SECTION B — PERFORMING OPERATIONS; TRANSPORTING

B60 VEHICLES IN GENERAL

B60C VEHICLE TYRES (manufacture, repairing B29)**; TYRE INFLATION; TYRE CHANGING; CONNECTING VALVES TO INFLATABLE ELASTIC BODIES IN GENERAL; DEVICES OR ARRANGEMENTS RELATED TO TYRES** (testing of tyres G01M 17/02) **[5]**

Note(s)

1. In this subclass, the following term is used with the meaning indicated:
   - "tyre" means a separate ground-engaging, continuous element outside the periphery of the wheel rim and includes the tyre casing, cover, or jacket and any insert, e.g. inner tube. In group B60C 29/00, relating to connection of valves, the term "tyre" also includes inflatable elastic bodies other than tyres or inner tubes.
2. Attention is drawn to the Note following the title of class B60.

Subclass index

TYRES
- Characterised by material....1/00
- Characterised by transverse section....3/00
- General structure....5/00, 7/00, 19/00
- Parts; reinforcements; treads; walls; beads; other parts....9/00, 11/00, 13/00, 15/00, 19/00
- Particular devices....17/00, 27/00

MOUNTING, INFLATION
- Inflating devices, pressure or temperature control....23/00, 29/00
- Apparatus or tools....25/00

SUBJECT MATTER NOT PROVIDED FOR IN OTHER GROUPS OF THIS SUBCLASS....99/00

1/00 Tyres characterised by the chemical composition or the physical arrangement or mixture of the composition [4]

Note(s)

Tyres characterised by the compositions only, i.e. having no significant tyre structure, are classified only with the compositions, e.g. in C08K, C08L.

3/00 Tyres characterised by transverse section (characterised by rail-engaging elements B60B 17/00) **[4]**

3/02 • Closed, e.g. toroidal, tyres **[4]**

3/04 • characterised by the relative dimensions of the section, e.g. low profile (B60C 3/06 takes precedence) **[4]**

3/06 • asymmetric **[4]**

3/08 • collapsible into storage or non-use condition, e.g. space-saving spare tyres (run-flat tyres B60C 17/08) **[4]**

5/00 Inflatable pneumatic tyres or inner tubes (B60C 1/00, B60C 9/00-B60C 17/00 take precedence) **[4]**

5/01 • without substantial cord reinforcement, e.g. cordless tyres, cast tyres **[4]**

5/02 • having separate inflatable inserts, e.g. with inner tubes; Means for lubricating, venting, preventing relative movement between tyre and inner tube (B60C 5/20 takes precedence) **[4]**

5/04 • • Shape or construction of inflatable inserts (B60C 5/10 takes precedence) **[4]**

5/08 • • • having reinforcing means

5/10 • formed as a single discontinuous ring with contiguous ends which may be connected together **[4]**

5/12 • without separate inflatable inserts, e.g. tubeless tyres with transverse section open to the rim (B60C 5/20 takes precedence) **[4]**

5/14 • • with impervious liner or coating on the inner wall of the tyre **[4]**

5/16 • • Sealing means between beads and rims, e.g. bands

5/18 • Sectional casings, e.g. comprising replaceable arcuate parts

5/20 • having multiple separate inflatable chambers (with additional tubes which become load supporting in emergence B60C 17/02) **[4]**

5/22 • • the chambers being annular **[4]**

5/24 • • the walls of the chambers extending transversely of the tyre **[4]**

7/00 Non-inflatable or solid tyres (B60C 1/00 takes precedence; tyres or rims characterised by rail-engaging elements B60B 17/00) **[2]**

7/02 • made from ropes or bristles

7/04 • made of wood or leather

7/06 • made of metal

7/08 • built-up from a plurality of arcuate parts

7/10 • characterised by means for increasing resiliency (highly resilient wheels B60B 9/00)

7/12 • • using enclosed chambers, e.g. gas-filled (inflatable tyres B60C 5/00) **[4]**
7/14 • • using springs
7/16 • • • of helical or flat coil form
7/18 • • • • disposed radially relative to wheel axis
7/20 • • • • disposed circumferentially relative to wheel axis
7/22 • having inlays other than for increasing resiliency, e.g. for armouring
7/24 • characterised by means for securing tyres on rim or wheel body
7/26 • • using bolts
7/28 • • using straps or the like, e.g. vulcanised into the tyre

9/00 Reinforcements or ply arrangement of pneumatic tyres (inserts having reinforcing means B60C 5/08; bead structure, e.g. turnup or overlap construction, B60C 15/00; tyre cords per se D02G 3/48; fabrics per se D03D, D04H; metal ropes or cables, per se D07B 1/06) **[4]**

Note(s)

When classifying in this group, classification is also made in subclass B32B insofar as any layered product is concerned.

9/02 • Carcasses
9/04 • • the reinforcing cords of each carcass ply arranged in a substantially parallel relationship
9/06 • • • the cords extend diagonally from bead to bead and run in opposite directions in each successive carcass ply, i.e. bias angle ply (B60C 9/07, B60C 9/09 take precedence) **[4]**
9/07 • • • the cords curve from bead to bead in plural planes, e.g. S-shaped cords **[4]**
9/08 • • • the cords extend transversely from bead to bead, i.e. radial ply (B60C 9/07 takes precedence) **[4]**
9/09 • • • • combined with other carcass plies having cords extending diagonally from bead to bead, i.e. combined radial ply and bias angle ply **[4]**
9/10 • • the reinforcing cords within each carcass ply arranged in a crossing relationship
9/11 • • • Woven, braided, or knitted plies **[4]**
9/12 • • built-up with rubberised layers of discrete fibres or filaments
9/13 • • • with two or more differing cord materials **[4]**
9/14 • • built-up with sheets, webs, or films of homogeneous material, e.g. synthetics, sheet metal, rubber
9/16 • • built-up with metallic reinforcing inlays
9/17 • • asymmetric to the midcircumferential plane of the tyre **[4]**
9/18 • Structure or arrangement of belts or breakers, crown-reinforcing or cushioning layers
9/20 • • built-up from rubberised plies each having all cords arranged substantially parallel
9/22 • • • the plies being arranged with all cords disposed along the circumference of the tyre
9/24 • • built-up of arcuate parts
9/26 • • Folded plies **[4]**
9/28 • • characterised by the belt or breaker dimensions or curvature relative to carcass (B60C 9/30 takes precedence) **[4]**
9/30 • • asymmetric to the midcircumferential plane of the tyre **[4]**

11/00 Tyre tread bands; Tread patterns; Anti-skid inserts

11/01 • Shape of the shoulders between tread and sidewall, e.g. rounded, stepped, cantilevered (arrangements of grooves or ribs on the sidewalls B60C 13/02) **[4]**
11/02 • Replaceable treads
11/03 • Tread patterns **[4]**
11/04 • • in which the raised area of the pattern consists only of continuous circumferential ribs, e.g. zig-zag (B60C 11/12, B60C 11/13 take precedence) **[4, 6]**
11/11 • • in which the raised area of the pattern consists only of isolated elements, e.g. blocks (B60C 11/12, B60C 11/13 take precedence) **[4]**
11/113 • • in which the raised area of the pattern consists only of projections extending continuously across the tread from one edge to the other **[6]**
11/117 • • formed only by isolated recesses, e.g. grooves, slots or holes (B60C 11/12, B60C 11/13 take precedence) **[6]**
11/12 • • characterised by the use of narrow slits or incisions, e.g. sipes **[4]**
11/13 • • characterised by the groove cross-section, e.g. for buttressing or preventing stone-trapping **[6]**
11/14 • Anti-skid inserts, e.g. vulcanised into the tread band
11/16 • • of plug form, e.g. made from metal, textile
11/18 • • or strip form, e.g. metallic combs, rubber strips of different wear resistence (B60C 11/20 takes precedence)
11/20 • • in coiled form
11/22 • Tread rings between dual tyres **[4]**
11/24 • Wear-indicating arrangements **[4]**

13/00 Tyre sidewalls; Protecting, decorating, marking, or the like, thereof (B60C 17/08 takes precedence; tyre shoulders B60C 11/01; removable tyre sidewall trim rings B60B 7/01) **[4, 5]**

13/02 • Arrangement of grooves or ribs **[4]**
13/04 • having annular inlays or covers, e.g. white sidewalls **[4]**

15/00 Tyre beads, e.g. ply turn-up or overlap

15/02 • Seating or securing beads on rims (sealing means between beads and rims of tubeless tyres B60C 5/16; means for securing solid tyres on rims B60C 7/24; rims B60B 21/00) **[4]**
15/024 • • Bead contour, e.g. lips, grooves, or ribs **[4]**
15/028 • • Spacers between beads (emergency load-supporting means B60C 17/00) **[4]**
15/032 • • • inflatable **[4]**
15/036 • • Tyres permanently fixed to the rim, e.g. by adhesive, by vulcanisation **[4]**
15/04 • Bead cores (producing bead-rings or bead-cores for tyres B29D 30/48) **[4]**
15/05 • • multiple, i.e. with two or more cores in each bead **[4]**
15/06 • Flipper strips, fillers, or chafing strips

17/00 Tyres characterised by means enabling restricted operation in damaged or deflated condition; Accessories therefor (having multiple separate inflatable chambers B60C 5/20)

17/01 • utilising additional inflatable supports which become load-supporting in emergency **[4]**
17/02 • • inflated or expanded in emergency only **[4]**
17/04 • utilising additional non-inflatable supports which become load-supporting in emergency
17/06 • • resilient **[4]**

17/08 • Means facilitating folding of sidewalls, e.g. run-flat sidewalls (for storage purposes B60C 3/08) **[4]**
17/10 • Internal lubrication **[4]**

19/00 Tyre parts or constructions not otherwise provided for
19/04 • Tyre with openings closeable by means other than the rim; Closing means therefor
19/08 • Electric-charge-dissipating arrangements
19/12 • Puncture preventing arrangements (B60C 9/00 takes precedence; inflatable inserts having reinforcing means B60C 5/08) **[4]**

23/00 Devices for measuring, signalling, controlling, or distributing tyre pressure or temperature, specially adapted for mounting on vehicles (measuring in general G01, e.g. G01L 17/00; remote signalling in general G08)**; Arrangement of tyre inflating devices on vehicles, e.g. of pumps, of tanks** (air pumps per se F04; tanks per se F17C)**; Tyre cooling arrangements [3]**
23/02 • Signalling devices actuated by tyre pressure
23/04 • • mounted on the wheel or tyre
23/06 • Signalling devices actuated by deformation of the tyre (wear-indicating arrangements B60C 11/24)
23/08 • • by touching the ground
23/10 • Arrangement of tyre-inflating pumps mounted on vehicles
23/12 • • operated by a running wheel
23/14 • • operated by the prime mover of the vehicle
23/16 • Arrangement of air tanks mounted on vehicles
23/18 • Tyre cooling arrangements **[3, 4]**
23/19 • • for dissipating heat **[4]**
23/20 • Devices for measuring or signalling tyre temperature **[3]**

25/00 Apparatus or tools adapted for mounting, removing or inspecting tyres (apparatus or tools characterised by the means for holding wheels or parts thereof B60B 30/00) **[5]**
25/01 • for removing tyres from, or mounting tyres on, wheels **[5]**
25/02 • • Tyre levers or the like, e.g. hand-held (machine operated B60C 25/05) **[5]**
25/04 • • • pivotal about the wheel axis, or movable along the rim edge, e.g. rollable **[5]**
25/05 • • Machines **[5]**
25/12 • • • for only seating the beads **[5]**
25/122 • • • • acting on the tyre tread **[5]**
25/125 • • • for only breaking the beads **[5]**
25/128 • • • • acting axially on the whole circumference of the bead or side wall **[5]**
25/13 • • • • acting axially at localised regions of the bead or side wall **[5]**
25/132 • • • for removing and mounting tyres (for only seating the beads B60C 25/12; for only breaking the beads B60C 25/125) **[5]**
25/135 • • • • having a tyre support or a tool, movable along wheel axis **[5]**
25/138 • • • • • with rotary motion of tool or tyre support **[5]**
25/14 • Apparatus or tools for spreading tyre beads (B60C 25/12 takes precedence) **[5]**
25/15 • • with means for inverting the tyre **[5]**
25/18 • Tools for mounting or demounting air valves
25/20 • Tools for attaching metallic tyres, e.g. iron tyres upon wooden rims

27/00 Non-skid devices temporarily attachable to resilient tyres or resiliently-tyred wheels
27/02 • extending over restricted arcuate part of tread (B60C 27/20 takes precedence)
27/04 • • the ground-engaging part being rigid
27/06 • extending over the complete circumference of tread, e.g. made of chains (B60C 27/20 takes precedence)
27/08 • • involving lugs or rings taking up wear
27/10 • • having tensioning means
27/12 • • • resilient
27/14 • • automatically attachable
27/16 • • formed of close material, e.g. leather
27/18 • • • the material being fabric, e.g. woven wire
27/20 • having ground-engaging plate-like elements
27/22 • for tandem tyres (endless-track features B62D)

29/00 Arrangements of tyre-inflating valves to tyres or rims; Accessories for tyre-inflating valves, not otherwise provided for (tools for mounting or demounting valves B60C 25/18; valves per se, valve dust caps F16K) **[4, 5]**
29/02 • Connection to rims **[4]**
29/04 • Connection to tyres **[4]**
29/06 • Accessories for tyre-inflating valves, e.g. housings, guards, covers for valve caps, locks, not otherwise provided for **[5]**

99/00 Subject matter not provided for in other groups of this subclass [2006.01]