Claims

1. A ~~motor-driven vehicle, in particular a~~ two-wheeled vehicle with a chassis (2), a central unit (3) comprising a drive unit (4, 23) and a seat carrier (6), with a cockpit structure (8) with steering mechanism (9, 19) and operating unit and with a front wheel (13) carried on a front wheel mount (11) and~~/or~~ with a rear wheel (12)~~,~~ carried on a rear wheel mount (10) ~~and/or a front wheel mount (11)~~,

~~characterized in that~~

wherein the wheel mounts (10, 11) have a toroidal wheel bearing rim, the toroidal wheel bearing rim with a corresponding wheel-rim-sided toroidal wheel bearing rim (20, 22), mountable to the wheel rim, carries the wheel (12, 13) rotatably via a roller bearing~~.~~

~~2. A motor-driven vehicle according to claim 1,~~

characterized in that

a torsion elastic suspension element (27, 28, 29, 30, 31) is rigidly arranged on the wheel bearing rim (20, 22) via a mounting flange (25, 26)~~.~~

~~3. A motor-driven vehicle according to claim 2,~~

~~characterized in that~~

, wherein the torsion elastic suspension element (27, 28, 29, 30, 31) consists of an element housing (29, 30) attached to the mounting flange (25, 26) in one piece, wherein at least one essentially rod-shaped formed torsion elastic suspension element (27, 28) is placed under tension in the element housing (29, 30).

~~4~~2. A ~~motor-driven~~ two-wheeled vehicle according to claim ~~3~~1,

characterized in that

the element housing (29, 30) is attached to the mounting flange (25, 26) in one piece.

~~5~~3. A ~~motor-driven~~ two-wheeled vehicle according to claim ~~3~~1,

characterized in that

the at least one torsion elastic suspension element (27, 28) is arranged under tension in the element housing (29, 30) by means of an essentially rod-like suspension core element (31).

~~6~~4. A ~~motor-driven~~ two-wheeled vehicle according to claim ~~5~~3,
characterized in that
on the side of the suspension element (27, 28) facing the wheel mount (10, 11) the suspension core element (31) is provided with a mounting flange for mounting the suspension core element (31) on the wheel mount (10, 11).

~~7~~5. A ~~motor-driven~~ two-wheeled vehicle according to ~~one of the preceding~~ claim~~s~~ 3 or 4,
characterized in that
damping ~~respectively~~ or suspension of the wheel is selectable ~~respectively~~ or adjustable by way of the arrangement of the suspension core element (31) in relation to the wheel bearing rim (20, 22), along with the degree of elasticity and the dimensions of the suspension element(s) (27, 28).

~~8~~6. A ~~motor-driven~~ two-wheeled vehicle according to claim 1,
characterized in that
the steerable front wheel (13) is attached to the wheel mount (11), which is steerable by way of the steering mechanism (9, 19), via a support element, mounted on the wheel-mount-sided toroidal~~, rim-sided~~ wheel bearing rim, the steerable front wheel (13) being attached in such a way, that a notional steering axis (X) runs through a notional centre of the wheel (Z).

~~9~~7. A ~~motor-driven~~ two-wheeled vehicle according to claim 1,
characterized in that
a brake ring (16, 17) attached to the wheel rim (14, 15) is arranged as brake disc, the brake ring (16, 17) interacting with the brake-shoe, which is mountable to the wheel mount (10, 11).

~~10~~8. A ~~motor-driven~~ two-wheeled vehicle according to claim 1,
characterized in that
the propelled rear wheel (12) has an essentially toroidal drive section (21), which is mountable on the rim side, and which is drivable by the drive unit (4, 23) directly or indirectly.

~~11~~9. A ~~motor-driven~~ two-wheeled vehicle according to claim ~~10~~8,
characterized in that

the drive of the toroidal drive section (21) is carried out via a gearbox construction, which compensates oscillating movements of the rear wheel.

~~12~~10. A ~~motor-driven~~ two-wheeled vehicle according to claim ~~10~~8,
characterized in that
the drive section (21) is an essentially toroidal gear ring (21), which is drivable by the drive unit (4, 23) by way of a toothed belt.

~~13~~11. A ~~motor-driven~~ two-wheeled vehicle according to claim ~~10~~8,
characterized in that
the drive section (21) is an essentially toroidal sprocket ring, which is drivable by the drive unit (4, 23) by way of a chain.

~~14. A motor-driven vehicle according to one of the preceding claims,~~
~~characterized in that~~
~~the vehicle is a two-wheeled vehicle made in the way of a scooter.~~

~~15~~12. A ~~motor-driven~~ two-wheeled vehicle according to any one of ~~the preceding~~ claims 1 to 11,
characterized in that
the two-wheeled vehicle is made to be foldable.

~~16~~13. A ~~motor-driven~~ two-wheeled vehicle according to any one of ~~the preceding~~ claims 1 to 12,
characterized in that
the two-wheeled vehicle is drivable by a fully electric drive.

~~17~~14. A ~~motor-driven~~ two-wheeled vehicle according to any one of ~~the preceding~~ claims 1 to 13,
characterized in that
the components relevant for the weight of the two-wheeled vehicle, such as chassis (2), central unit (3), cockpit structure (8), wheel mounts (10, 11) are made from fibre-reinforced plastics.