## Claims

What is claimed is:

1. A method, comprising:

radially expanding a backup ring to prevent, or at least reduce, extrusion of a sealing element, the backup ring comprising an inner ring segment and an outer ring segment, the inner ring segment defining opposing first and second end portions, and the outer ring segment defining opposing third and fourth end portions;

wherein the third end portion of the outer ring segment telescopically receives, and overlaps, the first end portion of the inner ring segment;

wherein radially expanding the backup ring comprises sliding the backup ring up an external tapered surface of a wedge ramp;

wherein sliding the backup ring up the external tapered surface of the wedge ramp telescopes the first end portion of the inner ring segment outwardly from the third end portion of the outer ring segment; and

wherein:

the inner ring segment defines a first hollow cross section, wherein the first hollow cross-section comprises an overlapping non-closed rectangular shape;

and

the outer ring segment defines a second hollow cross section, wherein the second hollow cross-section comprises an overlapping non-closed rectangular shape.

2. The method of claim 1, wherein the fourth end portion of the outer ring segment telescopically receives, and overlaps, the second end portion of the inner ring segment; and

wherein sliding the backup ring up the external tapered surface of the wedge ramp telescopes the second end portion of the inner ring segment outwardly from the fourth end portion of the outer ring segment.

3. The method of claim 1, wherein sliding the backup ring up the external tapered surface of the wedge ramp comprises:

pushing, using a piston, the backup ring towards the sealing element and relative to the wedge ramp.

4. The method of claim 1, wherein the sealing element and the wedge ramp are positioned around a mandrel; and

wherein the method further comprises moving the wedge ramp axially relative to the mandrel and toward the sealing element to axially compress and radially expand the sealing element.

5. The method of claim 4, wherein moving the wedge ramp axially relative to the mandrel and toward the sealing element comprises:

pushing, using a piston, the wedge ramp toward the sealing element.

6. The method of claim 1, wherein:

the first hollow cross-section further comprises a three disk shaped walls, one cylinder shaped wall, and one frustoconical shaped wall;

wherein the walls are constructed in a sequence of a first disk shaped wall, a first cylinder shaped wall, a second disk shaped wall, a first frustoconical wall, a third disk shaped wall; and

wherein the first disk shaped wall overlaps the third disk shaped wall.

7. The method of claim 1, wherein:

the second hollow cross-section further comprises a three disk shaped walls, one cylinder shaped wall, and one frustoconical shaped wall;

wherein the walls are constructed in a sequence of a first disk shaped wall, a first cylinder shaped wall, a second disk shaped wall, a first frustoconical wall, a third disk shaped wall; and

wherein the first disk shaped wall overlaps the third disk shaped wall.

8. The method of claim 1, wherein:

the first hollow cross-section further comprises five disk shaped walls, two cylinder shaped walls, and two frustoconical shaped walls;

wherein the walls are constructed in a sequence of a first disk shaped wall, a first cylinder shaped wall, a second disk shaped wall, a first frustoconical wall, a third disk shaped wall, a second cylinder shaped wall, a fourth disk shaped wall, a second frustoconical wall, and a fifth disk shaped wall; and

wherein the first disk shaped wall is adjacent to the third disk shaped wall and third disk shaped wall is adjacent to the fifth disk shaped wall.

9. The method of claim 1, wherein:

the second hollow cross-section further comprises five disk shaped walls, two cylinder shaped walls, and two frustoconical shaped walls;

wherein the walls are constructed in a sequence of a first disk shaped wall, a first cylinder shaped wall, a second disk shaped wall, a first frustoconical wall, a third disk shaped wall, a second cylinder shaped wall, a fourth disk shaped wall, a second frustoconical wall, and a fifth disk shaped wall; and

wherein the first disk shaped wall is adjacent to the third disk shaped wall and the third disk shaped wall is adjacent to the fifth disk shaped wall.

10. An apparatus, comprising:

a wedge ramp defining an external tapered surface; and

a backup ring positioned around the wedge ramp,

wherein the backup ring comprises:

an inner ring segment defining opposing first and second end portions, and

an outer ring segment defining opposing third and fourth end portions,

wherein the third end portion of the outer ring segment telescopically receives, and overlaps, the first end portion of the inner ring segment,

and

wherein the backup ring is slidable up the external tapered surface of the wedge ramp to:

radially expand the backup ring, and

prevent, or at least reduce, extrusion of a sealing element,

wherein:

the inner ring segment defines a first hollow cross section, wherein the first hollow cross-section comprises an overlapping non-closed rectangular shape; and

the outer ring segment defines a second hollow cross section, wherein the second hollow cross-section comprises an overlapping non-closed rectangular shape.

11. The apparatus of claim 10, further comprising:

a piston positioned adjacent the wedge ramp and movable to slide the backup ring up the external tapered surface of the wedge ramp.

12. The apparatus of claim 10, further comprising a mandrel around which the wedge ramp is positioned;

wherein the wedge ramp is slidable relative to the mandrel and toward the sealing element to axially compress and radially expand the sealing element.

13. The apparatus of claim 12, further comprising:

a piston positioned around the mandrel adjacent the wedge ramp and movable to slide the wedge ramp relative to the mandrel and toward the sealing element.

14. The apparatus of claim 12, further comprising the sealing element;
wherein the sealing element is positioned around the mandrel.

15. The apparatus of claim 10, wherein the backup ring defines a radially-inward portion tapered to engage the external tapered surface of the wedge ramp.

16. The apparatus of claim 10, wherein:

the inner ring segment extends along a first arc length defined by a first central angle of greater than 180 degrees; and

the outer ring segment extends along a second arc length defined by a second central angle of greater than 180 degrees.

17. A backup ring, comprising:

an inner ring segment defining opposing first and second end portions; and

an outer ring segment defining opposing third and fourth end portion,

wherein the third end portion of the outer ring segment telescopically receives, and overlaps, the first end portion of the inner ring segment,

and

wherein the backup ring is slidable up an external tapered surface of a wedge ramp to:
radially expand the backup ring, and

prevent, or at least reduce, extrusion of a sealing element,

wherein:

the inner ring segment defines a first hollow cross section, wherein the first hollow cross-section comprises an overlapping non-closed rectangular shape; and

the outer ring segment defines a second hollow cross section, wherein the second hollow cross-section comprises an overlapping non-closed rectangular shape.

18. The backup ring of claim 17, wherein radially expanding the backup ring telescopes the first end portion of the inner ring segment outwardly from the third end portion of the outer ring segment.

19. The backup ring of claim 17, wherein the fourth end portion of the outer ring segment telescopically receives, and overlaps, the second end portion of the inner ring segment; and

wherein radially expanding the backup ring telescopes the second end portion of the inner ring segment outwardly from the fourth end portion of the outer ring segment.

20. The backup ring of claim 17, wherein the backup ring defines a radially-inward portion tapered to engage the external tapered surface of the wedge ramp.

21. The backup ring of claim 17, wherein:

the inner ring segment extends along a first arc length defined by a first central angle of greater than 180 degrees; and

the outer ring segment extends along a second arc length defined by a second central angle of greater than 180 degrees.

22. The backup ring of claim 17, further comprising an insert extending within the first hollow cross section of the inner ring segment and the second hollow cross section of the outer ring segment.