Claims

1. An article having a surface patterned to enhance retention of deposited films, comprising:

a processing chamber component having a macro textured surface formed from one or more engineered features arranged to prevent formation of a line of sight surface across the macro textured surface, wherein the macro textured surface comprises one or more structures, the one or more structures comprising:

a top surface; and

an overhang, having a rounded edge, located along a sidewall of the one or more structures, wherein the overhang originates from the top surface of the one or more structures and

a recess is formed within a center area of the top surface of each of the one or more structures located radially inward from the overhang.

2. The article of claim 1, wherein the engineered features are arranged in a predefined pattern.

3. The article of claim 1, wherein the top surface of the one or more structures is rounded.

4. The article of claim 3, wherein a depth of the engineered features is greater than a depth of the recess.

5. The article of claim 3, wherein a surface of the recess is substantially concave.

6. The article of claim 5, wherein the concave surface of the recess is adapted to exert a compressive force on a film deposited on the surface of the recess.

7. The article of claim 1, wherein the engineered features are bounded by walls forming a hexagonal honeycomb pattern.

8. The article of claim 1, wherein the engineered features are closely packed.

9. The article of claim 1, wherein the engineered features form discreet pillars.

10. The article of claim 7, wherein a trench is formed between the walls forming the hexagonal honeycomb pattern.

11. The article of claim **10**, wherein a surface of the trench is substantially concave.

12. The article of claim **1**, wherein the engineered features forming the textured surface have at least one of a uniform shape, size and distribution across the textured surface.

13. An article having a surface patterned to enhance retention of deposited films, comprising:

a processing chamber component having a macro textured surface formed from engineered features arranged in a predefined pattern that prevents formation of a line of sight surface across the textured surface, the engineered features being arranged in a predefined pattern, wherein the engineered features comprise surfaces having a substantially concave shape and one or more structures defining the macro textured surface, the structures comprising:

a rounded overhang located along a sidewall and extending radially outward from a top surface of the one or more structures, wherein

a substantially concave recess formed within a center area of the top surface of the one or more structures and located radially inward from the rounded overhang.

14. The article of claim **13**, wherein the engineered features are bounded by walls forming a hexagonal honeycomb pattern.

15. The article of claim **13**, wherein the engineered features are closely packed.

16. The article of claim **13**, wherein the engineered features form discreet pillars.

17. The article of claim **16**, wherein the engineered features are bounded by structures forming mounds having a substantially concave recess formed therein.