

## SECTION B — PERFORMING OPERATIONS; TRANSPORTING

### B62 LAND VEHICLES FOR TRAVELLING OTHERWISE THAN ON RAILS

**B62M 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 per se 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

Of wheeled vehicles by hand, foot or with additional source of power: kinds of mechanisms;  
 construction of propulsion cranks or levers.....1/00, 3/00, 5/00, 6/00  
 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.....29/00

##### TRANSMISSIONS

Characterised by rigid mechanical parts thereof  
 chain or belt; toothed or friction wheel; friction roller.....9/00, 11/00, 13/00  
 crankshaft or coupling- rods; rotary shaft.....15/00, 17/00  
 Characterised by non-mechanical or non-rigid parts thereof.....19/00, 21/00, 23/00  
 Gearing speed-change actuators.....25/00

#### 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]**

1/02 • with rotary cranks, e.g. with pedal cranks (cranks per se B62M 3/00; immobilisable as foot-rests B62M 5/00)

1/04 • with reciprocating levers, e.g. foot levers (immobilisable as foot-rests B62M 5/00)

1/06 • driving a rotary crankshaft connected to driven axle other than by coupling-rods

1/08 • • directly driving a ratchet wheel on driven axle

1/10 • involving devices which enable the mechanical storing and releasing of energy occasionally, e.g. arrangement of flywheels **[1, 2010.01]**

1/12 • operated both by hand and by foot

1/14 • exclusively by hand power (hand cranks per se B62M 3/00)

1/16 • • by means of a to-and-fro movable handle-bar

1/18 • by movement of rider's saddle

1/20 • • with additional rider propulsion means

**3/00 Construction of cranks operated by hand or foot**

3/02 • of adjustable length

3/04 • • automatically adjusting

3/06 • 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

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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]**

## B62M

- 6/35 • • power-driven by friction rollers or gears engaging the ground wheel [2010.01]
- 6/40 • 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
  - 7/14 • 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 elliptically-shaped 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 derailleur [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 thereof [2010.01]
- 9/125 • • • • • • Mounting the derailleur on the frame [2010.01]
- 9/126 • • • • • • Chain guides; Mounting thereof [2010.01]
- 9/127 • • • • • • Mounting or guiding of cables [2010.01]
- 9/128 • • • • • • Accessories, e.g. protectors [2010.01]
- 9/131 • • • • • • Front derailleurs [2010.01]
- 9/132 • • • • • • electrically or fluid actuated; Controls thereof [2010.01]
- 9/133 • • • • • • changing gears automatically [2010.01]
- 9/134 • • • • • • Mechanisms for shifting laterally [2010.01]
- 9/1342 • • • • • • • characterised by the linkage mechanisms [2010.01]
- 9/1344 • • • • • • • limiting or positioning the movement [2010.01]
- 9/1346 • • • • • • • • using cams or plates [2010.01]
- 9/1348 • • • • • • • characterised by the use of biasing means, e.g. springs; Arrangements thereof [2010.01]
- 9/135 • • • • • • Mounting the derailleur on the frame [2010.01]
- 9/136 • • • • • • Chain guides; Mounting thereof [2010.01]
- 9/137 • • • • • • Mounting or guiding of cables [2010.01]
- 9/138 • • • • • • Accessories, e.g. protectors [2010.01]
- 9/14 • • • • • the wheels being laterally shiftable
- 9/16 • Tensioning or adjusting equipment for chains, belts, or the like

- 11/00 Transmissions characterised by use of interengaging toothed wheels or frictionally-engaging wheels** (with roller engaging the periphery of ground wheel B62M 6/35, B62M 6/75, B62M 13/00)
  - 11/02 • of unchangeable ratio
  - 11/04 • of changeable ratio
  - 11/06 • • with spur gear wheels (B62M 11/14 takes precedence)
  - 11/10 • • with bevel gear wheels (B62M 11/14 takes precedence)
  - 11/12 • • with frictionally-engaging wheels (B62M 11/14 takes precedence)
  - 11/14 • • with planetary gears
  - 11/16 • • • built in, or adjacent to, the ground-wheel hub
  - 11/18 • • • with a plurality of planetary gear units
- 13/00 Transmissions characterised by use of friction rollers engaging the periphery of the ground wheel** (for rider propelled cycles with additional source of power B62M 6/35, B62M 6/75) [1, 2010.01]
  - 13/02 • with changeable ratio, e.g. with roller of varying diameter
  - 13/04 • with means for moving roller into driving contact with ground wheel
- 15/00 Transmission characterised by use of crankshafts and coupling-rods**

17/00	<b>Transmissions characterised by use of rotary shaft, e.g. cardan shaft</b>	25/02	<ul style="list-style-type: none"> <li>with mechanical transmitting systems, e.g. cables, levers</li> </ul>
19/00	<b>Transmissions characterised by use of non-mechanical gearing, e.g. fluid gearing</b>	25/04	<ul style="list-style-type: none"> <li>hand actuated</li> </ul>
		25/06	<ul style="list-style-type: none"> <li>foot actuated</li> </ul>
		25/08	<ul style="list-style-type: none"> <li>with electrical or fluid transmitting systems</li> </ul>
21/00	<b>Transmissions characterised by use of resilient elements therein</b>		
23/00	<b>Transmissions characterised by use of other elements; Other transmissions</b>	27/00	<b>Propulsion devices for sledges or the like</b> (pushed or pulled by persons or animals B62B, B62C; wind propulsion B62B 15/00)
23/02	<ul style="list-style-type: none"> <li>characterised by the use of two or more dissimilar sources of power, e.g. transmissions for hybrid motorcycles (transmissions for wheeled vehicles using rider propulsion with additional source of power B62M 6/00) [1, 2010.01]</li> </ul>	27/02	<ul style="list-style-type: none"> <li>power driven</li> </ul>
25/00	<b>Actuators for gearing speed-change mechanisms specially adapted for cycles</b> (rider-operated controls for cycles in general B62K 23/00; gearing speed-change mechanisms F16H)	29/00	<b>Ground-engaging propulsion devices for cycles, sledges, or rider-propelled wheeled vehicles, not otherwise provided for</b>
		29/02	<ul style="list-style-type: none"> <li>using ground-engaging rods</li> </ul>