CLAIMS:

1. A lipseal for use in a lipseal assembly of an electroplating clamshell which engages and supplies electrical current to a semiconductor substrate during electroplating, the lipseal comprising:
   a body consisting of a single, integral piece of elastomeric material and having an outer portion configured to engage a cup of the lipseal assembly and an inner portion configured to engage a peripheral region of the semiconductor substrate, the inner portion including an upward-projecting protrusion having a width in a radial direction sufficient to inhibit diffusion of acid in an electroplating solution used during the electroplating, an upper surface of the upward-projecting protrusion having an angled surface to contact the semiconductor substrate, the upward-projecting protrusion comprising an annular rim which extends completely around an inner periphery of the lipseal, wherein the width is between inner and outer walls of the upward-projecting protrusion and the width is at least about 0.032 inch to about 0.034 inch, an increase in the width occurring by increasing an outer diameter of the lipseal to increase a diffusion distance thereby reducing a rate of chemical diffusion, an increase in the width occurring at an outer periphery of the upward-projecting protrusion, the outer portion of the body having a downward-projecting rim to engage a recess in the cup and aid in alignment of the lipseal with the cup, the downward-projecting rim extending completely around the periphery of the lipseal of the outer portion.

2. The lipseal of claim 1, wherein the width is between inner and outer walls of the protrusion and the width is at least about 0.032 inch.

3. The lipseal of claim 2, wherein the width is about 0.034 inch.

4. The lipseal of claim 1, wherein the outer portion includes a downwardly extending rim configured to be received in a recess of the cup.

5. The lipseal of claim 1, wherein an inner surface of the projection defines an inner diameter of the lipseal.

6. A method of electroplating a semiconductor substrate using the lipseal of claim 1, comprising supporting a pre-wet semiconductor substrate in an electroplating clamshell such that the protrusion of the lipseal contacts an outer periphery of the

semiconductor substrate, and contacting an exposed surface of the semiconductor substrate inwardly of the protrusion with an electroplating solution.

7. The method of claim 6, wherein the projection has a width of about 0.034 inch.