings forming part of frame
	not forming part of the frame B62J; transmission of drive from engines to wheels B62M)	21/00	Steering devices (steering devices specially adapted for one particular kind of cycle specified in groups
11/02	Frames (motorcycles or cycles with auxiliary engines	84.488	B62K 1/00-B62K 17/00, see the relevant group)
11 /04	characterised by position of engine B62M)	21/02	Front wheel forks or equivalent, e.g. single tine
11/04	 characterised by the engine being between front and rear wheels 	21/04	• Fork crowns
11/06	• the frame being of single-beam type	21/06	 Bearings specially adapted for steering heads (bearings in general F16C)
11/08	• • • the beam being fabricated from sheet metal,	21/08	 Steering dampers (dampers in general F16F)
	e.g. forming fuel tank walls	21/10	 Mechanisms for restoring steering device to straight-
11/10	characterised by the engine being over or beside driven rear wheel		ahead position
11/12	Steering wheel forks characterised by the association	21/12	Handlebars; Handlebar stems
11/12	therewith of engine	21/14	having resilient parts therein
11/14	Handlebar constructions, or arrangements of controls	21/16	having adjustable parts therein
	thereon, specially adapted thereto (hand controls per	21/18	 Connections between forks and handlebars or handlebar stems
	<u>se</u> B62K 23/02)	21/20	• • resilient
13/00	Cycles convertible to, or transformable into, other	21/22	• • adjustable
	types of cycles or land vehicles (convertible vehicles in	21/24	 readily releasable
	general B60F 5/00; cycle supports or stands equipped	21/26	 Handlebar grips (twist grips B62K 23/04)
40.00	with additional wheels for ride stabilisation B62H 1/12)	22/00	Diday apayoted controls specially adopted for sycles
13/02	• to a tandem	23/00	Rider-operated controls specially adapted for cycles, i.e. means for initiating control operations, e.g.
13/04	to a tricycle		levers, grips (specially adapted to cycle brake
13/06	 to a quadricycle, e.g. by coupling together two bicycles side by side 		mechanisms B62L 3/00)
13/08	• Frames	23/02	 hand-actuated (arrangements of controls on handle- bars of engine-driven cycles B62K 11/14)
15/00	Collapsible or foldable cycles	23/04	Twist grips
13/00	Conapsible of foldable cycles	23/06	• • Levers
17/00	Cycles not otherwise provided for	23/08	• foot-actuated
19/00	Cycle frames (cycle frames specially adapted for one	25/00	Axle suspensions (for vehicles in general B60G)
	particular kind of cycle specified in groups B62K 1/00-B62K 17/00, see the relevant group)	25/02	for mounting axles rigidly on cycle frame or fork, e.g. adjustably
19/02	 characterised by material or cross-section of frame members 	25/04	• for mounting axles resiliently on cycle frame or fork (for sidecars, forecars, or the like B62K 27/06)
19/04	 the material being wholly or mainly metallic, e.g. of high elasticity 	25/06	• • with telescopic fork, e.g. including auxiliary
19/06	• • • tubular	25/00	rocking arms
19/08	• • made from sheet	25/08	• • • for front wheel
19/10	Combinations of tube and sheet	25/10 25/12	• for rear wheel• with rocking arm pivoted on each fork leg (in
19/12	• • having cast members	25/12	combination with telescopic fork B62K 25/06)
19/14	 the material being wholly or mainly wood 	25/14	• • with single arm on each fork leg
19/16	 the material being wholly or mainly of plastics 	25/16	• • • for front wheel
19/18	 Joints between frame members 	25/18	• • • • the arm being pivoted intermediate its
19/20	 welded, soldered, or brazed 		ends
19/22	Adhesive joints	25/20	• • • for rear wheel
19/24	 Screwed joints 	25/22	 • with more than one arm on each fork leg
19/26	Riveted joints	25/24	• • • for front wheel
19/28	 Means for strengthening joints 	25/26	• • • for rear wheel
19/30	 Frame parts shaped to receive other cycle parts or accessories (axle suspensions B62K 25/00) 	25/28 25/30	with pivoted chain-staypivoted on pedal crank shelf (B62K 25/32 takes
19/32	 Steering heads (bearings therefor B62K 21/06) 	23/30	precedence)
19/34	Bottom brackets	25/32	• • the chain-stay forming a chain-guard
19/36	for attaching saddle pillars, e.g. adjustable during		
10 /00	ride	27/00	Sidecars; Forecars or the like (trailers B60P, B62D; characterised by carrying propulsion engine B62M)
19/38	for attaching brake members	27/02	• Frames
19/40	for attaching accessories, e.g. article carriers,	27/04	Car bodies; Fairings
19/42	lampsfor tyre pumps (attachment devices not forming	27/04	Resilient axle suspension
13/42	part of frame B62J 11/02)	27/08	Resilient car-body suspension on frame
19/44	Chain-guards forming part of frame (chain-guards)	27/10	 Other component parts or accessories
<i>10</i> , 17	• Chain-guards forming part of frame (chain-guards	2//10	Other component parts of accessories

IPC (2014.01), Section B 11 27/12 • Coupling parts for attaching cars or the like to cycle; Arrangements thereof

27/14 • • • Resilient coupling parts

27/16 • Hoods; Weather-guards, e.g. windscreens

B62L BRAKES SPECIALLY ADAPTED FOR CYCLES

Note(s)

- 1. This subclass <u>covers</u> only adaptations of brakes or actuating mechanisms peculiar to their use on cycles.
- 2. This subclass <u>does not cover</u> brakes or actuating mechanisms of wider applicability, which are regarded as of general type, irrespective of whether described or claimed only for cycles, which are covered by subclass B60T or the relevant subclasses of class F16.

	Brakes; Arrangements thereof (back-pedalling brakes B62L 5/00)	 Means for locking the actuating mechanisms (locking a cycle braking device directly B62H 5/18)
1/04	in which cycle wheels are engaged by brake elementsthe tyre surfaces being engaged	 Mechanisms specially adapted for braking more than one wheel
1/06 1/08	the wheel-rim being engagedby the elements moving radially relative to the wheel	5/00 Brakes, or actuating mechanisms therefor, controlled by back-pedalling (free-wheel devices specially adapted for cycles F16D 41/00)
1/10	• • • by the elements moving substantially parallel to the wheel axis	5/02 • the brakes being actuated through coacting coaxial cones
1/12	• • • • the elements being mounted on levers pivotable about a common axis	5/04 • the brakes being of expanding-brake-bushing type 5/06 • the brakes being of disc type
1/14	 • • • the elements being mounted on levers pivotable about different axes 	5/08 • • the brakes being of shoe type
1/16	• • • • the axes being located intermediate the ends of the levers	 the brakes being actuated through coacting cams and balls or rollers the brakes being of expanding-brake-bushing type
	 Brake-actuating mechanisms (actuating mechanisms for back-pedalling brakes B62L 5/00; Bowden mechanisms F16C 1/10); Arrangements thereof for control by a hand lever (hand levers for control of cycles in general B62K 23/06) for control by a foot lever (foot levers for control of cycles in general B62K 23/08) 	 5/14 • the brakes being of disc type 5/16 • the brakes being of shoe type 5/18 • the brakes being additionally controlled by alternative means 5/20 • the brakes having adjustable braking power

RIDER PROPULSION OF WHEELED VEHICLES OR SLEDGES; POWERED PROPULSION OF SLEDGES OR CYCLES; TRANSMISSIONS SPECIALLY ADAPTED FOR SUCH VEHICLES (arrangements or mounting of transmissions in vehicles in general B60K; transmission elements <u>per se</u> F16)

Note(s)

In this subclass, the following term is used with the meaning indicated:

"transmission" means all parts between the prime mover or the part to which a rider immediately applies propulsive effort, e.g. pedal cranks, and a driven ground wheel.

Subclass index

PROPULSION

1 KOI OLSION	
Of wheeled vehicles by hand, foot or with additional souce of power: kinds of mechanisms;	
construction of propulsion cranks or levers	
Of single-track vehicles by motor, characterised by position of engine	7/00
Of sledges or the like	27/00
Of wheeled vehicles or sledges, by ground-engaging means not otherwise provided for	
TRANSMISSIONS	
Characterised by rigid mechanical parts thereof	

chain or belt; toothed or friction wheel; friction roller	
crankshaft or coupling- rods; rotary shaft15/00, 17/00	
Characterised by non-mechanical or non-rigid parts thereof	
Gearing speed-change actuators	

Rider propulsion of wheeled vehicles

- 1/00 Rider propulsion of wheeled vehicles (rider propulsion with additional source of power B62M 6/00; propulsion by ground-engaging rods B62M 29/02) [1, 2010.01]
- involving devices which enable the mechanical storing and releasing of energy occasionally, e.g. arrangement of flywheels [1, 2010.01]
- 1/12 operated by both hand and foot power
- 1/14 operated exclusively by hand power
- 1/16 • by means of a to-and-fro movable handlebar
- 1/18 by movement of rider's saddle
- 1/20 with additional rider propulsion means
- with reciprocating levers, e.g. foot levers (levers which can be immobilised as foot rests B62M 5/00) [2013.01]
- 1/26 characterised by rotary cranks combined with reciprocating levers [2013.01]
- 1/28 characterised by the use of flexible drive members, e.g. chains [2013.01]
- 1/30 characterised by the use of intermediate gears [2013.01]
- 1/32 characterised by directly driving the wheel axle, e.g. by using a ratchet wheel **[2013.01]**
- 1/34 by walking on an endless belt [2013.01]
- with rotary cranks, e.g. with pedal cranks
 (B62M 1/34 takes precedence; combined with
 reciprocating levers B62M 1/26; cranks which can be
 immobilised as foot rests B62M 5/00) [2013.01]
- 1/38 • for directly driving the wheel axle [2013.01]

3/00 Construction of cranks operated by hand or foot

- 3/02 of adjustable length
- 3/04 • automatically adjusting
- with elliptical or other non-circular rotary movement
- 3/08 Pedals
- 3/10 • All-metal pedals
- 3/12 • with reflectors
- 3/14 Hand-grips for hand-operated cranks
- 3/16 Accessories
- 5/00 Foot-driven levers as pedal cranks which can be immobilised as foot-rests (immobilising against theft B62H 5/10)
- 6/00 Rider propulsion of wheeled vehicles with additional source of power, e.g. combustion engine or electric motor [2010.01]

Note(s) [2010.01]

In this main group, at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place

- 6/10 Rider propelled cycles with auxiliary combustion engine [2010.01]
- 6/15 Control or actuating devices therefor [2010.01]
- 6/20 power-driven at crank shaft parts [2010.01]
- 6/25 power-driven at axle parts [2010.01]
- 6/30 power-driven at single endless flexible member,
 e.g. chain, between cycle crankshaft and wheel
 axle, the engine engaging the endless flexible
 member [2010.01]
- 6/35 power-driven by friction rollers or gears engaging the ground wheel [2010.01]

- Rider propelled cycles with auxiliary electric motor [2010.01]
- 6/45 Control or actuating devices therefor [2010.01]
- 6/50 • characterised by detectors or sensors, or arrangement thereof [2010.01]
- 6/55 power-driven at crank shafts parts [2010.01]
- 6/60 • power-driven at axle parts **[2010.01]**
- 6/65 • with axle and driving shaft arranged coaxially [2010.01]
- 6/70 power-driven at single endless flexible member, e.g. chain, between cycle crankshaft and wheel axle, the motor engaging the endless flexible member [2010.01]
- 6/75 power-driven by friction rollers or gears engaging the ground wheel [2010.01]
- 6/80 Accessories, e.g. power sources; Arrangements thereof [2010.01]
- 6/85 • Solar cells [2010.01]
- 6/90 • Batteries **[2010.01]**
- 7/00 Motorcycles characterised by position of motor or engine (rider propulsion with addition source of power, e.g. auxiliary combustion engine or electric motor B62M 6/00; frames characterised by position of engine B62K 11/00) [1, 2010.01]
- 7/02 with engine between front and rear wheels
- 7/04 • below the frame
- 7/06 • directly under the saddle or seat
- 7/08 with the engine over the rear wheel
- 7/10 with the engine over the front wheel
- 7/12 with the engine beside or within the driven wheel
- with the engine on an auxiliary wheeled unit, e.g. trailer, sidecar (trailers B60P, B62D; sidecars B62K 27/00)

Transmissions

9/00 Transmissions characterised by use of an endless chain, belt, or the like (cycle chain guards B62J 13/00)

Note(s) [2010.01]

In this main group, at each hierarchical level, in the absence of an indication to the contrary, classification is made in the first appropriate place.

- 9/02 of unchangeable ratio
- 9/04 of changeable ratio
- 9/06 $$ $$ using a single chain, belt, or the like
- 9/08 • involving eccentrically-mounted or ellipticallyshaped driving or driven wheel; with expansible driving or driven wheel
- 9/10 • involving different-sized wheels selectively engaged by the chain, belt, or the like
- 9/12 • the chain, belt, or the like being laterally shiftable
- 9/121 • • Rear derailleurs **[2010.01]**
- 9/122 • • electrically or fluid actuated; Controls thereof [2010.01]
- 9/123 • • changing gears automatically **[2010.01]**
- 9/124 • • Mechanisms for shifting laterally **[2010.01]**
- 9/1242 • • characterised by the linkage mechanisms [2010.01]
- 9/1244 • • limiting or positioning the movement [**2010.01**]
- 9/1246 • • • using cams or plates **[2010.01]**

9/1248	• • • • • • characterised by the use of biasing means, e.g. springs; Arrangements	11/18	• • • with a plurality of planetary gear units
	thereof [2010.01]	13/00	Transmissions characterised by use of friction rollers
9/125	• • • • • Mounting the derailleur on the		engaging the periphery of the ground wheel (for rider
3/123	frame [2010.01]		propelled cycles with additional source of power
9/126			B62M 6/35, B62M 6/75) [1, 2010.01]
9/126	• • • • • Chain guides; Mounting	13/02	 with changeable ratio, e.g. with roller of varying
	thereof [2010.01]	15/02	diameter
9/127	• • • • • Mounting or guiding of	13/04	
	cables [2010.01]	13/04	with means for moving roller into driving contact with ground wheel
9/128	• • • • • Accessories, e.g. protectors [2010.01]		with ground wheel
9/131	• • • • Front derailleurs [2010.01]	15/00	Transmission characterised by use of crankshafts
9/132	• • • • • electrically or fluid actuated; Controls	15/00	and coupling-rods
	thereof [2010.01]		and coupling-rous
9/133	• • • • changing gears	17/00	Transmissions characterised by use of rotary shaft,
0, 200	automatically [2010.01]	27,00	e.g. cardan shaft
9/134	• • • • • Mechanisms for shifting		eigi cur uun onure
J/ 13 4	laterally [2010.01]	19/00	Transmissions characterised by use of non-
0/12/2	-		mechanical gearing, e.g. fluid gearing
9/1342			3, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1, 0, 1,
0/4044	mechanisms [2010.01]	21/00	Transmissions characterised by use of resilient
9/1344	8 F 8		elements therein
	movement [2010.01]		
9/1346	• • • • • • using cams or plates [2010.01]	23/00	Transmissions characterised by use of other
9/1348	• • • • • characterised by the use of biasing		elements; Other transmissions
	means, e.g. springs; Arrangements	23/02	 characterised by the use of two or more dissimilar
	thereof [2010.01]		sources of power, e.g. transmissions for hybrid
9/135	• • • • • Mounting the derailleur on the		motorcycles (transmissions for wheeled vehicles
	frame [2010.01]		using rider propulsion with additional source of
9/136	• • • • • Chain guides; Mounting		power B62M 6/00) [1, 2010.01]
	thereof [2010.01]		1 /1 /
9/137	• • • • • Mounting or guiding of	25/00	Actuators for gearing speed-change mechanisms
57 157	cables [2010.01]		specially adapted for cycles (rider-operated controls for
9/138	• • • • • • Accessories, e.g. protectors [2010.01]		cycles in general B62K 23/00; gearing speed-change
	~ -		mechanisms F16H)
9/14	• • • the wheels being laterally shiftable	25/02	 with mechanical transmitting systems, e.g. cables,
9/16	Tensioning or adjusting equipment for chains, belts,		levers
	or the like	25/04	 hand actuated
11/00	The control of the co	25/06	foot actuated
11/00	Transmissions characterised by use of interengaging	25/08	with electrical or fluid transmitting systems
	toothed wheels or frictionally-engaging wheels (with	23/00	with electrical of fluid transmitting systems
	roller engaging the periphery of ground wheel		
44.400	B62M 6/35, B62M 6/75, B62M 13/00)		
11/02	of unchangeable ratio	27/00	Propulsion devices for sledges or the like (pushed or
11/04	 of changeable ratio 	27/00	pulled by persons or animals B62B, B62C; wind
11/06	 with spur gear wheels (B62M 11/14 takes 		propulsion B62B 15/00)
	precedence)	27/02	
11/10	• • with bevel gear wheels (B62M 11/14 takes	27/02	 power driven
	precedence)	29/00	Ground-engaging propulsion devices for cycles,
11/12	• • with frictionally-engaging wheels (B62M 11/14	43/00	
. ==	takes precedence)		sledges, or rider-propelled wheeled vehicles, not
11/14	 with planetary gears 	20.702	otherwise provided for
11/14	• built in, or adjacent to, the ground-wheel hub	29/02	 using ground-engaging rods
11/10	built iii, or aujacent to, the ground-wheel hub		