Claims:

1. A collimator for use in a substrate processing chamber, comprising:

a body having a central region, a peripheral region, and a transitional region disposed between the central and peripheral regions;

a first plurality of apertures in the central region having a first aspect ratio;

a second plurality of apertures in the peripheral region having a second aspect ratio less than the first aspect ratio; and

a third plurality of apertures in the transitional region, wherein the third plurality of apertures are cut so the transitional region forms a conical shape surrounding the central region,

wherein the central region has a circular edge formed by the transitional region.

2. The collimator of claim 1, wherein the first plurality of apertures, the second plurality of apertures, and the third plurality of apertures are textured.

3. The collimator of claim 1, wherein the third plurality of apertures are cut at a predetermined angle of 15 to 45 degrees.

4. The collimator of claim 1, wherein the first plurality of apertures includes 61 apertures.

5. The collimator of claim 1, wherein upper portions of the first plurality of apertures, the second plurality of apertures, and the third plurality of apertures include a chamfer.

6. The collimator of claim 5, wherein the chamfer is about 2.5° and has a length of about 1 inch.

7. The collimator of claim 5, wherein the chamfer is about 15° and has a length of about 0.15 inches.

8. The collimator of claim 1, wherein an aspect ratio of the first plurality of apertures is 3.3:1.

9. The collimator of claim 1, wherein each of the first plurality of apertures, the second plurality of apertures, and the third plurality of apertures is hexagonal.

10. The collimator of claim 1, wherein a circle circumscribing each of the first plurality of apertures has a diameter of about 1.5 inches.

11. A collimator for use in a substrate processing chamber, comprising:

a body having a central region, a peripheral region, and a transitional region disposed between the central and peripheral regions;

a first plurality of apertures in the central region having a first aspect ratio;

a second plurality of apertures in the peripheral region having a second aspect ratio less than the first aspect ratio; and

a third plurality of apertures in the transitional region, wherein the third plurality of apertures are cut so the transitional region forms a conical shape surrounding the central region,

wherein the first plurality of apertures, the second plurality of apertures, and the third plurality of apertures are textured,

wherein upper portions of the first plurality of apertures, the second plurality of apertures, and the third plurality of apertures include a chamfer, and

wherein the central region has a circular edge formed by the transitional region.

12. The collimator of claim 11, wherein the third plurality of apertures are cut at a predetermined angle of 15 to 45 degrees.

13. The collimator of claim 11, wherein the first plurality of apertures includes 61 apertures.

14. The collimator of claim 11, wherein the chamfer is about 2.5° and has a length of about 1 inch.

15. The collimator of claim 11, wherein the chamfer is about 15° and has a length of about 0.15 inches.

16. The collimator of claim 11, wherein an aspect ratio of the first plurality of apertures is 3.3:1.

17. The collimator of claim 11, wherein each of the first plurality of apertures, the second plurality of apertures, and the third plurality of apertures is hexagonal.

18. The collimator of claim 11, wherein a circle circumscribing each of the first plurality of apertures has a diameter of about 1.5 inches.

19. A substrate processing chamber, comprising:

a chamber body defining an inner volume;

a sputtering target disposed in an upper portion of the inner volume;

a substrate support disposed below the sputtering target; and

a collimator disposed in the inner volume between the sputtering target and the substrate support, wherein the collimator comprises:

a body having a central region, a peripheral region, and a transitional region disposed between the central and peripheral regions;

a first plurality of apertures in the central region having a first aspect ratio;

a second plurality of apertures in the peripheral region having a second aspect ratio less than the first aspect ratio; and

a third plurality of apertures in the transitional region, wherein the third plurality of apertures are cut so the transitional region forms a conical shape surrounding the central region,

wherein the central region has a circular edge formed by the transitional region.

20. The substrate processing chamber of claim 19, wherein an aspect ratio of the first plurality of apertures is 3.3:1.