

CLAIMS:

1. A coupling assembly for an ostomy appliance comprising a locking arrangement, a first
5 coupling and a second coupling, wherein the locking arrangement comprises:
a locking ring, mounted to first and/or second coupling, forming an inner
circumference and being adjustable between locked and unlocked configurations, wherein
in the locked configuration the locking ring is for maintaining the first and second couplings
in a coupled configuration and the inner circumference is less than in the unlocked
10 configuration; and
first and second grips mounted to the locking ring, wherein the first and second
grips are positioned about the locking ring to be moveable towards one another to increase
the inner circumference and adjust the locking ring from the locked configuration to the
unlocked configuration.
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2. A coupling assembly as claimed in claim 1 wherein the locking ring is springy and
resiliently biased to return from the unlocked configuration to the locked configuration.
3. A coupling assembly as claimed in claim 1 or claim 2 wherein the locking ring comprises
20 first and second locking ring ends moveable relative to one another between the locked
and unlocked configurations.
4. A coupling assembly as claimed in claim 3 wherein the locking ring is split.
- 25 5. A coupling assembly as claimed in claim 3 or claim 4 wherein the locking ring extends
around a length that is greater than the inner circumference in the locked configuration.
6. A coupling assembly as claimed in claim 5 wherein the distance between the first and
second grips around the length of the locking ring is greater than the inner circumference in
30 the locked configuration.
7. A coupling assembly as claimed in any one of the preceding claims further comprising
first and second pinch tabs extending from the locking ring and comprising the first and
second grips respectively.
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8. A coupling assembly as claimed in claim 7 wherein the first pinch tab extends around the locking ring between a first tab distal end and a first tab proximal end, the second pinch tab extends around the locking ring between a second tab distal end and a second tab proximal end and the first and second tab distal ends form the first and second grips.
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9. A coupling assembly as claimed in claim 8 wherein in the locked configuration the first and second tab distal ends are aligned with the second and first tab proximal ends respectively.
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10. A coupling assembly as claimed in claim 8 or claim 9 wherein the first and second pinch tabs comprise first and second tab proximal portions adjacent to the locking ring forming the first and second tab proximal ends and first and second tab distal portions extending radially outwardly from the first and second tab proximal portions forming the first and second tab distal ends.
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11. A coupling assembly as claimed in claim 10 wherein the first and second tab distal portions extend around the locking ring between the first and second tab distal ends and first and second tab inner edges, wherein in the unlocked configuration the first and second tab distal ends are aligned with the second and first tab inner edges respectively.
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12. A coupling assembly as claimed in any one of claims 7 to 10 wherein the first and second pinch tabs slide adjacent to one another when the locking ring is adjusted between the locked and unlocked configurations.
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13. A coupling assembly as claimed in any one of the preceding claims wherein the locking ring comprises at least one locking tab extending inwardly around the inner circumference for maintaining the coupling assembly in the coupled configuration when the locking ring is in the locked configuration.
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14. A coupling assembly as claimed in claim 13 wherein the locking ring is mounted to the first coupling and the at least one locking tab is configured to engage with the second coupling when in the coupled and locked configurations to maintain the first and second couplings in the coupled configuration.
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15. A coupling assembly as claimed in claim 14 wherein the first coupling comprises at least one first coupling opening, the at least one locking tab being configured to engage the

second coupling through the at least one first coupling opening when in the coupled and locked configurations to maintain the first and second couplings in the coupled configuration.

- 5 16. A coupling assembly as claimed in claim 14 or claim 15 wherein the second coupling comprises a second coupling outer flange, the at least one locking tab being configured to at least partially overlap the second coupling outer flange when in the coupled and locked configurations to maintain the first and second couplings in the coupled configuration.
- 10 17. A coupling assembly as claimed in any one of the preceding claims further comprising a first and/or second grip constraining arrangement configured to constrain radial and/or circumferential movement of the first and second grips when the locking ring is adjusted between the locked and unlocked configurations.
- 15 18. A coupling assembly as claimed in claim 17 wherein the first grip constraining arrangement comprises at least one constraining pin slidably mounted in at least one constraining slot, the at least one constraining slot being formed in at least one of the locking ring, first pinch tab and second pinch tab and the at least one constraining pin being attached to the first coupling or vice-versa.
- 20 19. A coupling assembly as claimed in claim 17 or claim 18 wherein the second grip constraining arrangement comprises a radially extending constraining protrusion mounted in at least one radially extending constraining recess, the first coupling comprising the constraining protrusion and the locking ring comprising the at least one constraining recess
- 25 or vice-versa.
- 30 20. A coupling assembly as claimed in any one of the preceding claims further comprising a centring arrangement configured to constrain circumferential movement of at least a portion of the locking ring when the locking ring is adjusted between the locked and unlocked configurations.
- 35 21. A coupling assembly as claimed in claim 20 wherein the centring arrangement comprises at least one centring protrusion mounted in at least one centring recess, the first coupling comprising the at least one centring protrusion and the locking ring comprising the at least one centring recess or vice-versa.

22. An ostomy appliance comprising the coupling assembly of any one of the preceding claims, a pouch and a wafer, wherein the first coupling is attached to the wafer and the second coupling is attached to the pouch or vice-versa such that the wafer and pouch can be disconnected by uncoupling the first and second couplings.

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23. The coupling assembly of any preceding claim, comprising:

a sealing arrangement extending around a coupling aperture, the sealing arrangement being located between the first and second couplings in the coupled configuration;

10 wherein, in the coupled configuration the sealing arrangement is compressed along the axial direction to form a seal between the first and second couplings and the sealing arrangement is located adjacent to and at least partially bounds the coupling aperture.

24. A coupling assembly as claimed in claim 23 wherein the coupling aperture is bounded
15 by the first coupling, the second coupling and the sealing arrangement.

25. A coupling assembly as claimed in claim 23 or claim 24 wherein the first coupling comprises a first coupling inner wall and a first coupling channel extending around the first coupling inner wall.

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26. A coupling assembly as claimed in any one of the preceding claims 23 to 25 wherein the second coupling comprises a second coupling wall and a second coupling inner flange extending radially inwardly towards the coupling aperture from the second coupling wall.

27. A coupling assembly as claimed in claim 25 and claim 26 wherein in the coupled configuration the second coupling wall extends into the first coupling channel, the second coupling inner flange extends over the first coupling inner wall and the sealing arrangement is formed between the second coupling inner flange and first coupling inner wall.

28. A coupling assembly as claimed in any one of claims 25 to 27 wherein the first coupling comprises a first coupling outer wall extending around the first coupling channel.

29. A coupling assembly as claimed in any one of the preceding claims 23 to 28 wherein the sealing arrangement comprises a resiliently deformable material.

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30. A coupling assembly as claimed in any one of the preceding claims 23 to 29 wherein the sealing arrangement comprises a seal element.

5 31. A coupling assembly as claimed in claim 30 when dependent upon any one of claims 26 to 28 wherein the seal element is mounted between the second coupling inner flange and first coupling inner wall.

32. A coupling assembly as claimed in claim 30 or claim 31 wherein the seal element is attached to the second coupling.

10 33. A coupling assembly as claimed in any one of claims 30 to 32 wherein the seal element comprises a closed ring.

15 34. A coupling assembly as claimed in any one of claims 29 to 33 wherein the sealing arrangement comprises the second coupling inner flange and/or the first coupling inner wall, wherein at least part of the second coupling inner flange and/or first coupling inner wall comprises the resiliently deformable material.

20 35. A coupling assembly as claimed in any one of the preceding claims 23 to 34 wherein the first and second couplings extend circumferentially around the coupling aperture.

36. A coupling assembly as claimed in any one of claims 25 to 35 wherein the first coupling inner wall and channel extend circumferentially and/or the second coupling wall and inner flange extend circumferentially.

25 37. A coupling assembly as claimed in any one of claims 25 to 36 wherein the second coupling comprises a second coupling outer flange extending radially outwardly away from the coupling aperture from the second coupling wall and in the coupled configuration the second coupling outer flange extends radially outwardly in the first coupling channel.

30 38. A coupling assembly as claimed in claim 23 wherein the locking ring comprises at least one locking tab extending radially inwardly towards the coupling aperture for selectively maintaining the coupling assembly in the coupled configuration.

39. A coupling assembly as claimed in claim 38 when dependent upon claim 37 wherein the at least one locking tab is configured to selectively overlap the second coupling outer flange to hold the first and second coupling in the coupled configuration.

5 40. A coupling assembly as claimed in claim 39 when dependent upon any one of claims 28 to 36 wherein the first coupling outer wall comprises at least one first coupling opening for receiving the at least one locking tab such that the at least one locking tab is configured to extend through the at least one first coupling opening and over the second coupling outer flange in the coupled configuration.

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41. An ostomy appliance comprising the coupling assembly of any one of the preceding claims 23 to 40, a pouch and a wafer, wherein the first coupling is attached to the wafer and the second coupling is attached to the pouch or vice-versa such that the wafer and pouch can be disconnected by uncoupling the first and second couplings.

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