

B60C

VEHICLE TYRES; TYRE INFLATION; TYRE CHANGING; CONNECTING VALVES TO INFLATABLE ELASTIC BODIES IN GENERAL; DEVICES OR ARRANGEMENTS RELATED TO TYRES

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Manufacture, repairing	B29D 30/00
------------------------	----------------------------

B60C 3/00

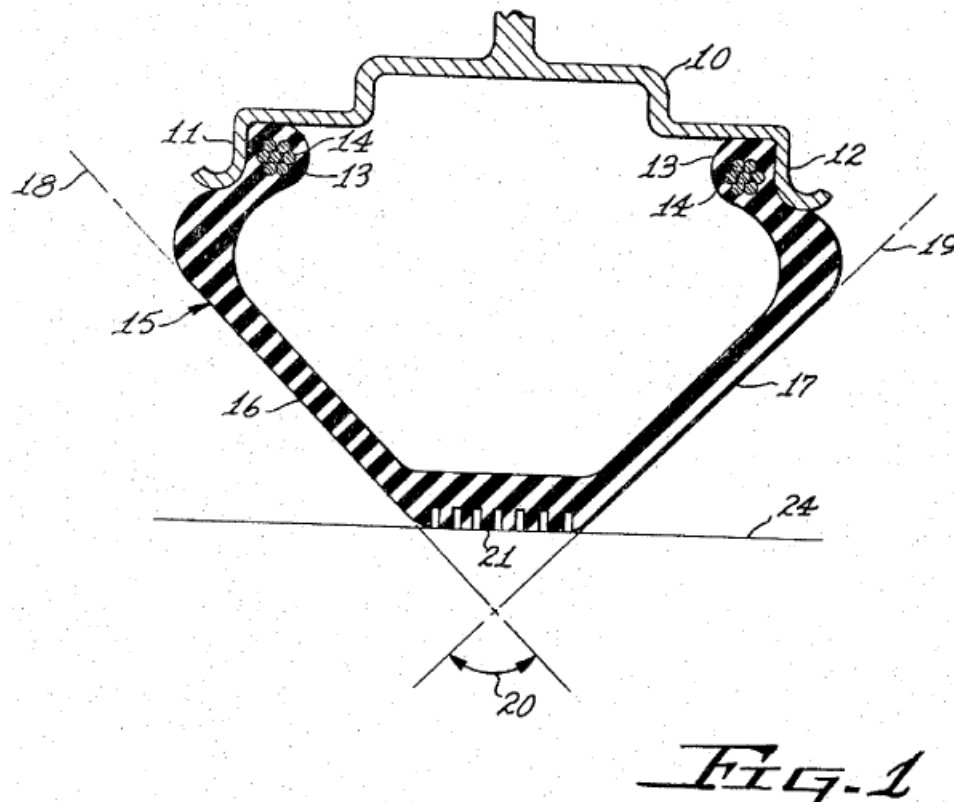
Tyres characterised by the transverse section

Definition statement

This place covers:

Tyres distinguished by a mathematical relationship, e.g. equation or ratio, or an absolute dimension, e.g. radius of curvature, which mathematical relationship or absolute dimension describes the cross-sectional profile or cross-sectional shape of the tyre.

Example 1:



Special rules of classification

Documents which nominally fit within [B60C 3/00](#) but otherwise fit in any of the areas listed below should be classified in the appropriate area listed below:

Tyres whose transverse section is characterised only by carcass ply curvature	B60C 9/0292
Tyres whose transverse section is characterised only by tyre tread radius of curvature	B60C 11/0083
Tyres whose transverse section is characterised only by shape of the shoulders between tread and sidewall	B60C 11/01
Tyres whose transverse section is characterised only by sidewall radius of curvature	B60C 13/003
Tyres whose transverse section is characterised only by arrangement of sidewall grooves or ribs	B60C 13/02
Tyres whose transverse section is characterised only by shape of the tyre bead contour	B60C 15/024

B60C 3/02

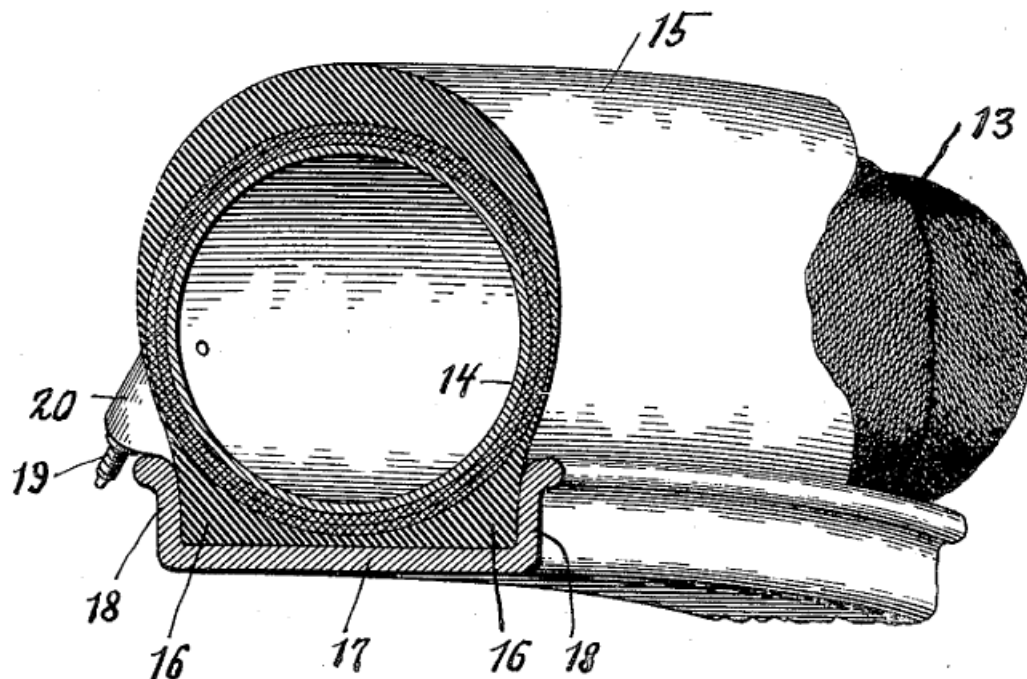
Closed, e.g. toroidal, tyres

Definition statement

This place covers:

Subject matter under main group [B60C 3/00](#) wherein a cross-section defined by a plane passing through the rotation axis of the tyre defines a continuous, circular-type configuration.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Securing tyres without beads; Securing closed torus or tubular tyres	B60C 15/0233
Tyres with openings closeable by means other than the rim; Closing means therefor	B60C 19/04

B60C 3/04

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

Definition statement

This place covers:

Subject matter under main group [B60C 3/00](#) wherein the tyre is characterised by the relative dimensions of the section, e.g., section width, section height, and/or aspect ratio.

Example:

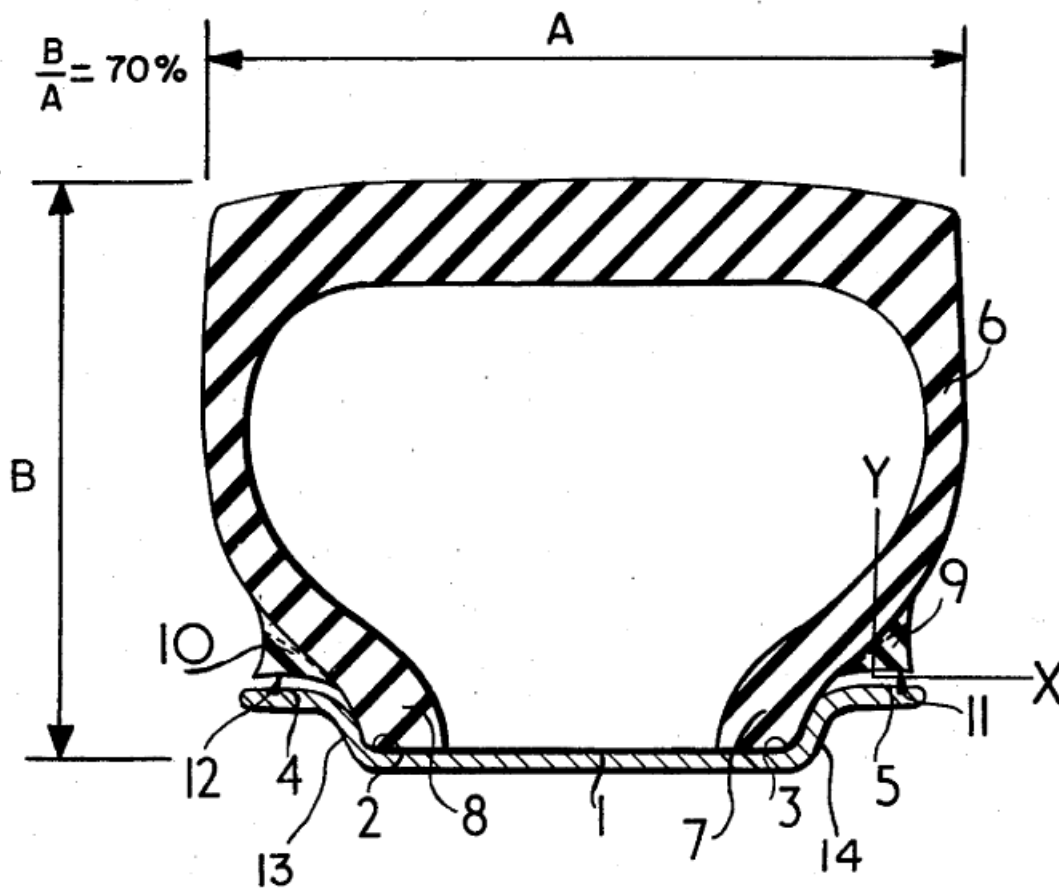


FIG. I.

References

Limiting references

This place does not cover:

Tyre cross-section asymmetric about equatorial plane	B60C 3/06
--	---------------------------

B60C 3/06

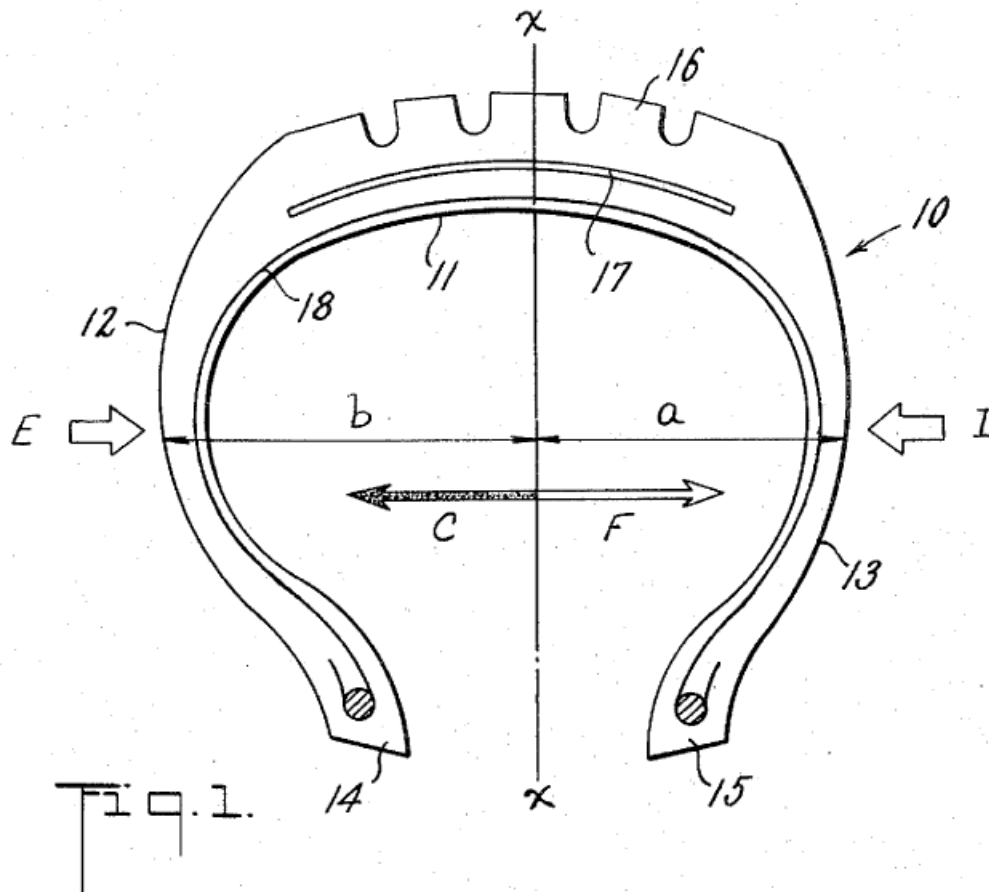
asymmetric

Definition statement

This place covers:

Subject matter under main group [B60C 3/00](#) wherein the section does not have a plane longitudinally bisecting the section into mirror image halves, i.e. tyre equatorial plane or midcircumferential plane.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Asymmetric carcasses	B60C 9/17
Asymmetric belts	B60C 9/30

Asymmetric caps and base treads	B60C 11/0066
Asymmetric tread patterns	B60C 11/0304
Asymmetric bead seats	B60C 15/0236
Asymmetric bead reinforcement	B60C 2015/0696
Tyres requiring asymmetric or special mounting	B60C 19/001

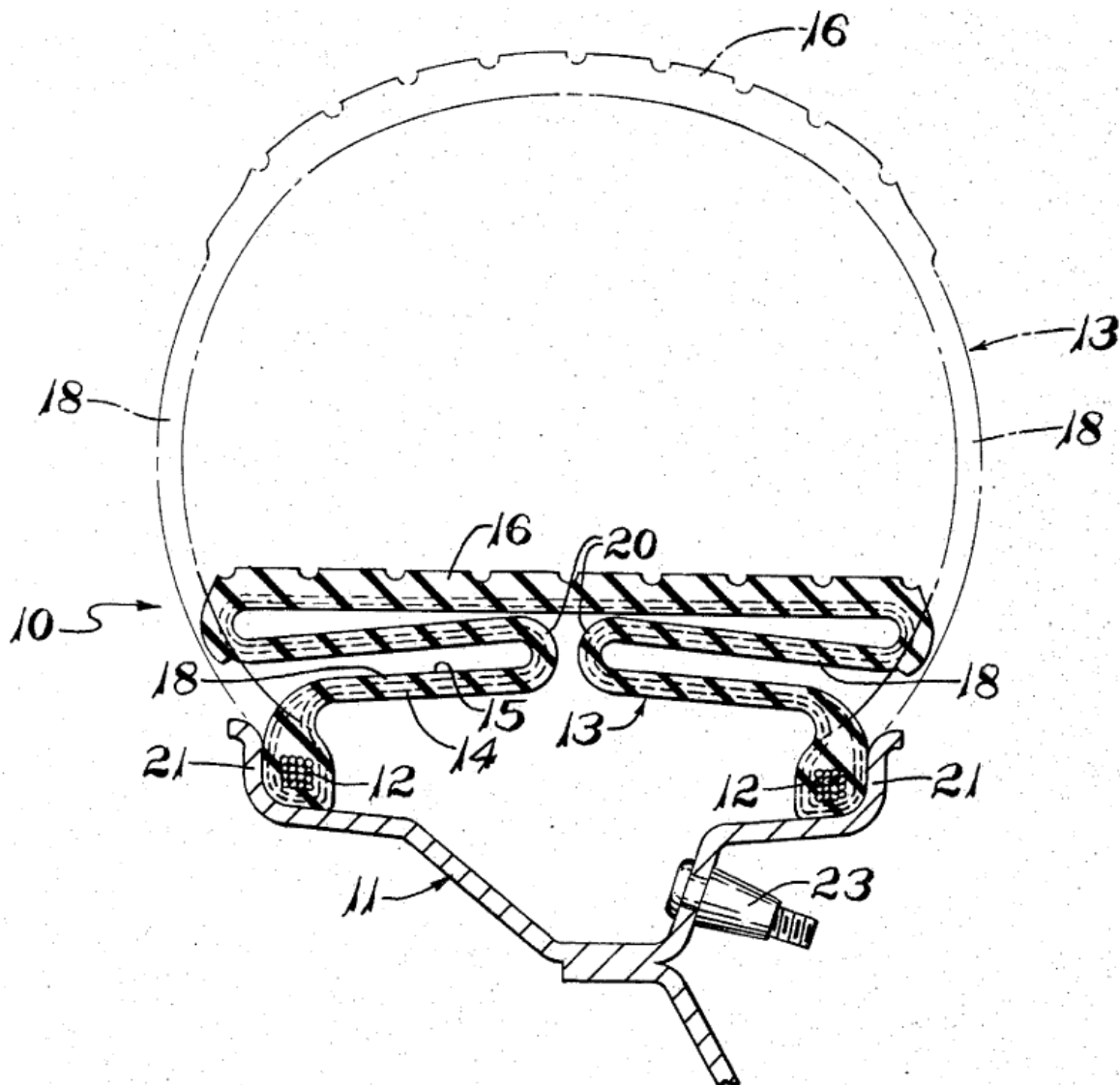
B60C 3/08

collapsible into storage or non-use condition, e.g. space-saving spare tyres

Definition statement

This place covers:

Example illustrating storage condition vs. inflated condition of a spare tyre:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Run-flat tyres	B60C 17/08
----------------	----------------------------

B60C 5/04

Shape or construction of inflatable inserts ([B60C 5/10](#) takes precedence)

Definition statement

This place covers:

Subject matter wherein the inflatable insert is defined by a special shape or construction.

References

Limiting references

This place does not cover:

Inflatable pneumatic tyres or inner tubes formed as a single discontinuous ring with contiguous ends which may be connected together	B60C 5/10
--	---------------------------

B60C 5/08

having reinforcing means

Definition statement

This place covers:

Subject matter wherein the inner tube is strengthened throughout at least a portion of its extent.

B60C 5/10

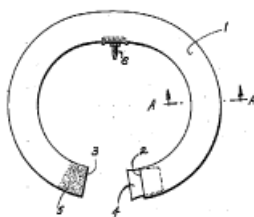
formed as a single discontinuous ring with contiguous ends which may be connected together

Definition statement

This place covers:

Subject matter wherein the pneumatic tyre forms a discontinuous ring, the ends of which may connect together, overlap, or abut.

Example 1:



Example 2:



B60C 7/00

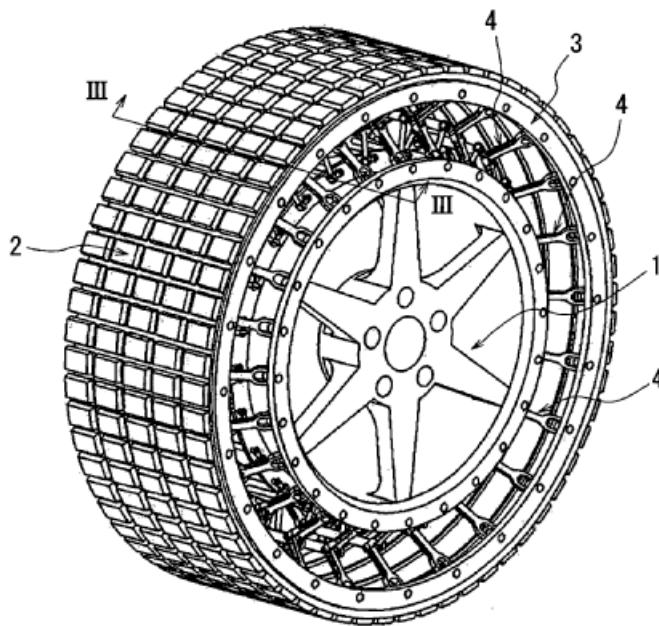
Non-inflatable or solid tyres ([B60C 1/00](#) takes precedence)

Definition statement

This place covers:

- non-inflatable tyres of the solid rubber tyre type (e.g. sectional, casing enclosed core, integral) whether or not they include voids such as chamber openings
- non-inflatable tyres made up of a tread band supported by a plurality of springs or spokes
- means for securing non-inflatable tyres to rims

Example:



References

Limiting references

This place does not cover:

Tyres characterised by the chemical composition or the physical arrangement or mixture of the composition	B60C 1/00
---	---------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Wheels characterised by rail-engaging elements	B60B 17/00
Castor wheels	B60B 33/00

Special rules of classification

The precedential classification within [B60C 1/00](#) should be given if the subject matter cannot to be classified within any subgroup of [B60C 7/00](#). For example, disclosure which is related to the chemical composition of the tread but also discloses a solid tyre using foam material should be classified in both [B60C 1/0016](#) as well as [B60C 7/105](#).

B60C 7/10

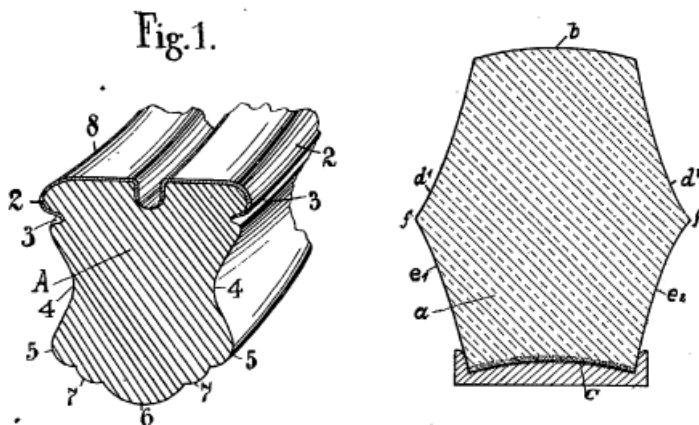
characterised by means for increasing resiliency

Definition statement

This place covers:

Subject matter wherein there is provided means for absorbing road shocks other than the use of a pneumatic means (e.g. non-inflatable or solid tyre having a particular structure and/or composition).

Examples:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Highly resilient wheels	B60B 9/00
-------------------------	---------------------------

B60C 7/101

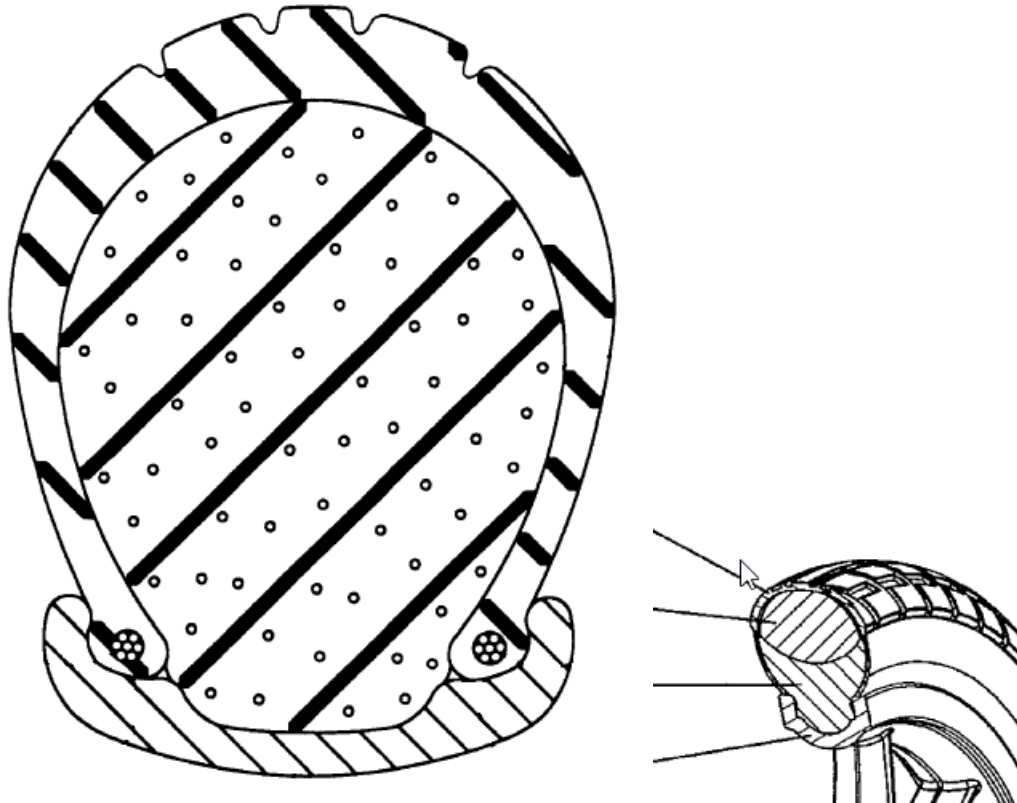
{Tyre casings enclosing a distinct core, e.g. foam (enclosed chambers defined by a distinct core [B60C 7/121](#))}

Definition statement

This place covers:

Subject matter wherein the tyre consists of a casing enclosing a core where the core may be separate or integral with the casing. The core and casing must be distinct by reason of differing materials or arrangement.

Example:



References

Limiting references

This place does not cover:

Tyre casing enclosing a distinct core where the core has chambers therein	B60C 7/121
---	----------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Pneumatic tyre at least partially filled with foam material	B60C 5/002
Tyres comprising resilient foam means which become load supporting in deflated or damaged condition	B60C 17/065

B60C 7/12

using enclosed chambers, e.g. gas-filled

Definition statement

This place covers:

Subject matter where the tyres use enclosed chambers where the chambers are effectively empty, i.e. not filled with a solid material.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Inflatable tyres	B60C 5/00
------------------	---------------------------

B60C 7/121

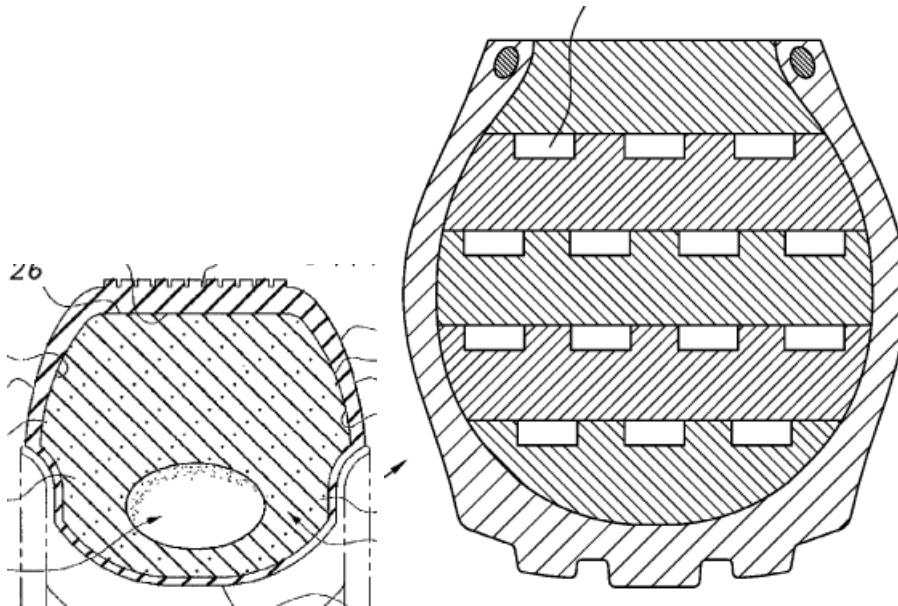
{enclosed chambers defined by a distinct core}

Definition statement

This place covers:

Subject matter wherein the tyre consists of a casing enclosing a core where the core may be separate or integral with the casing. The core and casing must be distinct by reason of differing materials or arrangement and include chambers within the core.

Example:



B60C 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](#))

References

Limiting references

This place does not cover:

Inserts having reinforcing means	B60C 5/08
Bead structure, e.g. turnup or overlap construction	B60C 15/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Tyre cords per se	D02G 3/48
Fabrics per se	D03D , D04H
Metal ropes or cables per se	D07B 1/06

B60C 9/1835

{Rubber strips or cushions at the belt edges}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Compositions	B60C 2001/0075
--------------	--------------------------------

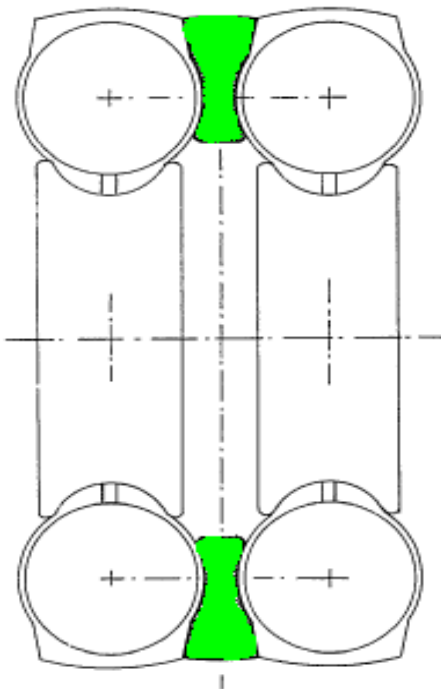
B60C 11/22

Tread rings between dual tyres

Definition statement

This place covers:

Example:



B60C 11/246**{Tread wear monitoring systems}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

Tyre pressure monitoring	B60C 23/04
--------------------------	----------------------------

B60C 13/003**{characterised by sidewall curvature}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

Carcass ply curvature	B60C 9/0292
-----------------------	-----------------------------

B60C 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](#))****References*****Limiting references****This place does not cover:*

Sealing means between beads and rims of tubeless tyres	B60C 5/16
Means for securing solid tyres on rims	B60C 7/24

Informative references*Attention is drawn to the following places, which may be of interest for search:*

Rims	B60B 21/00
------	----------------------------

B60C 15/0236**{Asymmetric bead seats, e.g. different bead diameter or inclination angle (asymmetric transverse section [B60C 3/06](#))}****References*****Limiting references****This place does not cover:*

Asymmetric transverse section	B60C 3/06
-------------------------------	---------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Asymmetric bead reinforcement	B60C 2015/0696
-------------------------------	--------------------------------

B60C 15/04**Bead cores****References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Producing bead-rings or bead-cores for tyres	B29D 30/48
--	----------------------------

B60C 15/0603

{characterised by features of the bead filler or apex}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Compositions of the apex rubber	B60C 2001/0058
---------------------------------	--------------------------------

B60C 17/00

Tyres characterised by means enabling restricted operation in damaged or deflated condition; Accessories therefor

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Tyres having multiple separate inflatable chambers	B60C 5/20
Tyres having additional shear belt layers	B60C 9/18

B60C 17/08

Means facilitating folding of sidewalls, e.g. run-flat sidewalls

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Means facilitating folding of sidewalls for storage purposes	B60C 3/08
--	---------------------------

B60C 19/12

Puncture preventing arrangements

References

References out of a residual place

Examples of places in relation to which this place is residual:

Inflatable inserts having reinforcing means	B60C 5/08
Reinforcements or ply arrangement of pneumatic tyres	B60C 9/00

Informative references

Attention is drawn to the following places, which may be of interest for search:

Sealing compositions per se	B29C 73/163
Devices for introducing sealing compositions into the tyre	B29C 73/166

B60C 23/00

Devices for measuring, signalling, controlling, or distributing tyre pressure or temperature, specially adapted for mounting on vehicles; Arrangement of tyre inflating devices on vehicles, e.g. of pumps or of tanks; Tyre cooling arrangements

Definition statement

This place covers:

Devices that are adapted for mounting on vehicles and are operational while the vehicle is moving.

Automatically distributing tyre pressure.

Monitoring tyre pressure status:

- Directly by measuring tyre air pressure.
- Indirectly by monitoring tyre deformation.

Monitoring tyre temperature status.

Arrangement of tyre inflating pumps.

Arrangement of air tanks.

Tyre cooling arrangements.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Tyre parts or constructions not otherwise provided for	B60C 19/00
Devices for introducing sealing compositions into articles	B29C 73/166
Producing pneumatic tyres or parts thereof	B29D 30/06
Tyre inflating devices, supplying air for tyre inflation	B60S 5/04

Informative references

Air pumps per se	F04
Tyre valves	F16K 15/20
Check valves for inflatable bodies, e.g. tyres	F16K 15/207
Tanks per se	F17C
Measuring in general	G01
Measuring distance traversed on the ground by vehicles	G01C 22/00
Housings for sensors	G01D 11/245
Devices for measuring tyre pressure (e.g. hand held pressure gauges)	G01L 17/00
Testing of tyres	G01M 17/02
Remote signalling in general	G08
Antennas for use in vehicles	H01Q 1/32

Tyre mounted electrical circuits

Sensors measuring tyre wear	B60C 11/243
Tyre sensors other than for detecting tyre pressure	B60C 2019/004
Attaching fasteners to tyres	B29D 2030/0072
Directly attaching monitoring devices to tyres	B29D 2030/0077
Attaching monitoring devices by inserting them inside tyre cavities	B29D 2030/0083
Tyre sensors for brake control	B60T 8/1725
Sensors mounted on wheel or tire	B60W 2422/70
Tyre mounted RFID devices	G06K 19/07764
Tyre mounted antennas	H01Q 1/2241

Powering electrical circuits

Mechanical power producing mechanisms	F03G 7/00
Transponder powered from received waves	G01S 13/75
Supplying or distributing electric power by electromagnetic waves	H02J 50/00 - H02J 50/90
Electric generators per se	H02K
Rotary generators associated with wheels	H02K 7/1846
Piezoelectric generators in general	H10N 30/30

Wireless transmission of measurements

Pressure measurements for remote indication	G01L 19/086
Registering or indicating the working of vehicles and communicating information to a remotely located station	G07C 5/008
Transmission of measured signals using a wireless link	G08C 17/00
Near field transmission systems	H04B 5/00
Radio transmission systems	H04B 7/00

Sensors per se

Temperature sensors	G01K
Pressure and force sensing	G01L

B60C 23/001

{Devices for manually or automatically controlling or distributing tyre pressure whilst the vehicle is moving}

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Devices for introducing sealing compositions into articles	B29C 73/166
--	-----------------------------

B60C 23/00305

{Wheel circumventing supply lines, e.g. not through or about the axles}

Definition statement

This place covers:

Illustrative example of subject matter classified in this group.

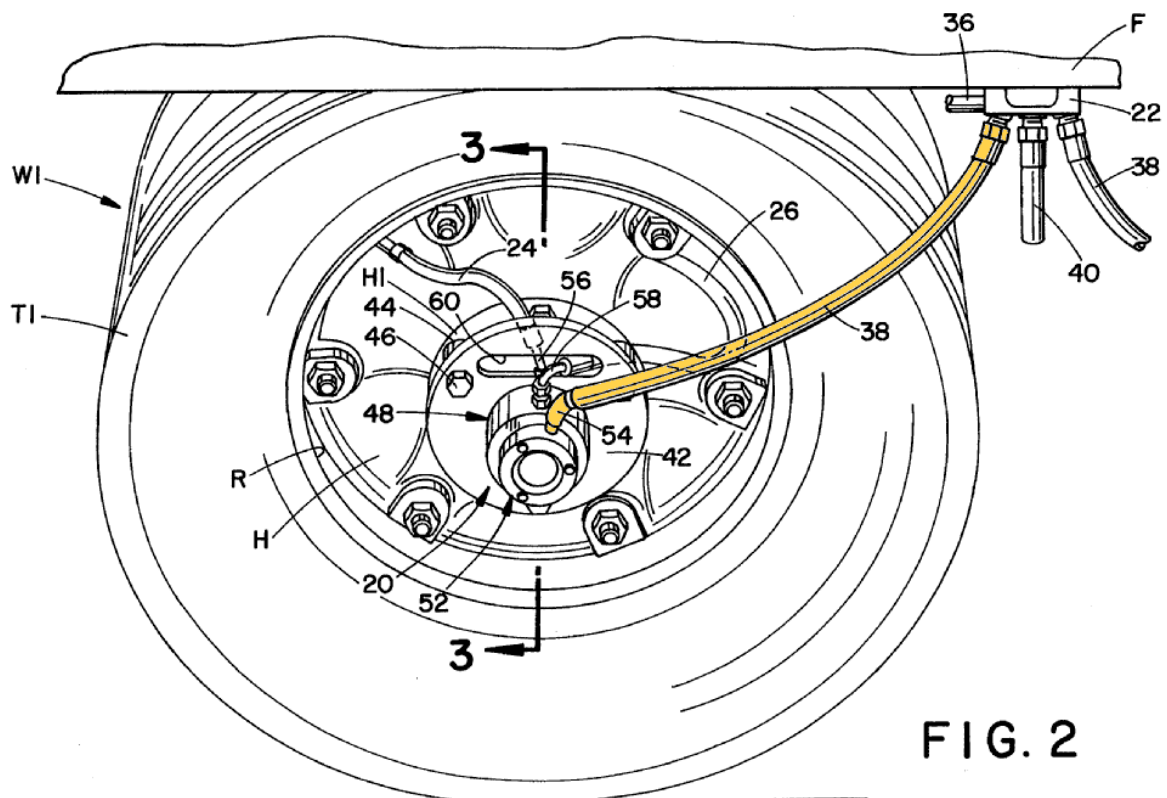


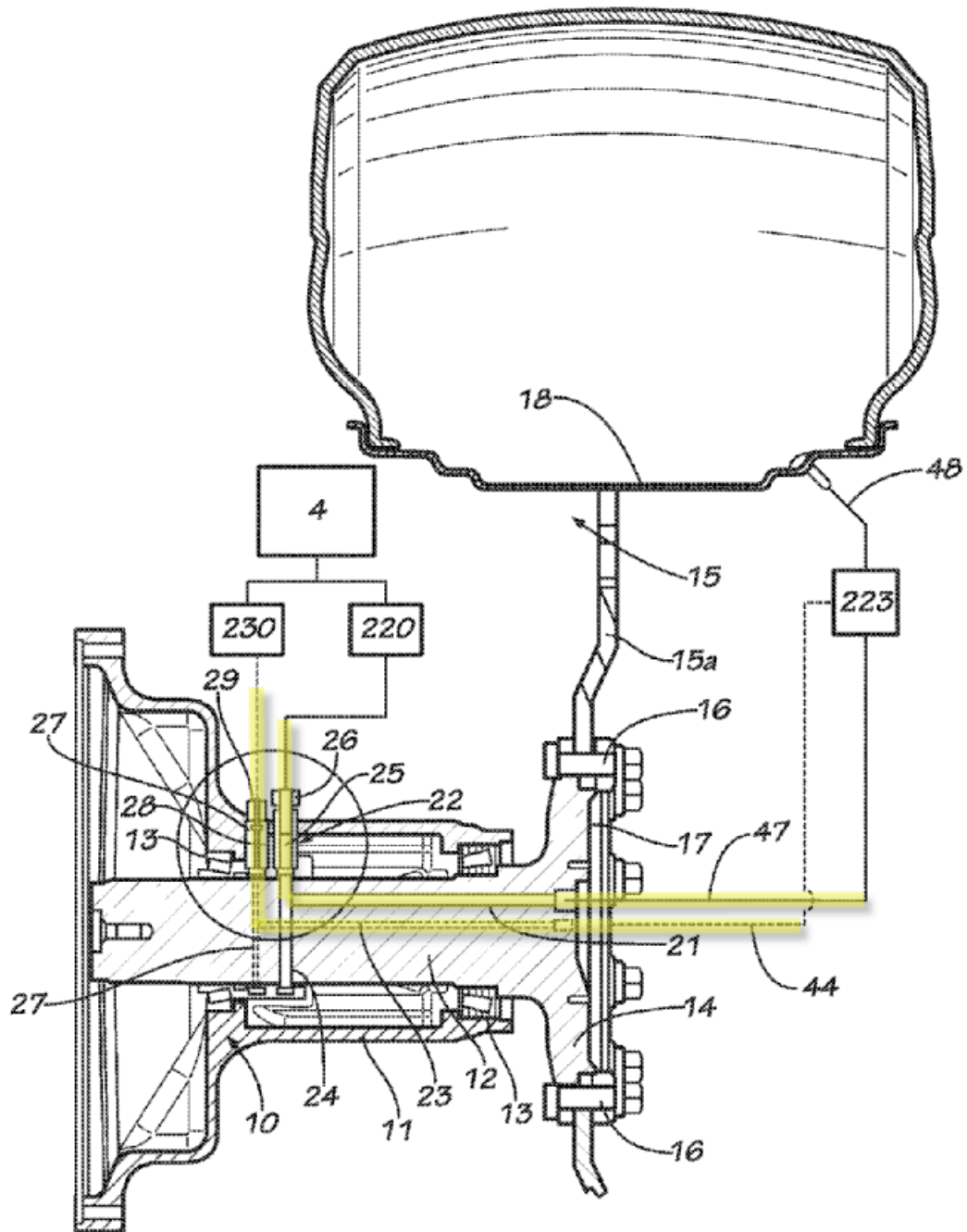
FIG. 2

B60C 23/00318**{on the wheels or the hubs}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

Vehicle wheels	B60B
Hubs	B60B 27/00

B60C 23/00347**{comprising two or more feedthrough}****Definition statement***This place covers:*

Illustrative example of subject matter classified in this group.



B60C 23/00354**{Details of valves}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

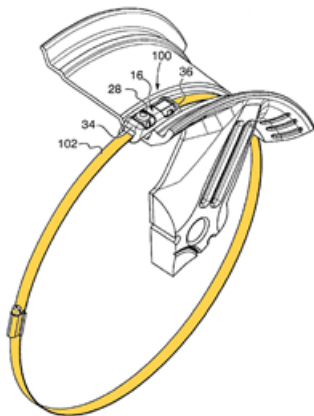
Valves; taps; cocks; actuating-floats; devices for venting or aerating	F16K
--	----------------------

B60C 23/004**{the control being done on the wheel, e.g. using a wheel-mounted reservoir}****References*****Informative references****Attention is drawn to the following places, which may be of interest for search:*

Pumps operated by a running wheel	B60C 23/12
-----------------------------------	----------------------------

B60C 23/04985**{using straps surrounding the rims}****Definition statement***This place covers:*

Illustrative example of subject matter classified in this group.



B60C 23/06

Signalling devices actuated by deformation of the tyre {, e.g. tyre mounted deformation sensors or indirect determination of tyre deformation based on wheel speed, wheel-centre to ground distance or inclination of wheel axle}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Wear-indicating arrangements	B60C 11/24
------------------------------	----------------------------

B60C 23/10

Arrangement of tyre-inflating pumps mounted on vehicles

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Devices for manually or automatically controlling or distributing tyre pressure whilst the vehicle is moving	B60C 23/001
--	-----------------------------

B60C 23/12

operated by a running wheel

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Wheel mounted reservoirs	B60C 23/004
--------------------------	-----------------------------

B60C 23/121

{the pumps being mounted on the tyres}

References**Informative references**

Attention is drawn to the following places, which may be of interest for search:

Tyre parts or constructions not otherwise provided for	B60C 19/00
Attaching fasteners to tyres, e.g. patches, in order to connect devices to tyres	B29D 2030/0072

B60C 23/126

{the pumps being mounted on the wheel rims}

References***Informative references***

Attention is drawn to the following places, which may be of interest for search:

Vehicle wheels	B60B
----------------	----------------------

B60C 23/127

{the pumps being mounted on the hubs}

References***Informative references***

Attention is drawn to the following places, which may be of interest for search:

Hubs	B60B 27/00
------	----------------------------

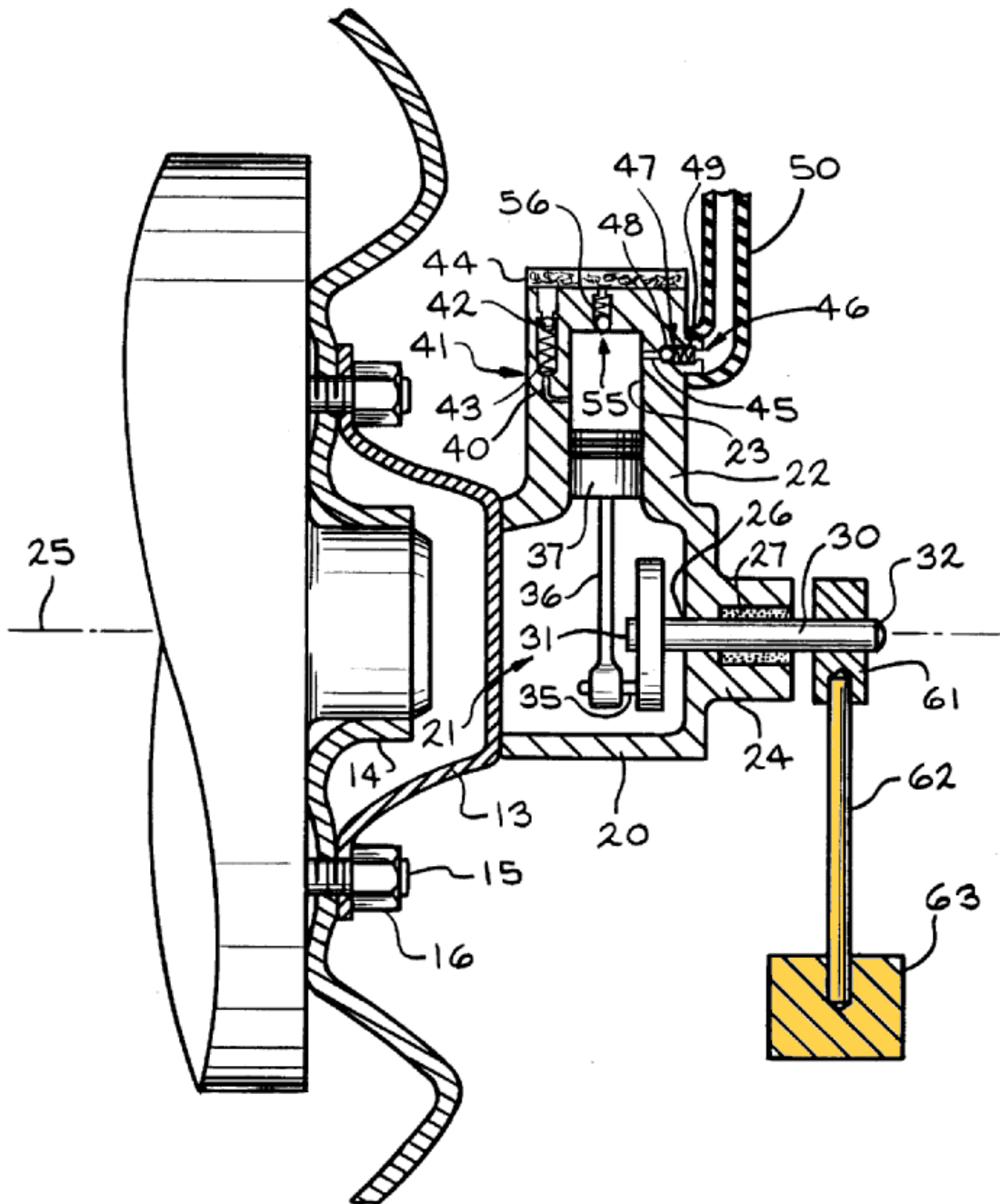
B60C 23/131

{activated by force of gravity}

Definition statement

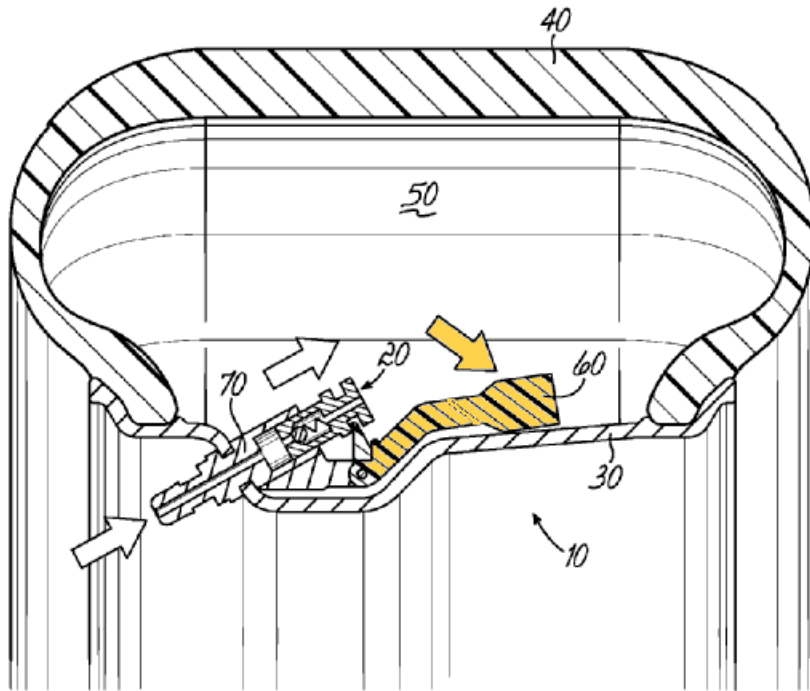
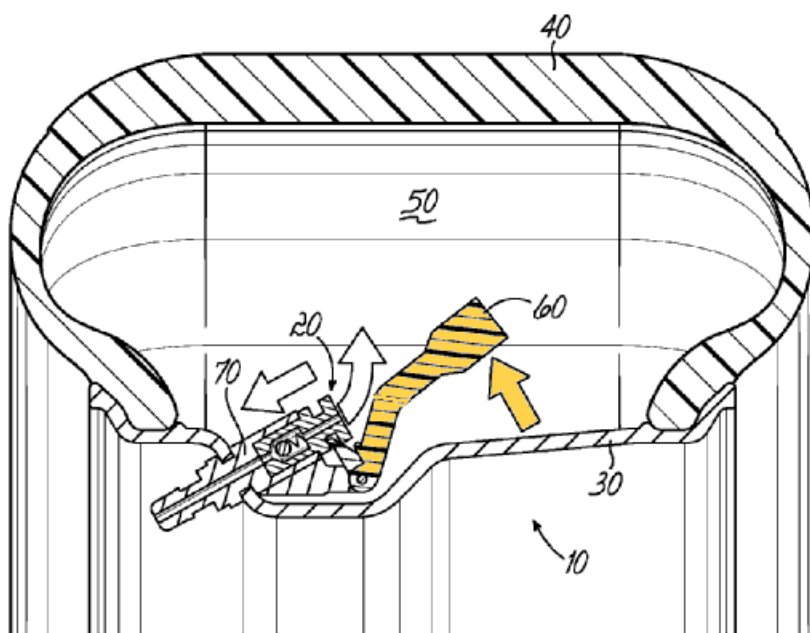
This place covers:

Illustrative example of subject matter classified in this group.



B60C 23/133**{activated by centrifugal force}****Definition statement***This place covers:*

Illustrative example of subject matter classified in this group.

**FIG. 1**

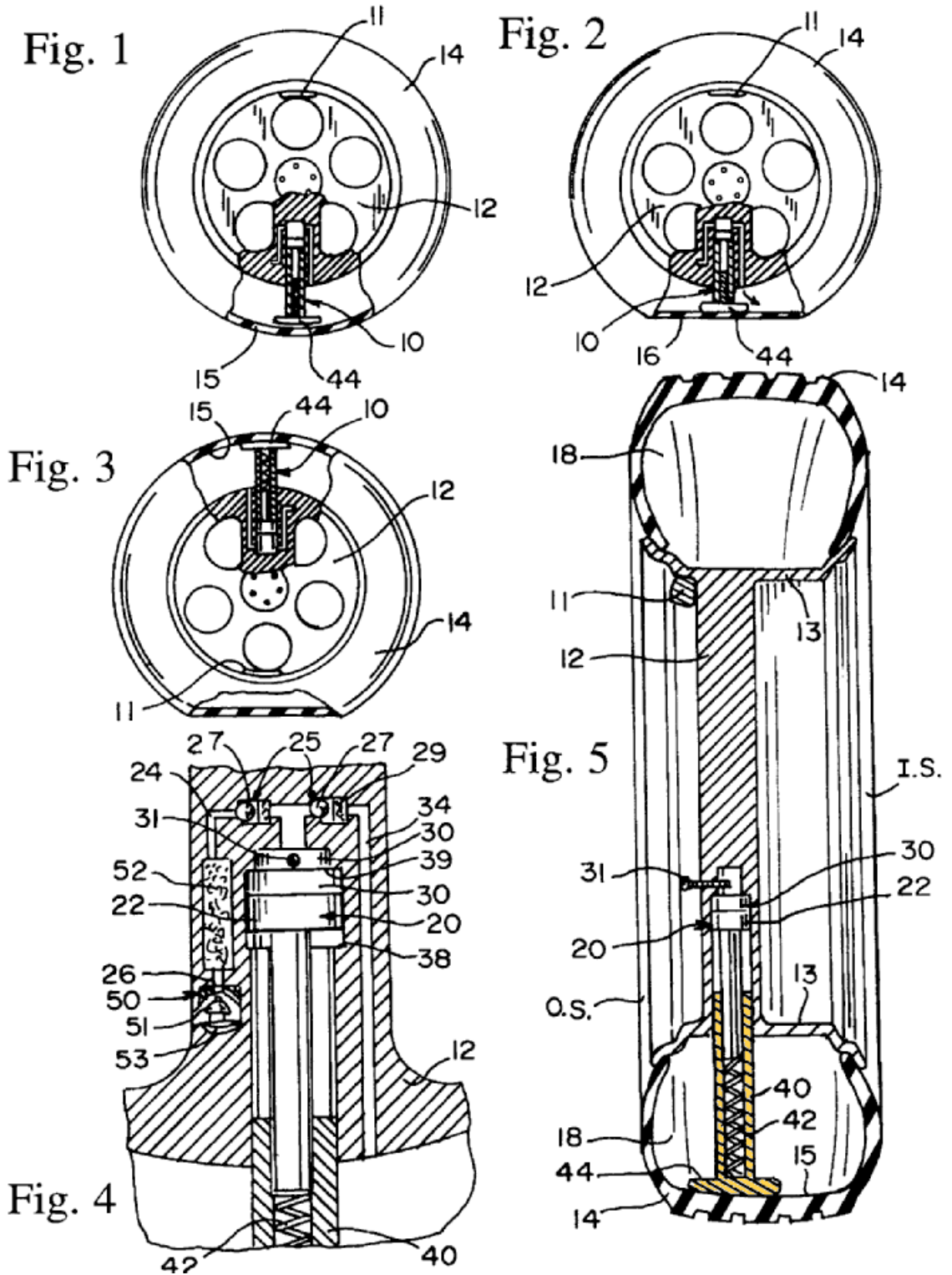
B60C 23/135

{activated due to tyre deformation}

Definition statement

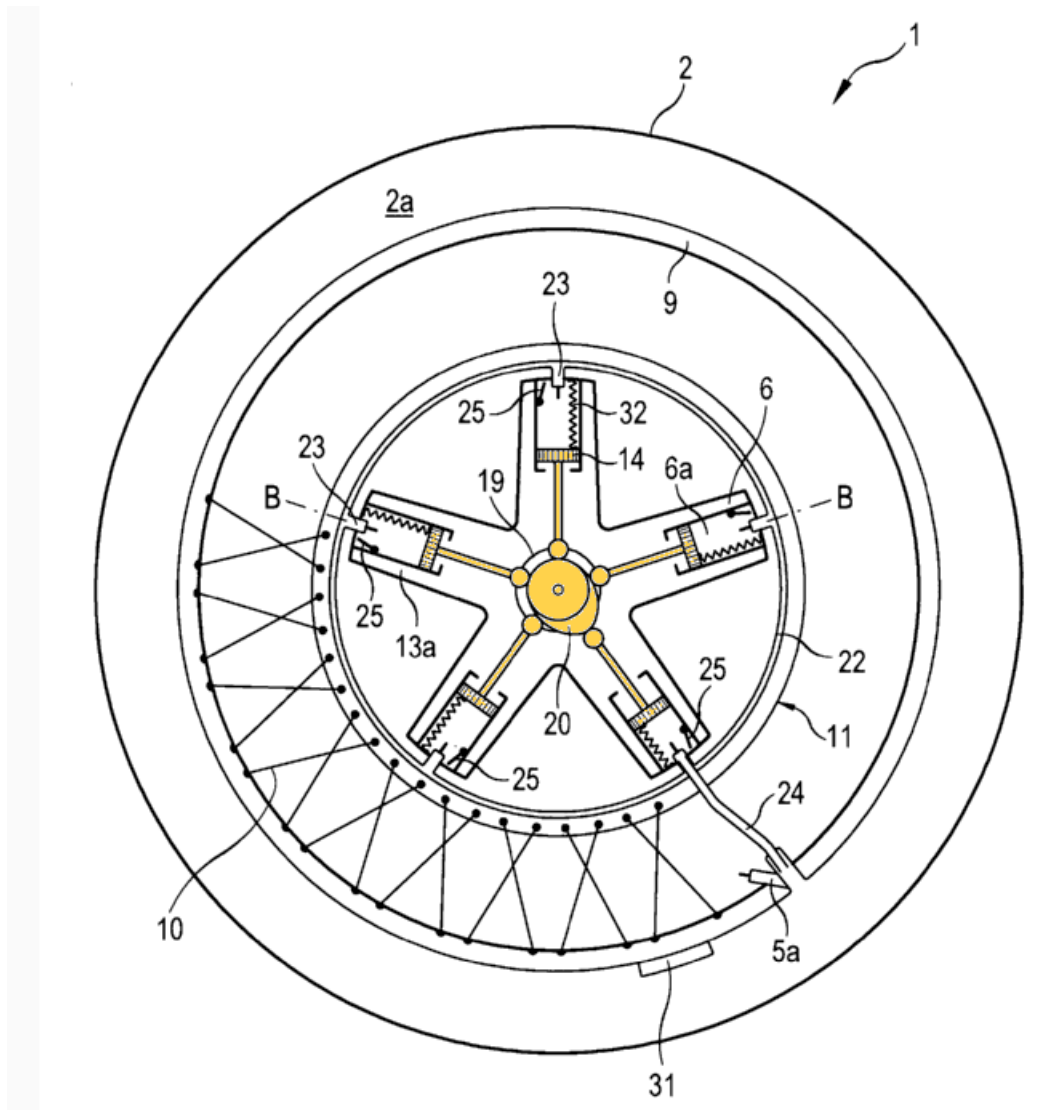
This place covers:

Illustrative example of subject matter classified in this group.



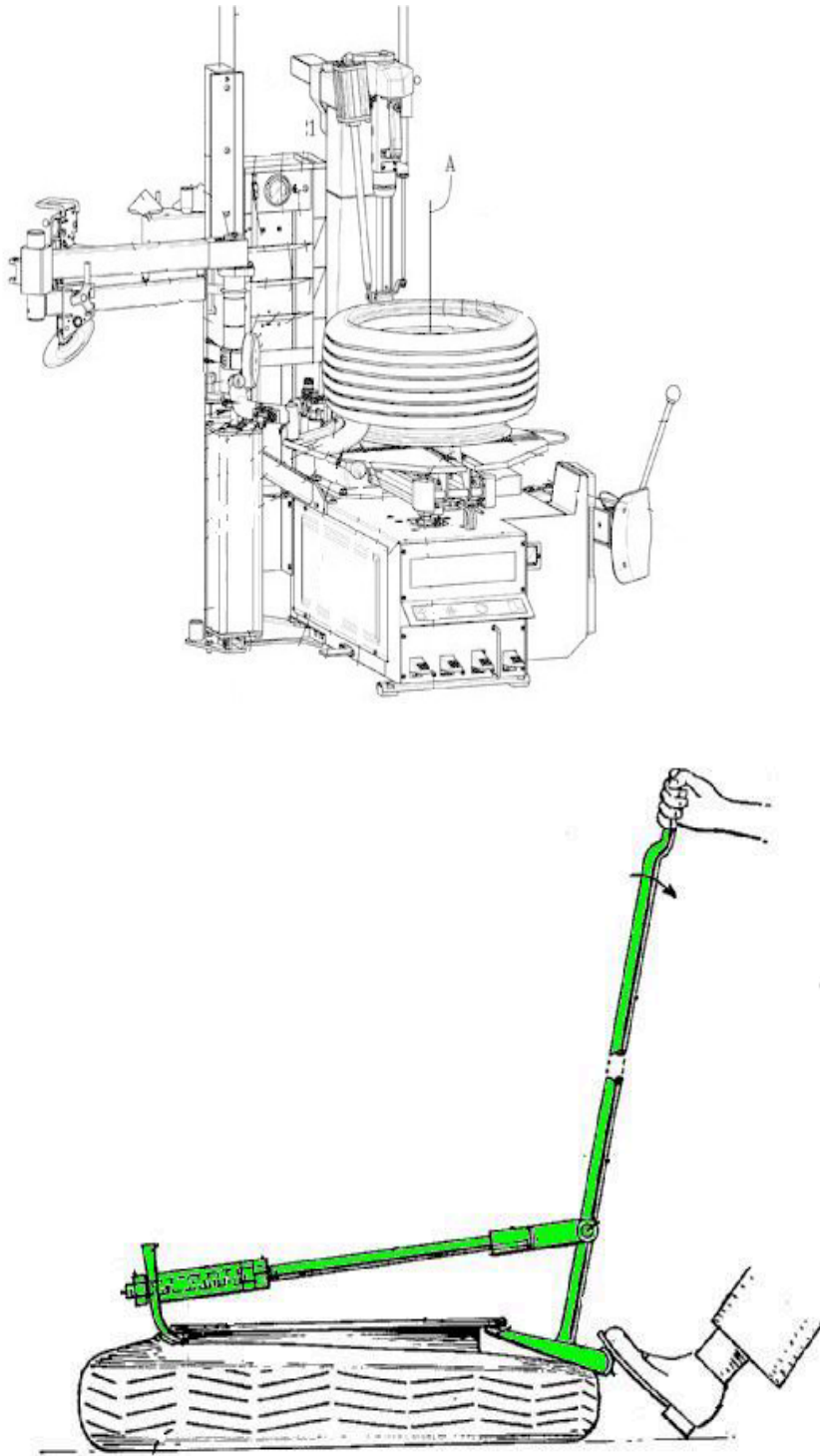
B60C 23/137**{comprising cam driven pistons}****Definition statement***This place covers:*

Illustrative example of subject matter classified in this group.

**B60C 25/00****Apparatus or tools adapted for mounting, removing or inspecting tyres (testing of tyres [G01M 17/02](#))****Definition statement***This place covers:*

- Hand-tools and machines for mounting or demounting a tyre on/ from a rim portion.
- Demounting machines also include separation of tyres from rims by destroying one or both parts.

Example:



References

Limiting references

This place does not cover:

Testing of tyres	G01M 17/02
------------------	----------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Rims per se	B60B 21/00
Hand-tools or machines for mounting or demounting wheels to/ from a vehicle axle	B60B 29/00
Means for holding wheels or parts thereof	B60B 30/00
Balancing of wheels	G01M 1/045
Compensation of unbalance or matching of tyres	G01M 1/30
Compensation of unbalance by removing material from the tyre tread	G01M 1/34

B60C 25/01

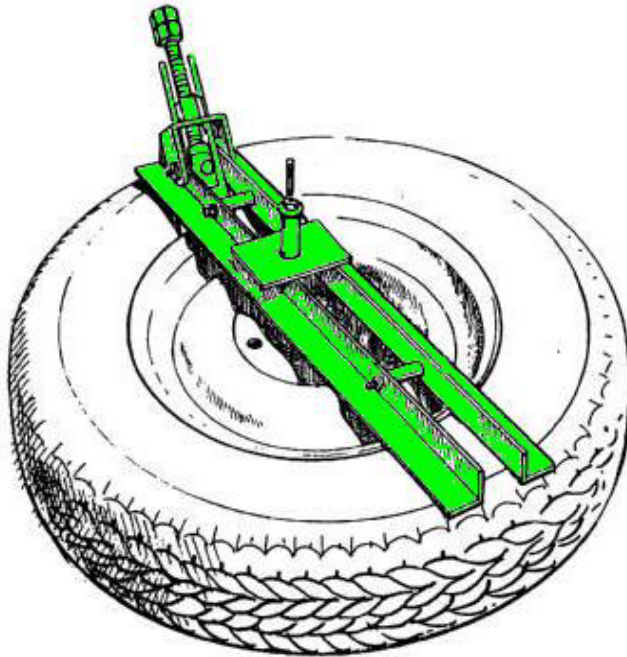
for removing tyres from or mounting tyres on wheels

Definition statement

This place covers:

Devices for manually mounting or demounting tyres to/ from rims.

Example:

**References****Informative references**

Attention is drawn to the following places, which may be of interest for search:

Machines for mounting or demounting tyres to/ from rims	B60C 25/05
---	----------------------------

B60C 25/02

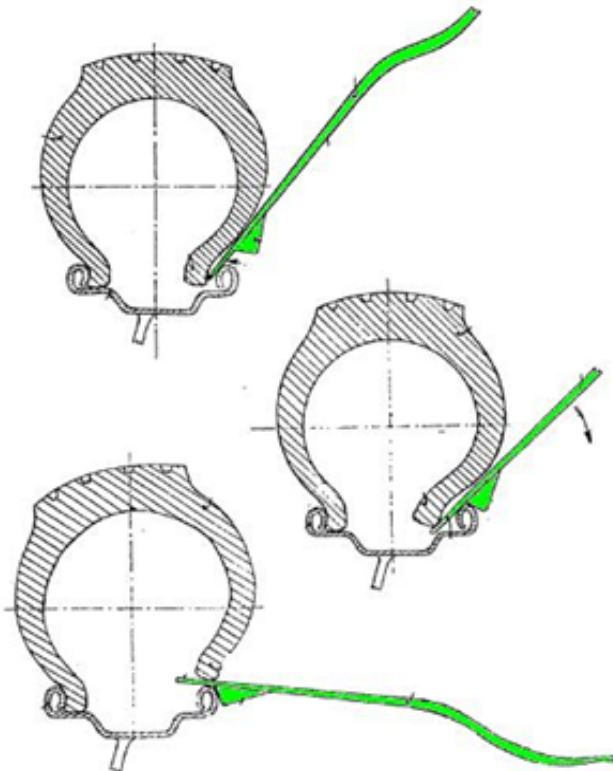
Tyre levers or the like, e.g. hand-held

Definition statement

This place covers:

Tyre levers or similar hand-tools for manually mounting or demounting tyres to/ from rims.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Machine operated tyre levers	B60C 25/05
------------------------------	----------------------------

B60C 25/025

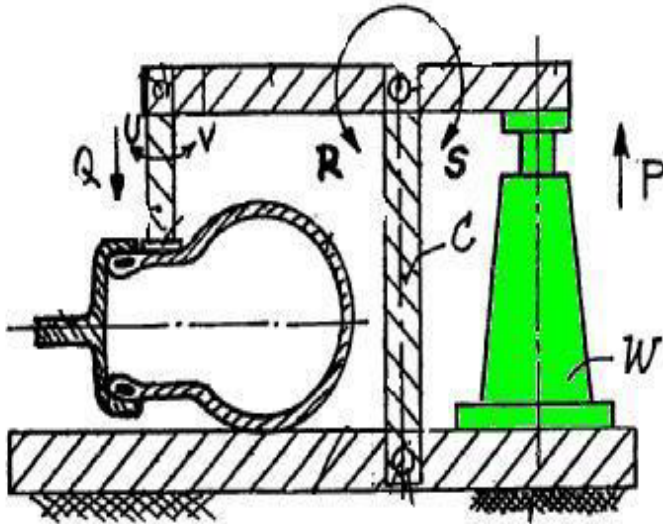
{with a jack}

Definition statement

This place covers:

Hand-tools provided with a jack for manually mounting/demounting tyres to/from rims

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Machine operated devices	B60C 25/05
--------------------------	----------------------------

B60C 25/04

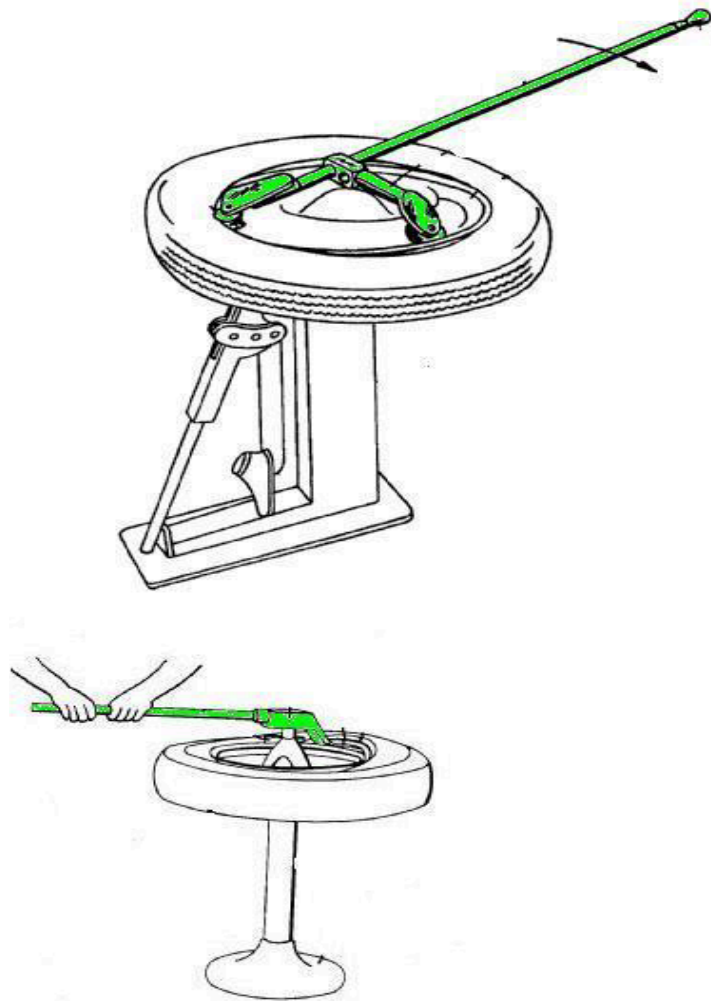
pivotal about the wheel axis, or movable along the rim edge, e.g. rollable

Definition statement

This place covers:

The hand-tools are pivotable around the wheel axis or movable along the rim edge for manually mounting/demounting tyres to/from rims

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Machine operated device	B60C 25/05
-------------------------	----------------------------

B60C 25/05

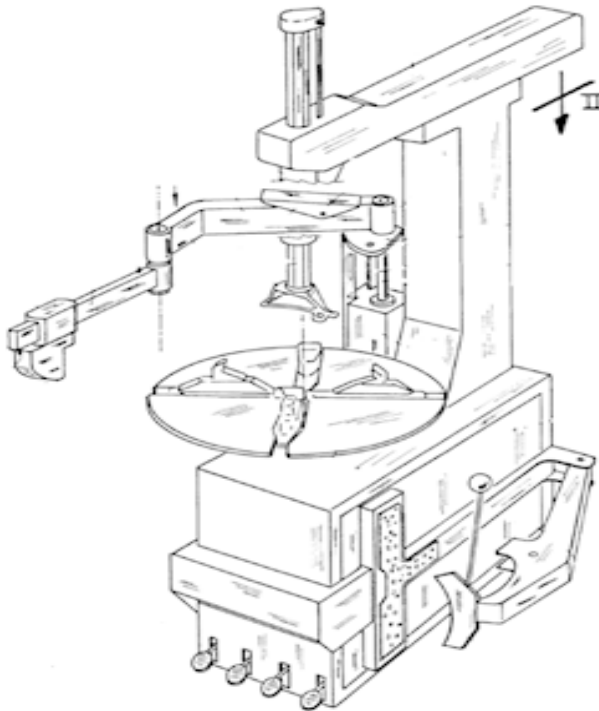
Machines

Definition statement

This place covers:

Machines and motorized apparatus for mounting/ demounting tyres on/ from rims.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Hand-tools for mounting/ demounting tyres on/ from rims	B60C 25/01
Means for holding vehicle wheels or parts thereof	B60B 30/00
Matching of tyres with rims, i.e. conjoint balancing	G01M 1/30

B60C 25/12

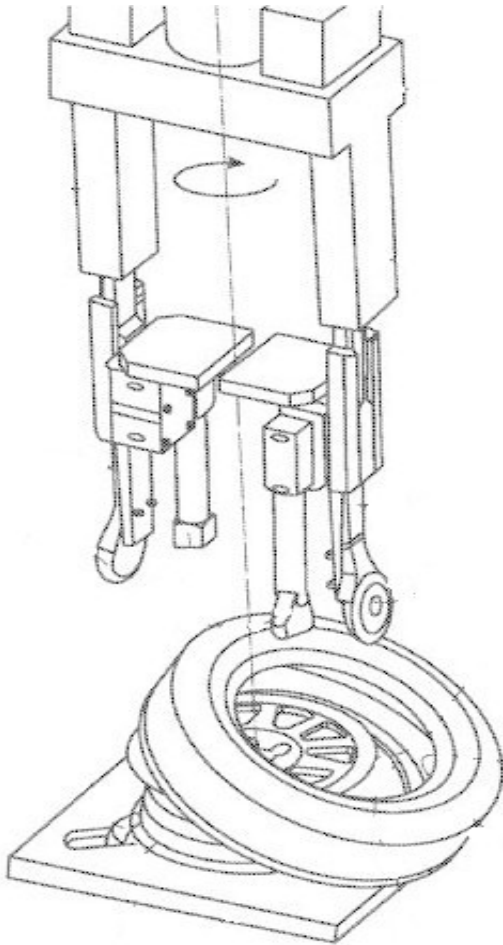
for only seating the beads

Definition statement

This place covers:

Machines for only seating the beads of the tyre.

Example:



Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

seating the beads	bringing the bead portion of the tyre in contact with the inner side of the rim, but not in sealing contact with the rim flange. The bead portions are only within the rim well
-------------------	---

B60C 25/122

acting on the tyre tread

Definition statement

This place covers:

Seating of the beads is done by acting on the tyre tread portion.

Example:



Special rules of classification

Classification should be done in [B60C 25/14](#) for locating the bead portions onto the sealing surface of the rim.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

seating the beads	bringing the bead portion of the tyre in contact with the inner side of the rim, but not in sealing contact with the rim flange. The bead portions are only within the rim well
-------------------	---

B60C 25/125

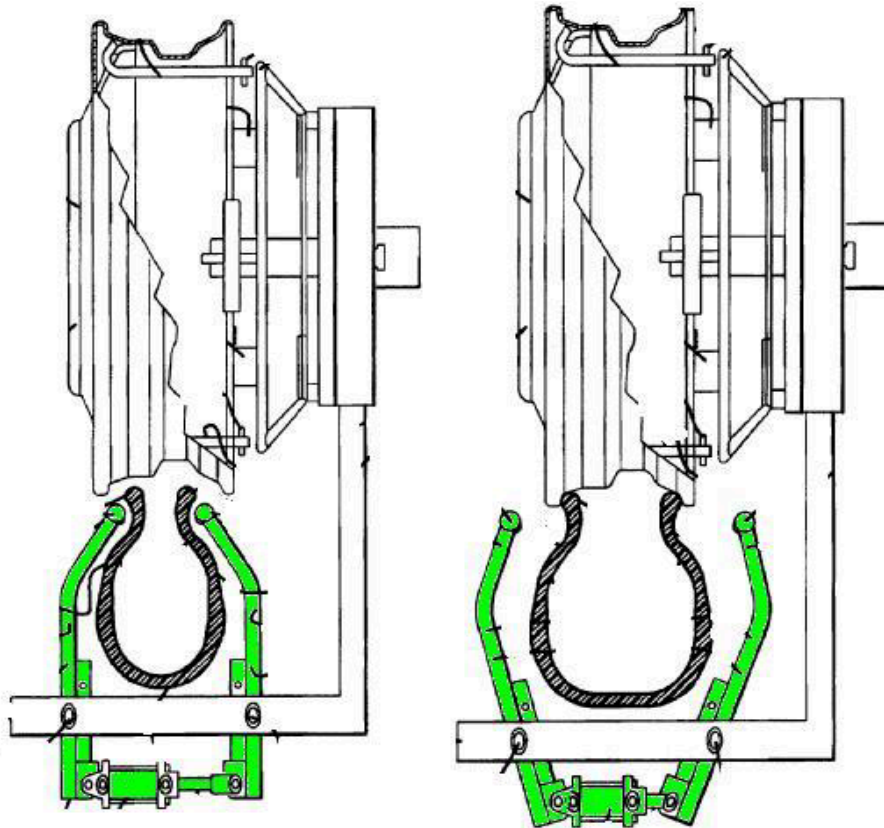
for only breaking the beads

Definition statement

This place covers:

Machines for only breaking the beads.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Separating the tyre from the rim by destroying the tyre	B60C 25/0524
---	------------------------------

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Breaking the beads	dismantling the contact of the bead portion of the tyre from the bead seat of the rim portion
--------------------	---

B60C 25/128

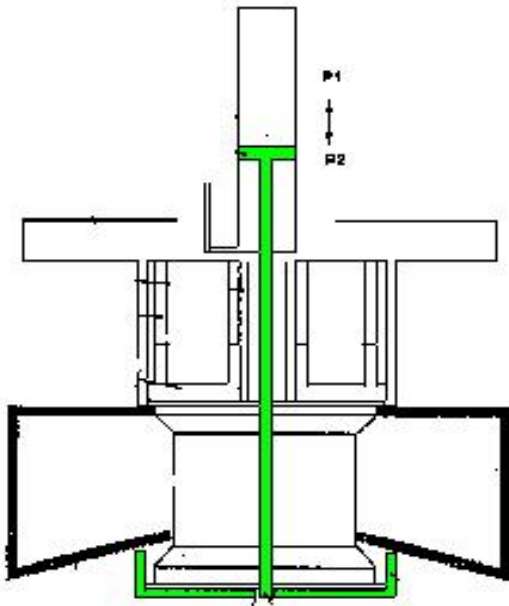
acting axially on the whole circumference of the bead or side wall

Definition statement

This place covers:

Machines for only breaking the beads while acting axially on the whole circumference of the bead portion of the tyre.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Separating the tyre from the rim by destroying the tyre	B60C 25/0524
---	------------------------------

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Breaking the beads	dismantling the contact of bead portion of the tyre from the bead seat of the rim portion
--------------------	---

B60C 25/13

acting axially on a part of the bead or side wall only at localised regions of the bead or side wall

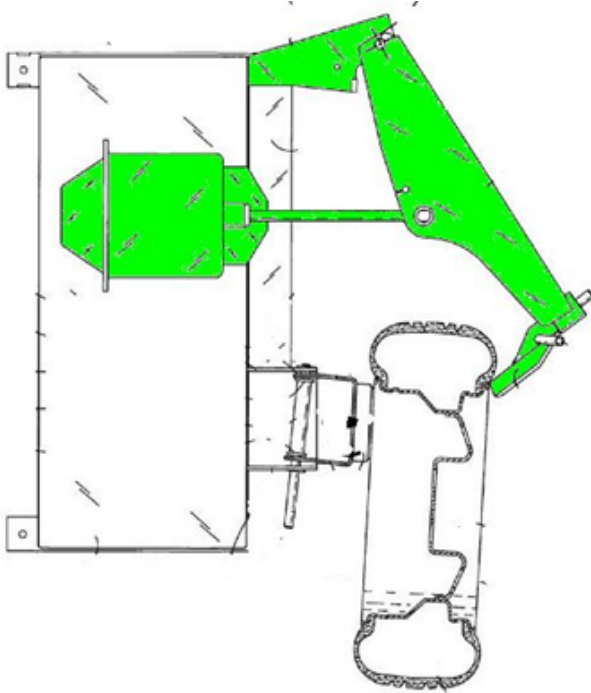
Definition statement

This place covers:

Machines for only breaking the beads while acting axially at localised areas of the bead portion of the tyre.

Normally an additional device is present at the side of a tyre removing machine comprising a tool, e.g. a blade for axially pressing on localized areas of the bead region in order to break the beads.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Separating the tyre from the rim by destroying the tyre	B60C 25/0524
---	------------------------------

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Breaking the beads	dismantling the contact of bead portion of the tyre from the bead seat of the rim portion
--------------------	---

B60C 25/132

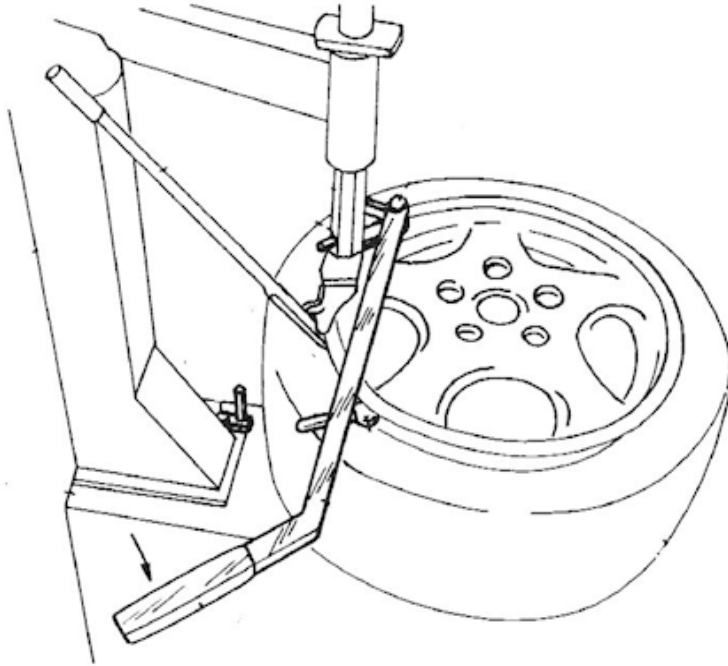
for removing and mounting tyres (for only seating the beads [B60C 25/12](#); for only breaking the beads [B60C 25/125](#) {; for locating provisionally the beads of tubeless tyres against the sealing surfaces of the rims [B60C 25/145](#)})

Definition statement

This place covers:

- Machines for mounting/ demounting tyres to/ from rims.
- Pulling the bead portion of the tyre over the rim edge is done by the machine.

Example:



References

Limiting references

This place does not cover:

Machines for only seating the beads	B60C 25/12
Machines for only breaking the beads	B60C 25/125
Machines for locating provisionally the beads of tubeless tyres against the sealing surfaces of the rims	B60C 25/145

B60C 25/135

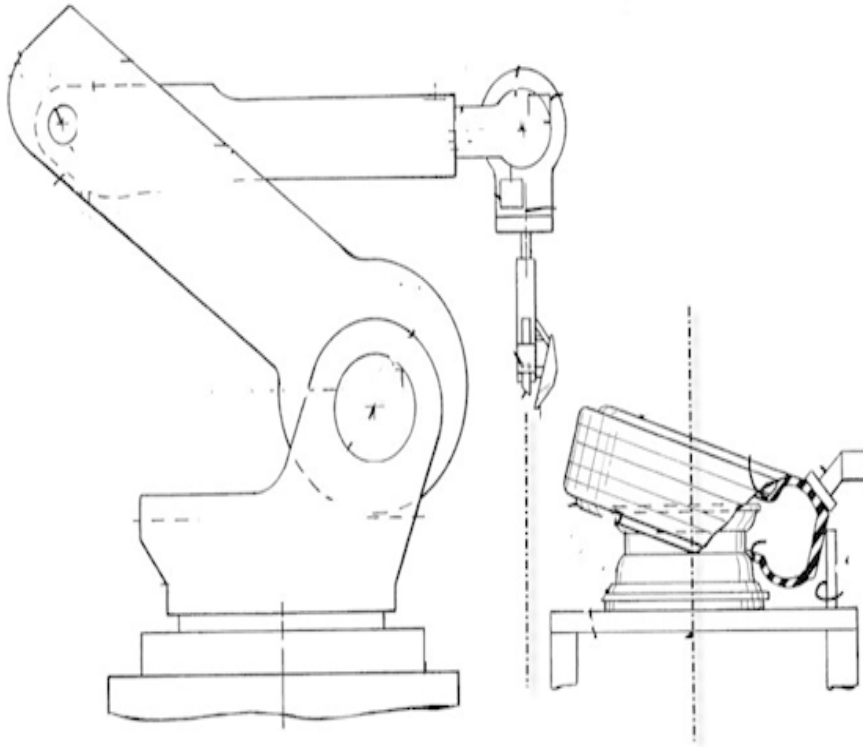
having a tyre support or a tool, movable along wheel axis

Definition statement

This place covers:

Machines wherein the tool, or the support of the tyre is movable along the wheel axis.

Example:



B60C 25/138

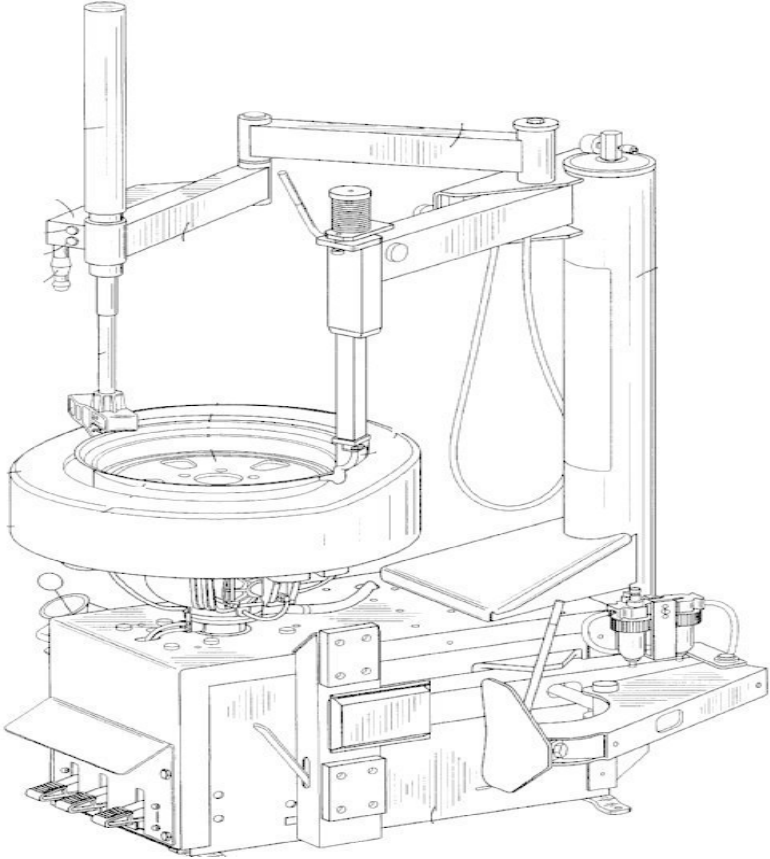
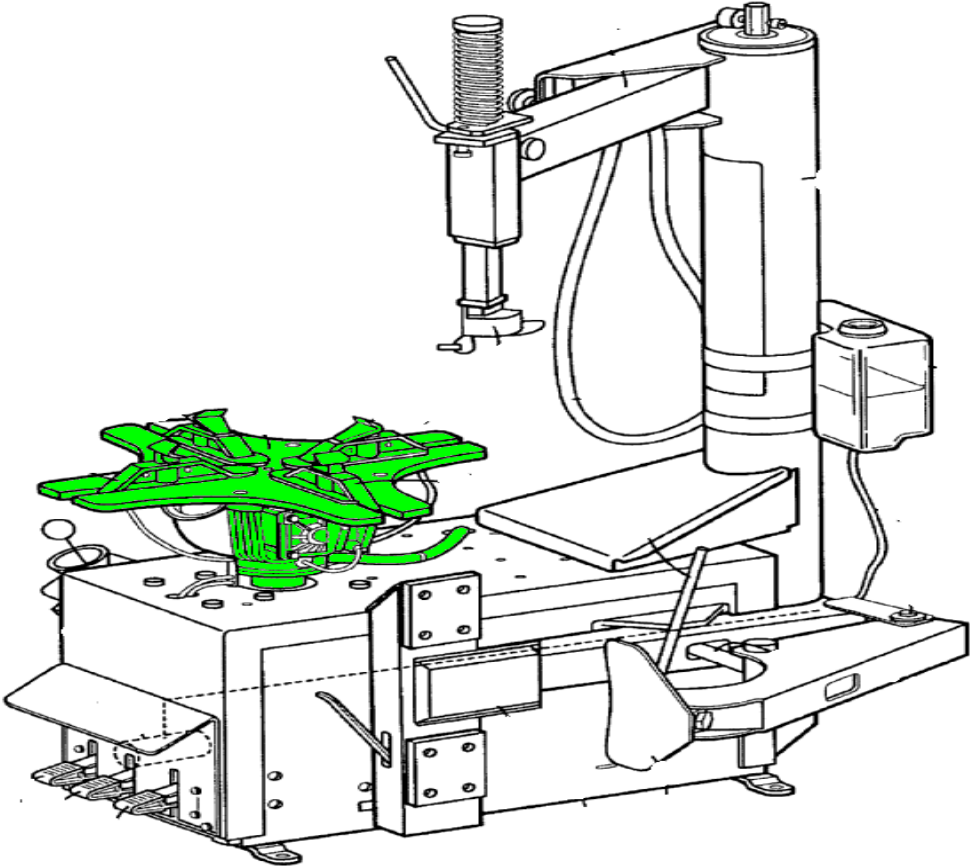
with rotary motion of tool or tyre support

Definition statement

This place covers:

Machines with a rotating support (turntable) for the rim portion or a machine tool providing a rotary motion.

Examples:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Means for holding wheels or parts thereof, also with turntables	B60B 30/00
---	----------------------------

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- turntable
- self-centering device
- rotary support
- clamping device

B60C 25/14

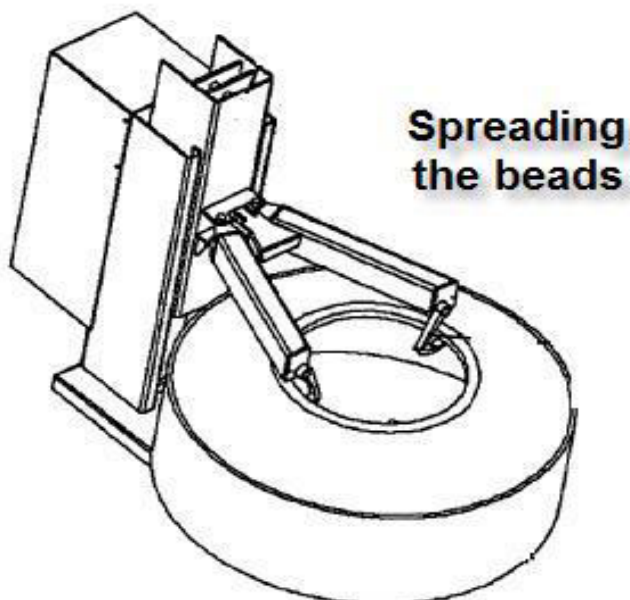
Apparatus or tools for spreading {or locating} tyre beads

Definition statement

This place covers:

- Devices for spreading the tyres.
- Devices for locating the tyre beads in the rim well.

Example:



B60C 25/142

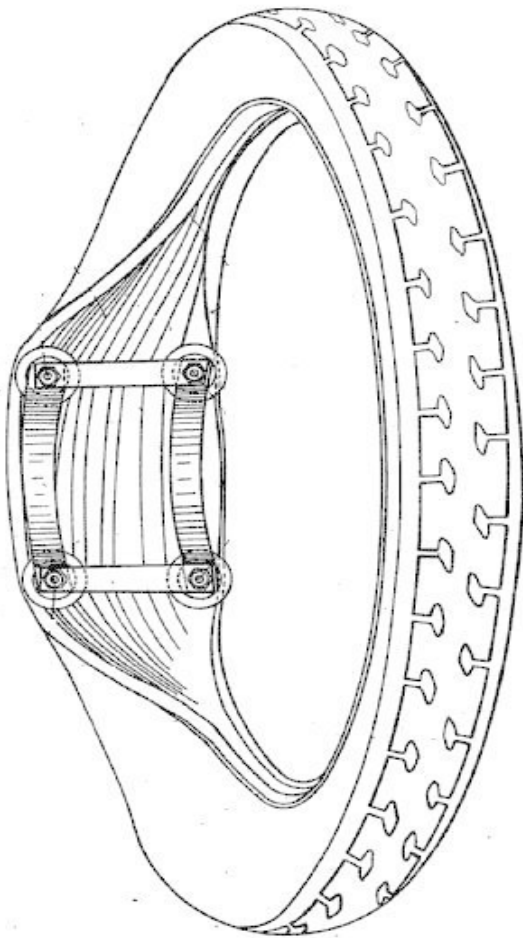
{Devices for tightening or expanding the felly, devices for spreading the tyres}

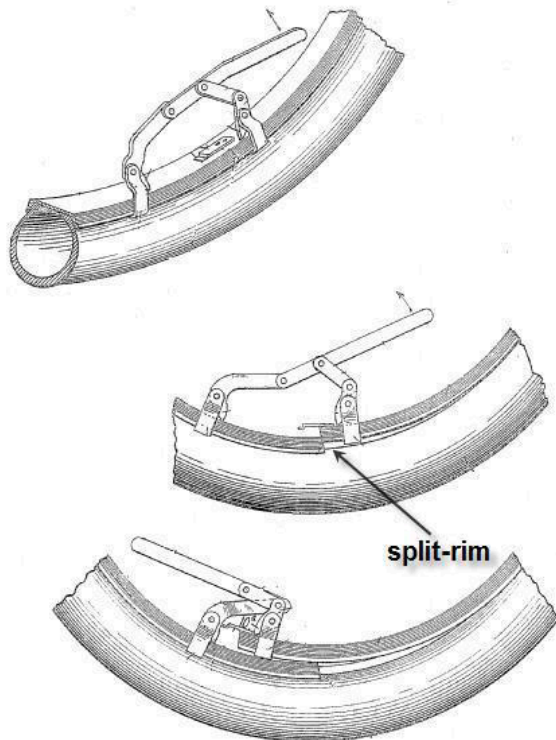
Definition statement

This place covers:

- Devices for spreading the tyres.
- Devices for expanding or tightening split-rims.

Example:





References

Informative references

Attention is drawn to the following places, which may be of interest for search:

inspecting tyres	B60C 25/002
------------------	-----------------------------

B60C 25/145

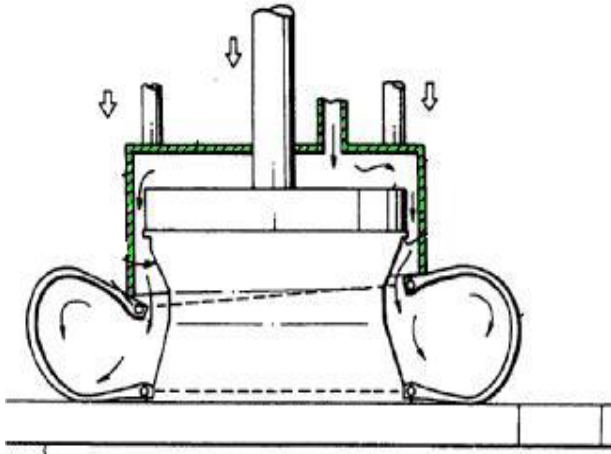
{for locating provisionally the beads of tubeless tyres against the sealing surfaces of the rims, e.g. air filling bell}

Definition statement

This place covers:

Devices for locating the bead portions of the tyre against the sealing surface of the rim portion by applying air pressure.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Tyre inflation devices	B60S 5/04
Air pumps per se	F04

B60C 25/16

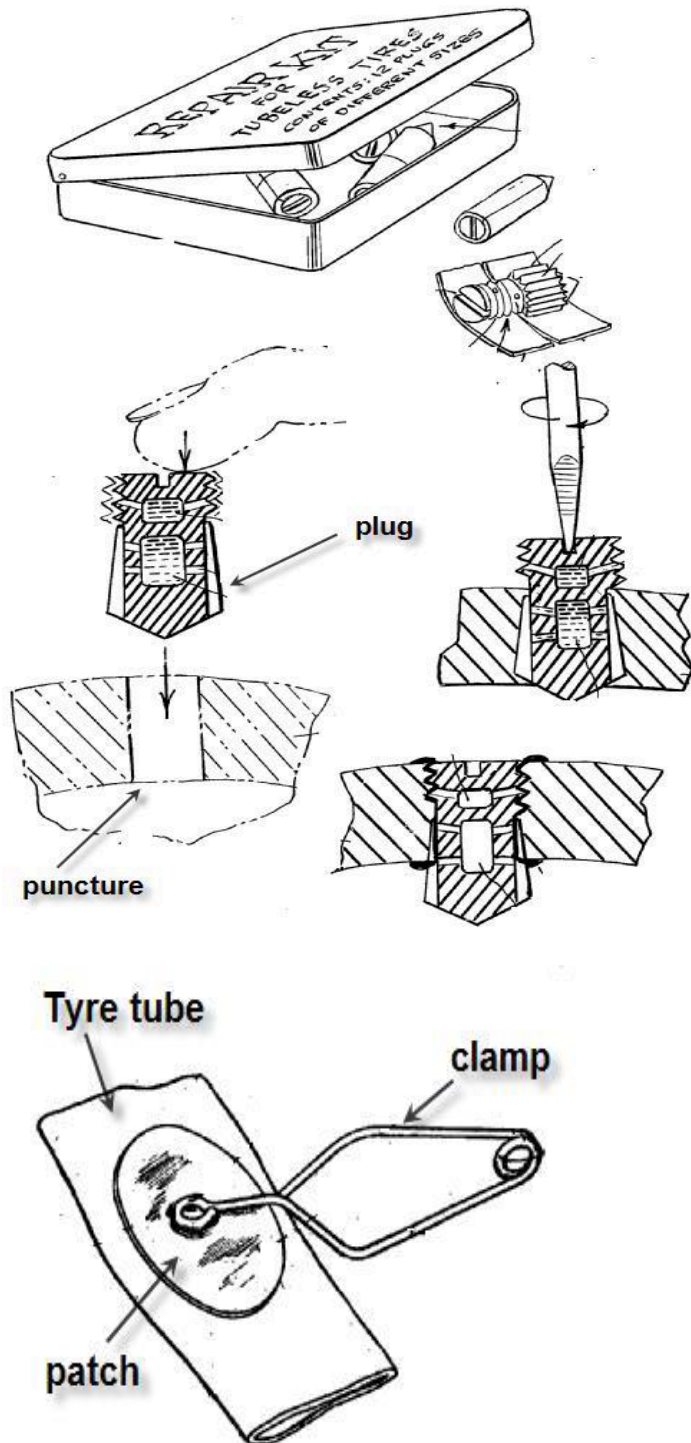
{Tools for repairing damaged tyres}

Definition statement

This place covers:

Devices and tools for repairing minor defects on damaged tyres by applying patches, inserting plugs etc.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Patches or plugs per se	B29C 73/10
Applying sealant agents (Tyre-fit systems)	B29C 73/166

Special rules of classification

Tools for repairing tyres are also classified in [B29C 73/08](#) and [B29C 73/12](#).

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- patch
- plug

B60C 25/18

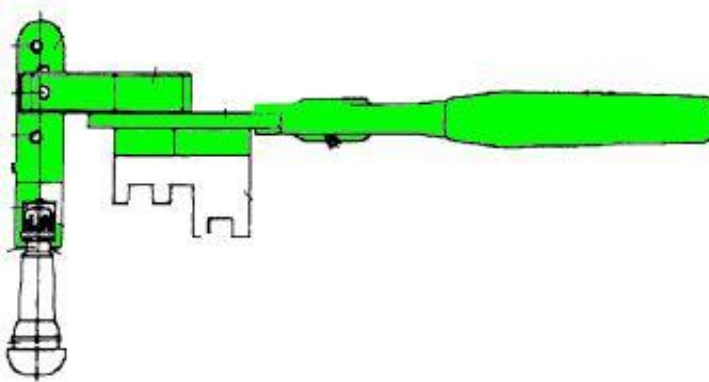
Tools for mounting or demounting air valves

Definition statement

This place covers:

Apparatus and tools for mounting or demounting air valves on/ from wheel rims.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Air valves adapted for tyres or rims	B60C 29/00
--------------------------------------	----------------------------

B60C 27/00

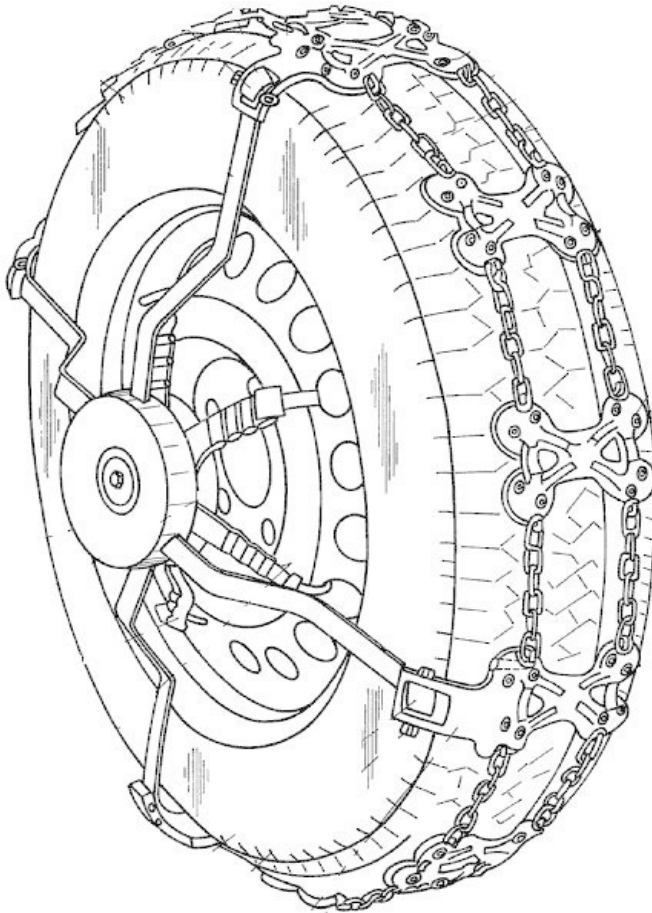
Non-skid devices temporarily attachable to resilient tyres or resiliently-tyred wheels

Definition statement

This place covers:

Non-skid devices temporary attachable to tyre treads of a vehicle in order to enhance the traction of the vehicle.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Wheels or wheel attachments designed for increasing traction e.g. spade lugs	B60B 15/00
anti-skid devices mounted to the body frame of the vehicle e.g. rotatable chain wheels	B60B 39/003
particle dispensing devices in front of the tyres	B60B 39/02
endless track devices	B62D 55/00

B60C 27/02

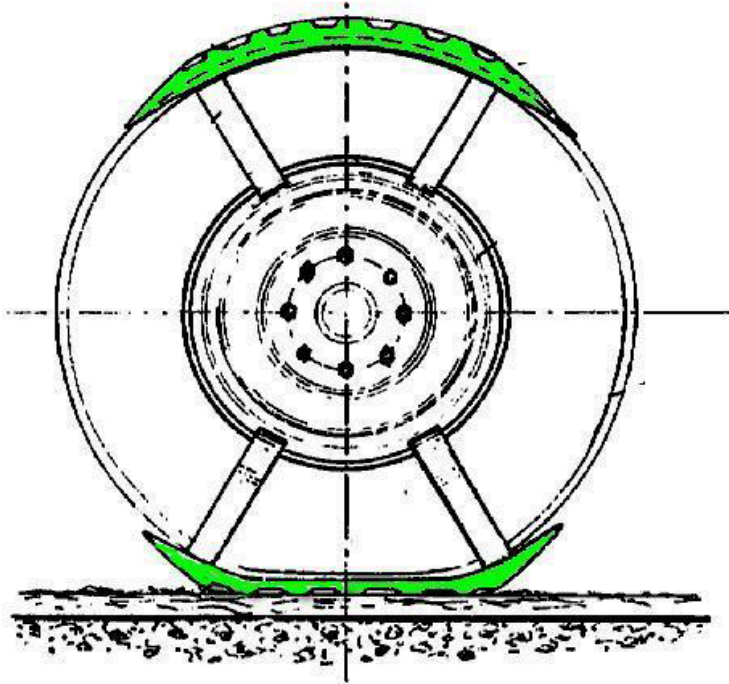
extending over restricted arcuate part of tread ([B60C 27/20](#) takes precedence)

Definition statement

This place covers:

The anti-skid device extends over restricted arcuate parts of the tread without being interconnected in the circumferential direction of the tyre.

Example:



References

Limiting references

This place does not cover:

Ground-engaging plate-like traction elements	B60C 27/20
--	----------------------------

B60C 27/04

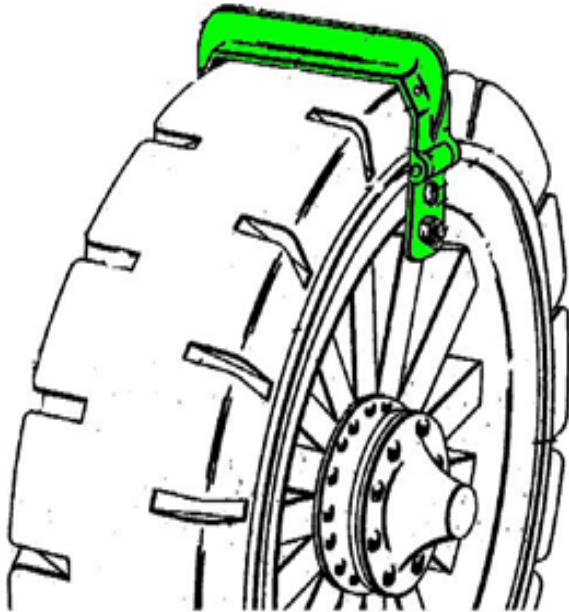
the ground-engaging part being rigid

Definition statement

This place covers:

The ground-engaging part of the anti-skid device is rigid and not elastic.

Example:



Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- yoke
- cleat
- gripping shoe
- traction shoe

B60C 27/045

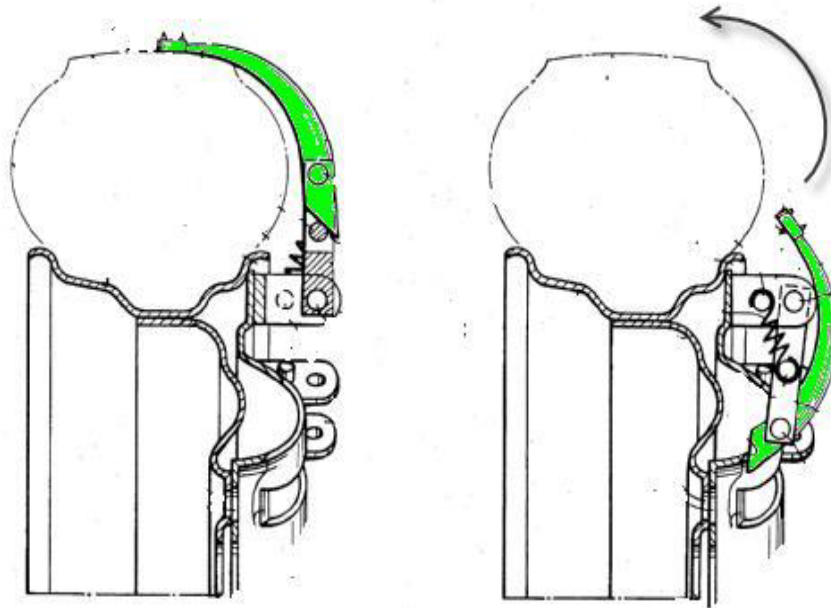
{involving retractable devices (fixing of spade lugs [B60B 15/00](#))}

Definition statement

This place covers:

Retractable devices for increasing the traction of the tyre, wherein the device comes into contact with the tread of the tyre.

Example:



References

Limiting references

This place does not cover:

Retractable devices which do not come in contact with the tread but stay besides the tyre	B60B 15/00
---	----------------------------

B60C 27/06

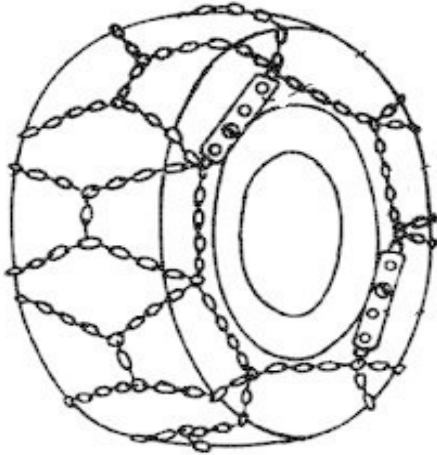
extending over the complete circumference of the tread, e.g. made of chains {or cables} ([B60C 27/20](#) takes precedence)

Definition statement

This place covers:

Anti-skid devices extending over the whole circumference of the tread portion of the tyre.

Example:



References

Limiting references

This place does not cover:

Devices comprising ground-engaging plate-like elements	B60C 27/20
--	----------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Devices with traction enhancing elements at localised parts of the tread without any connection between these parts on the circumference of the tyre	B60C 27/02
--	----------------------------

B60C 27/08

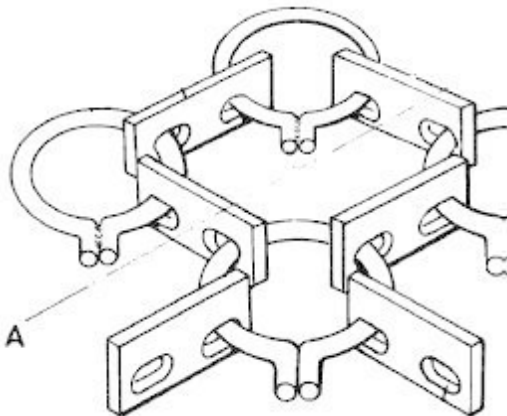
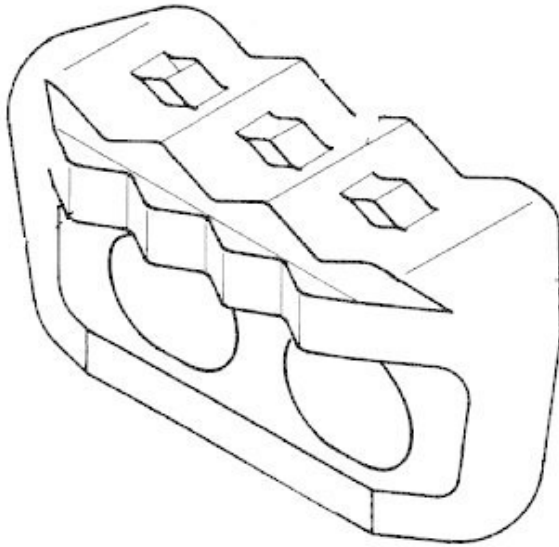
involving lugs or rings taking up wear {, e.g. chain links, chain connectors }

Definition statement

This place covers:

All different parts of the traction enhancing part of the anti-skid device such as chain links, chain connectors, stud links, etc.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Chain elements per se, e.g. for hoisting equipment	F16G 15/00
--	----------------------------

B60C 27/10

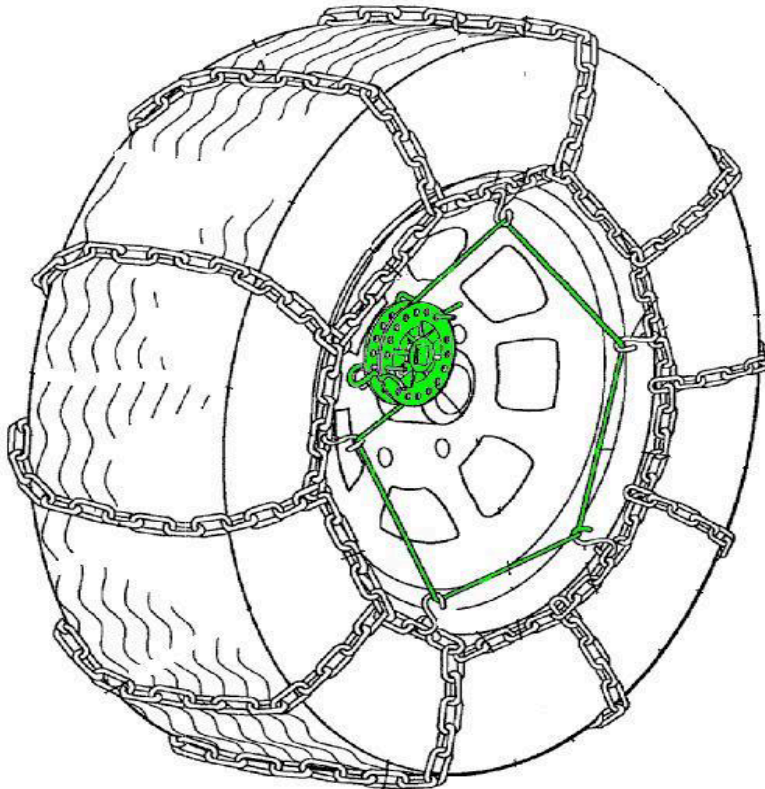
having tensioning means

Definition statement

This place covers:

All parts for tensioning the anti-skid device to the respective tyre or wheel, e.g. pawl and ratchet means, rotatable hooks, etc.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Chain shortener for hoisting	F16G 15/00
------------------------------	----------------------------

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- pawl
- ratchet
- reel
- turnbuckle

B60C 27/12

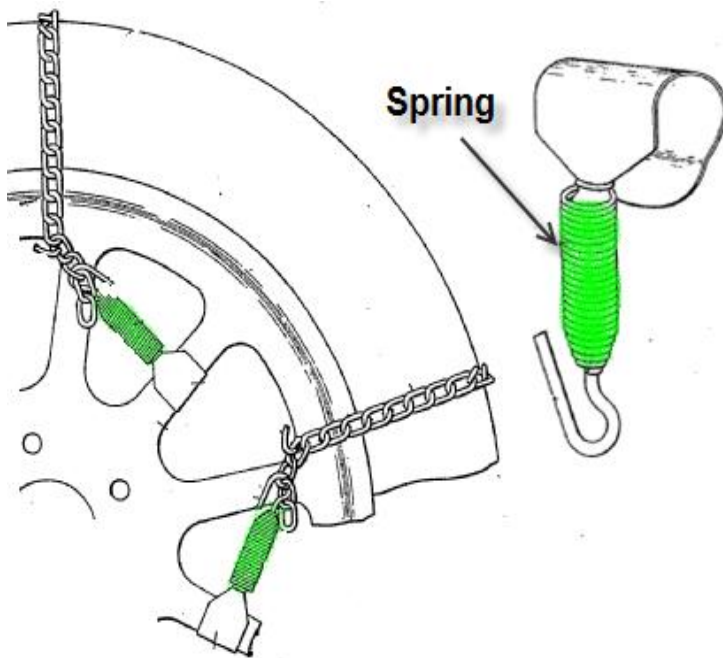
resilient {pretension}

Definition statement

This place covers:

All resilient and elastic tensioning means e.g. comprising springs, elastic rings, elastic blocks of vulcanised rubber, etc.

Example:



B60C 27/14

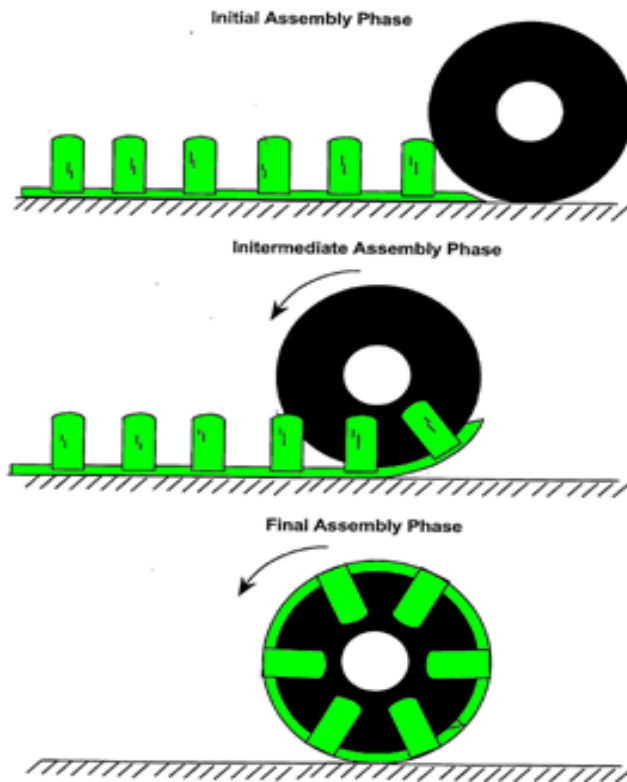
automatically attachable

Definition statement

This place covers:

The anti-skid device is automatically attachable to the tyre of the vehicle.

Example:



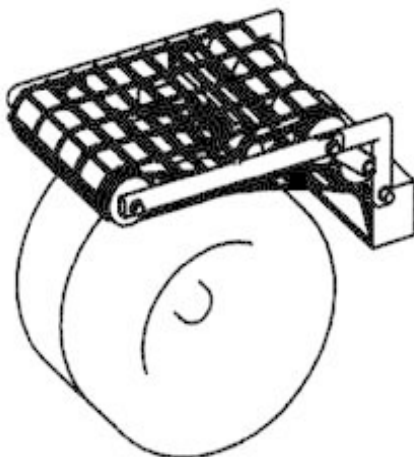
B60C 27/145

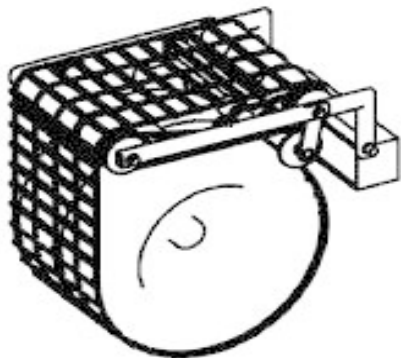
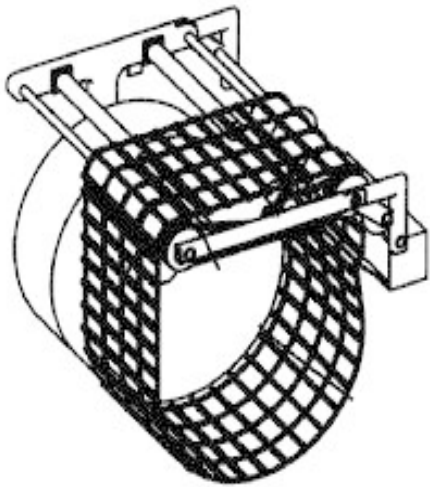
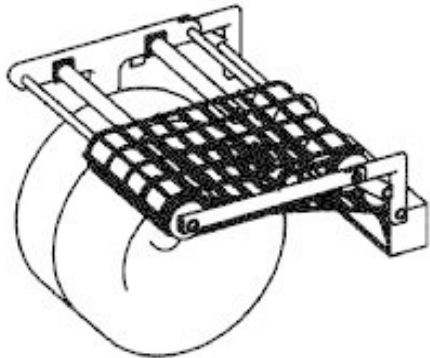
{the anti-skid device being wound around the wheel by its rotation from a point connected to the body frame of the vehicle}

Definition statement

This place covers:

The anti-skid device is applied around the tyre tread from a point connected to the body frame of the vehicle.





References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Vehicle mounted non-skid devices with no fixation or contact to the tyre tread portion	B60B 39/00
--	----------------------------

B60C 27/16

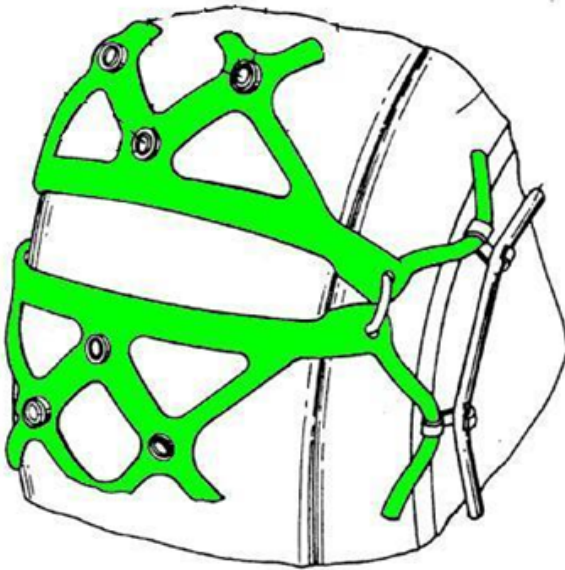
formed of close material, e.g. leather {or synthetic mats}

Definition statement

This place covers:

The traction enhancing elements are formed of close material e.g. rubber material, synthetic mats, leather, etc. extending over enlarged areas of the tread portion.

Example:



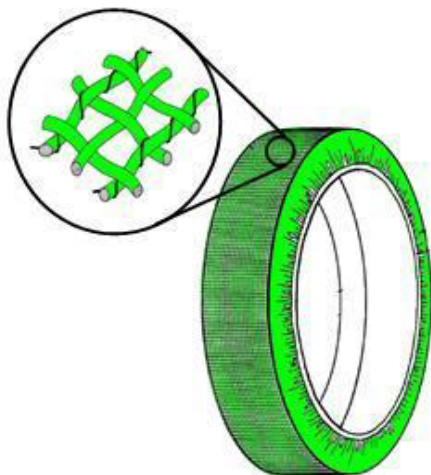
B60C 27/18

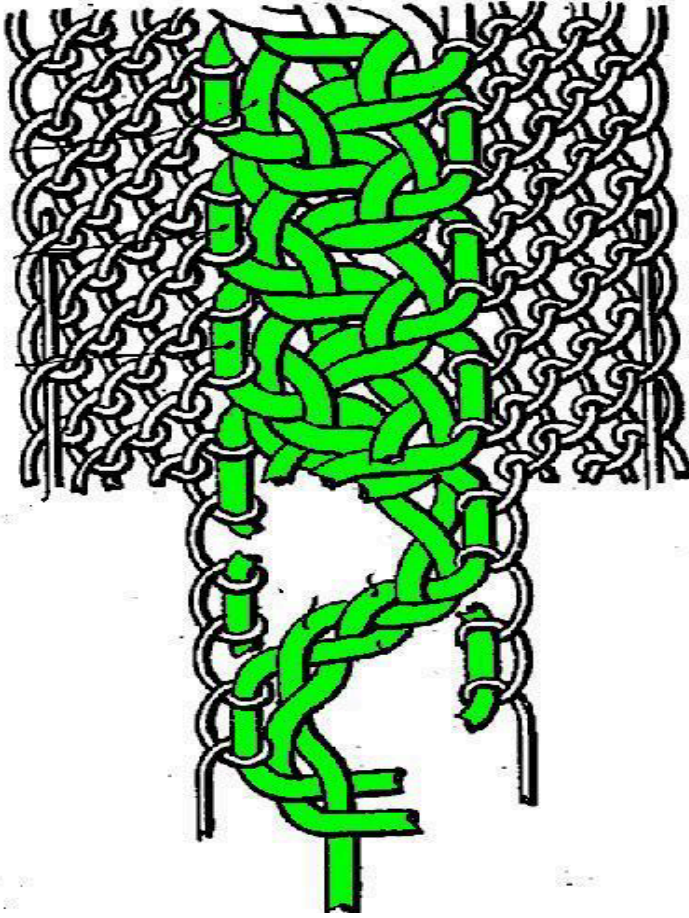
the material being fabric, e.g. woven wire {or textile}

Definition statement

This place covers:

The anti-skid device is made of fabric material, e.g. woven wire, textile filaments, cordura etc.





References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Fabrics per se	D04B 1/00
Patterned fabrics or articles made by weft knitting processes	D04B 1/10
Warp knitting processes or fabrics defined by such processes	D04B 21/00

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- canvas
- cloth
- woven
- non-woven
- textile
- cordura
- warp
- weft
- knit
- twill

B60C 27/20

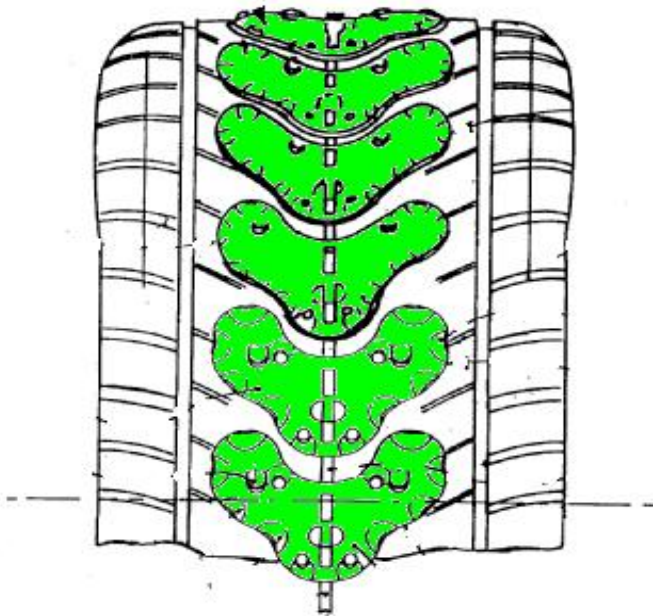
having ground-engaging plate-like elements

Definition statement

This place covers:

The ground-engaging parts being interconnected plate-like elements arranged on the circumference of the tread portion.

Example:



Special rules of classification

Devices extending over restricted arcuate parts of the tread are only classified in [B60C 27/02](#).

Devices on restricted arcuate part of tread with rigid traction enhancing parts are only classified in [B60C 27/04](#).

B60C 27/22

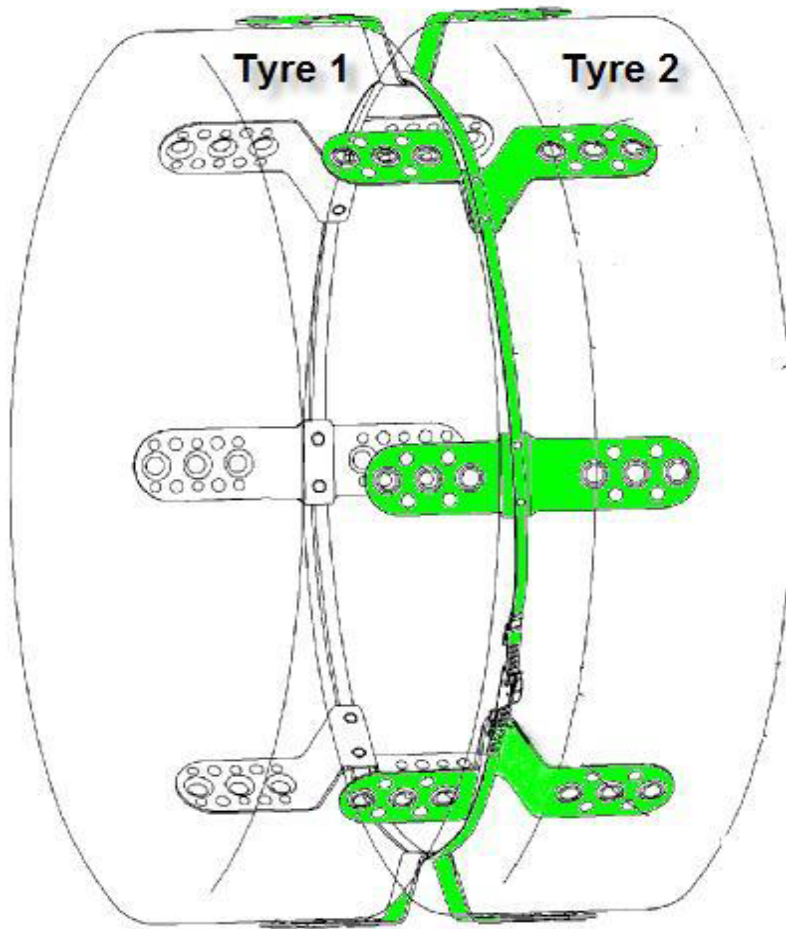
for tandem tyres

Definition statement

This place covers:

Anti-skid devices applicable to tandem tyres on the same axis.

Example:



References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Endless-track units	B62D 55/08
Endless track features between two wheels of different axes	B62D 55/24

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

tandem tyres	tyres located on the same axis one next to the other. Often used by lorries or trucks
--------------	---

B60C 29/00

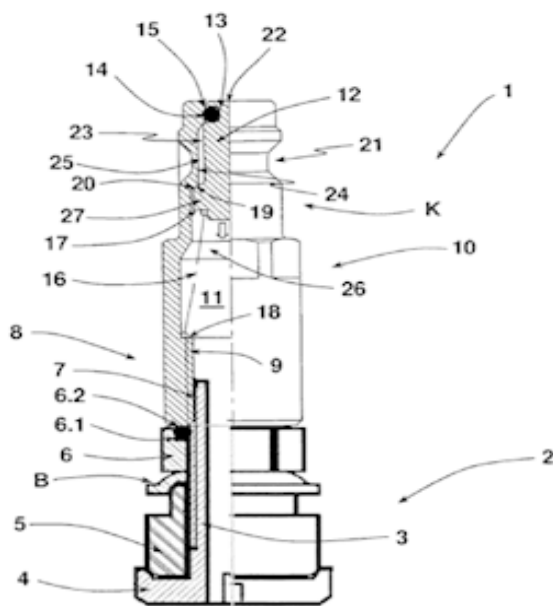
Arrangements of tyre-inflating valves to tyres or rims; Accessories for tyre-inflating valves, not otherwise provided for (tools for mounting or demounting valves [B60C 25/18](#))

Definition statement

This place covers:

- tyre valves per se.
- connection of the valve to the rim or the tyre.
- accessories for valves (hose connections, caps, pressure relief devices).

Example:



References

Limiting references

This place does not cover:

Tools for mounting or demounting valves	B60C 25/18
---	----------------------------

Informative references

Attention is drawn to the following places, which may be of interest for search:

Devices for measuring tyre pressure mounted in the vehicle	B60C 23/00
Auto-repairing devices or arrangements (e.g. by introducing sealing compositions into the tyre)	B29C 73/16
Supplying air for tyre inflation	B60S 5/04
Pumps actuated by muscle power	F04B 33/00
Valves per se or valve dust caps	F16K
Check valves for inflatable bodies, e.g. tyres	F16K 15/20

Couplings of the quick acting type (e.g. valve connectors)	F16L 37/00
Devices for measuring tyre pressure (e.g. hand-held pressure gauges)	G01L 17/00

B60C 99/00

Subject matter not provided for in other groups of this subclass

Definition statement

This place covers:

- tyres for special use.
- simulation or design methods for tyres.