

## 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, 2006.01, 2010.01]**

1/10 • involving devices which enable the mechanical storing and releasing of energy occasionally, e.g. arrangement of flywheels **[1, 2006.01, 2010.01]**

1/12 • operated by both hand and foot power **[1, 2006.01]**

1/14 • operated exclusively by hand power **[1, 2006.01]**

1/16 • • by means of a to-and-fro movable handlebar **[1, 2006.01]**

1/18 • by movement of rider's saddle **[1, 2006.01]**

1/20 • • with additional rider propulsion means **[1, 2006.01]**

1/24 • 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]**

1/36 • 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 [1, 2006.01]**

3/02 • of adjustable length **[1, 2006.01]**

3/04 • • automatically adjusting **[1, 2006.01]**

3/06 • with elliptical or other non-circular rotary movement **[1, 2006.01]**

3/08 • Pedals **[1, 2006.01]**

3/10 • • All-metal pedals **[1, 2006.01]**

3/12 • • with reflectors **[1, 2006.01]**

3/14 • Hand-grips for hand-operated cranks **[1, 2006.01]**

3/16 • Accessories **[1, 2006.01]**

**5/00 Foot-driven levers as pedal cranks which can be immobilised as foot-rests** (immobilising against theft B62H 5/10) **[1, 2006.01]**

**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, the first place priority rule is applied, i.e. 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]
- 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, 2006.01, 2010.01]
- 7/02 • with engine between front and rear wheels [1, 2006.01]
- 7/04 • • below the frame [1, 2006.01]
- 7/06 • • directly under the saddle or seat [1, 2006.01]
- 7/08 • with the engine over the rear wheel [1, 2006.01]
- 7/10 • with the engine over the front wheel [1, 2006.01]
- 7/12 • with the engine beside or within the driven wheel [1, 2006.01]
- 7/14 • with the engine on an auxiliary wheeled unit, e.g. trailer, sidecar (trailers B60P, B62D; sidecars B62K 27/00) [1, 2006.01]

**Transmissions**

- 9/00 Transmissions characterised by use of an endless chain, belt, or the like** (cycle chain guards B62J 13/00) [1, 2006.01]

**Note(s) [2010.01]**

In this main group, the first place priority rule is applied, i.e. 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 [1, 2006.01]
- 9/04 • of changeable ratio [1, 2006.01]
- 9/06 • • using a single chain, belt, or the like [1, 2006.01]
- 9/08 • • • involving eccentrically-mounted or elliptically-shaped driving or driven wheel; with expansible driving or driven wheel [1, 2006.01]
- 9/10 • • • involving different-sized wheels selectively engaged by the chain, belt, or the like [1, 2006.01]
- 9/12 • • • • the chain, belt, or the like being laterally shiftable [1, 2006.01]
- 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 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 [1, 2006.01]
- 9/16 • Tensioning or adjusting equipment for chains, belts, or the like [1, 2006.01]
- 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) [1, 2006.01]
- 11/02 • of unchangeable ratio [1, 2006.01]
- 11/04 • of changeable ratio [1, 2006.01]

11/06	• • with spur gear wheels (B62M 11/14 takes precedence) [1, 2006.01]	23/00	<b>Transmissions characterised by use of other elements; Other transmissions [1, 2006.01]</b>
11/10	• • with bevel gear wheels (B62M 11/14 takes precedence) [1, 2006.01]	23/02	• 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, 2006.01, 2010.01]
11/12	• • with frictionally-engaging wheels (B62M 11/14 takes precedence) [1, 2006.01]	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) [1, 2006.01]
11/14	• • with planetary gears [1, 2006.01]	25/02	• with mechanical transmitting systems, e.g. cables, levers [1, 2006.01]
11/16	• • • built in, or adjacent to, the ground-wheel hub [1, 2006.01]	25/04	• • hand actuated [1, 2006.01]
11/18	• • • with a plurality of planetary gear units [1, 2006.01]	25/06	• • foot actuated [1, 2006.01]
13/00	<b>Transmissions characterised by use of friction rollers engaging the periphery of the ground wheel</b> (for rider propelled cycles with additional source of power B62M 6/35, B62M 6/75) [1, 2006.01, 2010.01]	25/08	• with electrical or fluid transmitting systems [1, 2006.01]
13/02	• with changeable ratio, e.g. with roller of varying diameter [1, 2006.01]	<hr/>	
13/04	• with means for moving roller into driving contact with ground wheel [1, 2006.01]	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) [1, 2006.01]
15/00	<b>Transmission characterised by use of crankshafts and coupling-rods</b> [1, 2006.01]	27/02	• power driven [1, 2006.01]
17/00	<b>Transmissions characterised by use of rotary shaft, e.g. cardan shaft</b> [1, 2006.01]	29/00	<b>Ground-engaging propulsion devices for cycles, sledges, or rider-propelled wheeled vehicles, not otherwise provided for</b> [1, 2006.01]
19/00	<b>Transmissions characterised by use of non-mechanical gearing, e.g. fluid gearing</b> [1, 2006.01]	29/02	• using ground-engaging rods [1, 2006.01]
21/00	<b>Transmissions characterised by use of resilient elements therein</b> [1, 2006.01]		