

Claims

1. A scooter comprising:
- a deck for a rider to stand on;
- a tiller projecting upwardly from the deck in use;
- 5 two front wheels;
- a steering mechanism configured to steer the two front wheels about respective steering axes;
- and,
- at least one rear wheel;
- wherein the steering system has:
- 10 a first mode of steering in which rotation of the tiller about a vertical axis steers the wheels; and,
- a second mode of steering in which rotation of the deck about a horizontal axis steers the wheels.
2. A scooter according to claim 1, comprising a central boss, wherein;
- 15 the tiller is mounted for rotation relative to the central boss about the vertical axis; and,
- the deck is mounted for rotation relative to the central boss about the horizontal axis.
3. A scooter according to claim 2, wherein the steering system comprises a pair of steering arms connected to respective front wheels, the steering arms being connected to a steering hub, wherein the steering hub is configured to move with rotation of the tiller in the first steering mode, and with
- 20 rotation of the deck in the second steering mode.
4. A scooter according to claim 3, wherein the steering hub is mounted for rotation with the tiller, the tiller is mounted for rotation in a tiller pivot member about the vertical axis, and the tiller pivot member is mounted for rotation in the central boss about the horizontal axis.
5. A scooter according to any of claims 2 to 4, comprising a resilient centring mechanism for
- 25 resiling the tiller to a predetermined neutral rotational position relative to the central boss.
6. A scooter according to any of claims 2 to 5, comprising an anti-camber mechanism for resiling the deck to a predetermined neutral rotational position relative to the central boss.

7. A scooter according to any of claims 2 to 6, wherein the two front wheels are mounted to the central boss via a suspension system.
8. A scooter according to claim 7, wherein the suspension system is a double-wishbone suspension system.
- 5 9. A scooter according to any preceding claim, in which the rear wheel is mounted for rotation in a rear wheel mount, and in which the deck is rotatable about the horizontal axis about the rear wheel mount.
10. A scooter according to any preceding claim, comprising a pair of rear wheels and a rear steering mechanism configured to steer the two rear wheels about respective steering axes.
- 10 11. A scooter according to claim 10, wherein rotation of the deck about the horizontal axis steers the wheels.
12. A scooter according to claim 11, wherein rotation of the deck about the horizontal axis causes the front wheels to steer in a first direction about their respective steering axes, and causes the rear wheels to steer a second, opposite, direction about their respective steering axes.
- 15 12. A scooter according to any of claims 10 to 12, in which wherein the rear steering system is configured to steer the rear wheels in the second mode of steering but not in the first mode of steering.
13. A scooter according to any of claims 10 to 12, in which the rear steering mechanism is adjustable to provide at least two steering settings, in which each steering steers the wheels by a
20 different angle in response to a predetermined degree of deck roll.
14. A scooter according to any of claims 10 to 13, in which the rear steering mechanism is configured for Ackermann steering.
15. A scooter according to any preceding claim, in which the front steering mechanism is configured for Ackermann steering.
- 25 16. A motorised scooter comprising:
- a deck for a rider to stand on;
 - a tiller projecting upwardly from the deck in use;
 - at least one front wheel;
 - at least one rear wheel;

wherein at least one wheel is motorised;

wherein the tiller comprises a left-hand grip, a right-hand grip, and a first control member between the left-hand grip and right-hand grip, the control member being pivotable about a horizontal axis to control power to the motorised wheel.

5 17. A motorised scooter according to claim 16, wherein the first control member comprises a first control region adjacent the left-hand grip, and a second control region adjacent the right-hand grip.

18. A motorised scooter according to claim 17, wherein the control regions are at least part-cylindrical.

19. A motorised scooter according to claim 17 or 18, wherein the first and second control regions
10 are spaced-apart and comprising a second control member between the first and second control regions.

20. A motorised scooter according to claim 19, wherein the second control member is a button.

21. A motorised scooter according to claim 19 or 20, wherein the second control member is a left
15 turn signal control proximate the left-hand control region, and comprising a third control member in the form of a right turn signal control between the first and second control regions, proximate the right-hand control region.

22. A motorised scooter according to claim 21, comprising a fourth control member between the first and second control regions, the fourth control member being a horn.

23. A battery-powered electric scooter battery pack, comprising at least two sub-battery packs
20 that can be assembled for use and separated for transit.

24. A battery-powered electric scooter battery pack according to claim 23, in which each sub-battery pack has an energy capacity of 160Whr or less.

25. A battery-powered electric scooter comprising a battery pack according to claim 23 or 24.

26. A scooter comprising:
25 a deck for a rider to stand on;
a tiller projecting from the deck in use;
at least one front wheel;

the scooter having an unfolded condition wherein the tiller projects upwardly from the deck in use, and a folded condition wherein the tiller is rotated to be generally parallel with the deck;

wherein the folded condition is maintained by a magnetic attraction between a first component on the tiller and a second component on the deck, and wherein alignment of the first and second components is established by a mating connection between corresponding formations on the tiller and deck, being spaced apart from the first and second components.

- 5 27. A scooter according to claim 26, wherein the mating connection between corresponding formations is closer to the position where the deck and tiller are joined than the first component on the tiller and a second component on the deck forming the magnetic connection.

28. A scooter comprising:

 a deck for a rider to stand on;

- 10 a tiller connected to the deck at a first end, and defining a pair of spaced apart handle portions at a second end;

 at least one front wheel;

 at least one rear wheel;

- wherein the tiller comprises an internal spine extending from first end where the tiller meets
15 the deck, to a second end within the handle portions, wherein the spine is Y-shaped.