

1/46

100

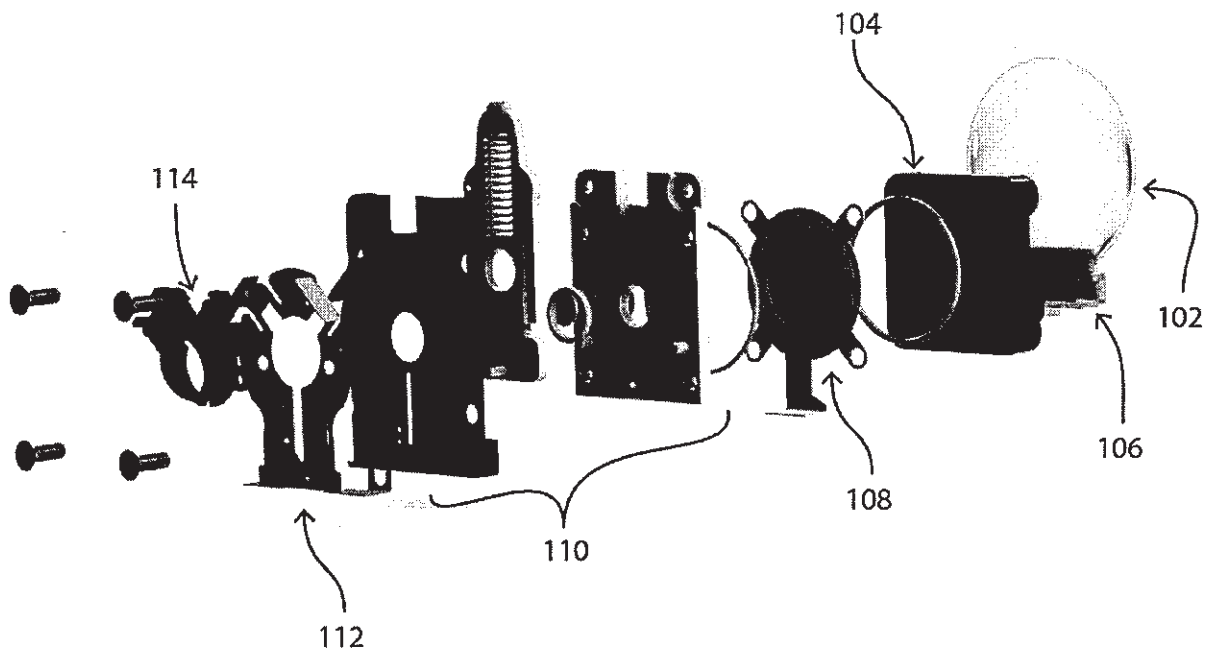


FIG. 1

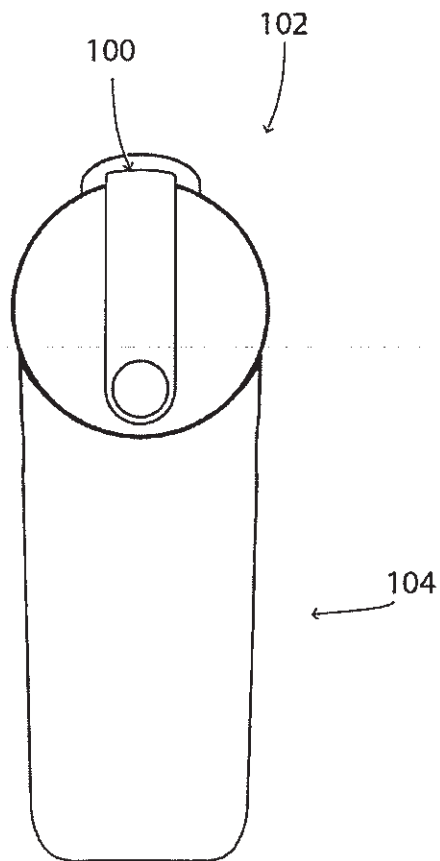


FIG. 2



Fig.3



Fig.4

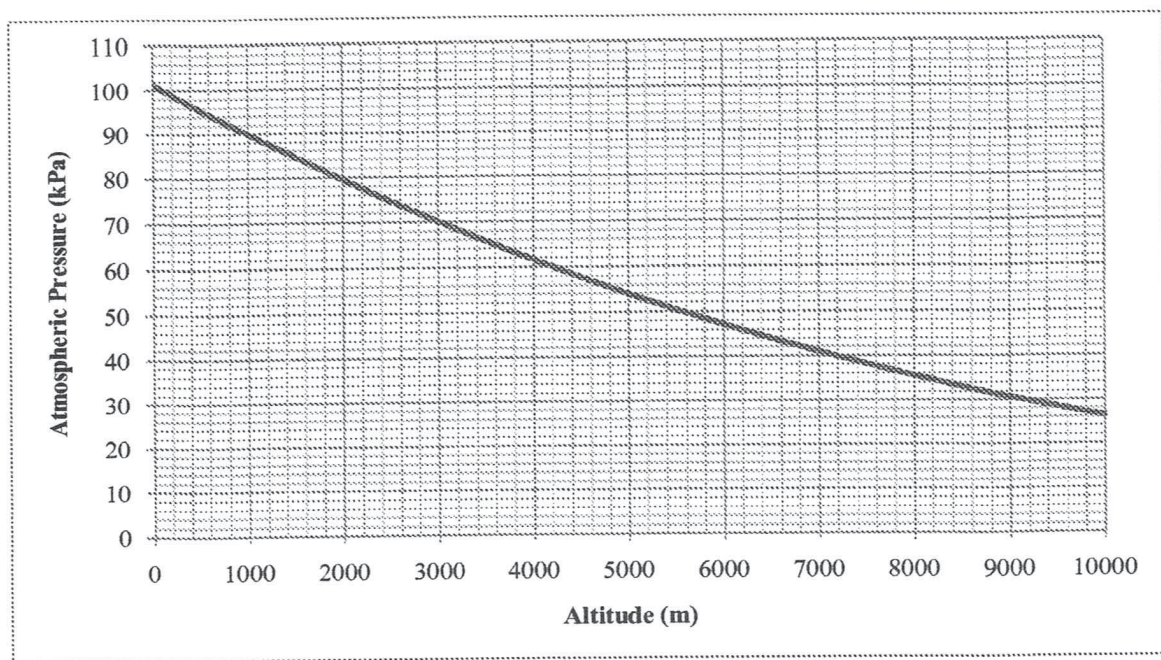


FIG. 5

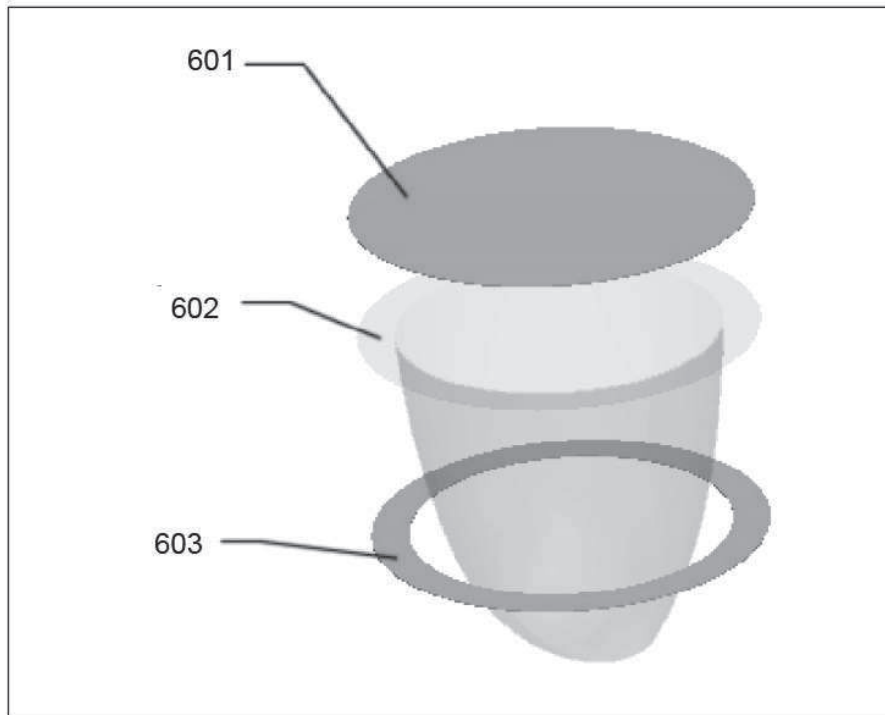


Fig. 6A

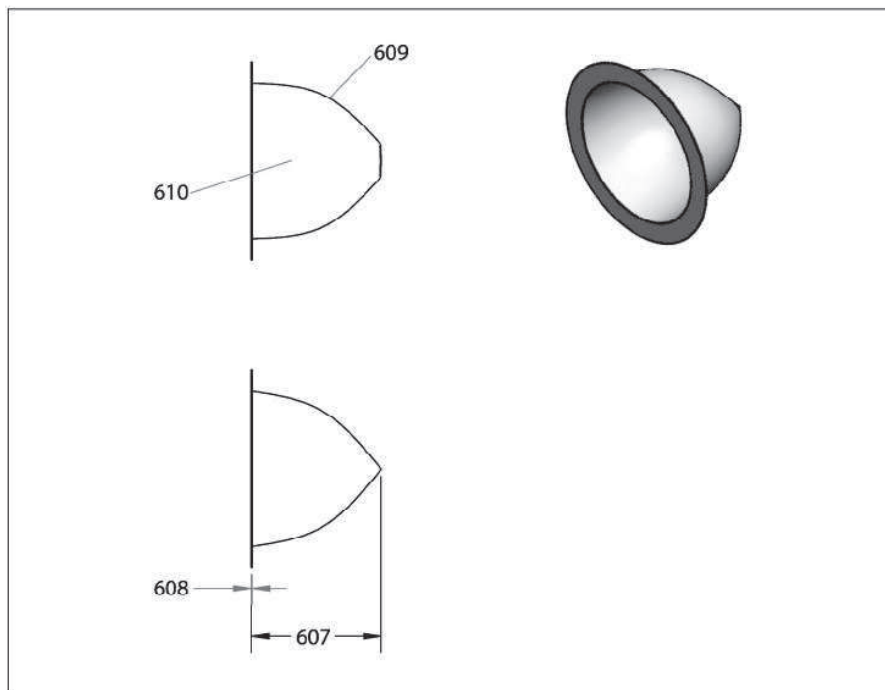


Fig. 6B

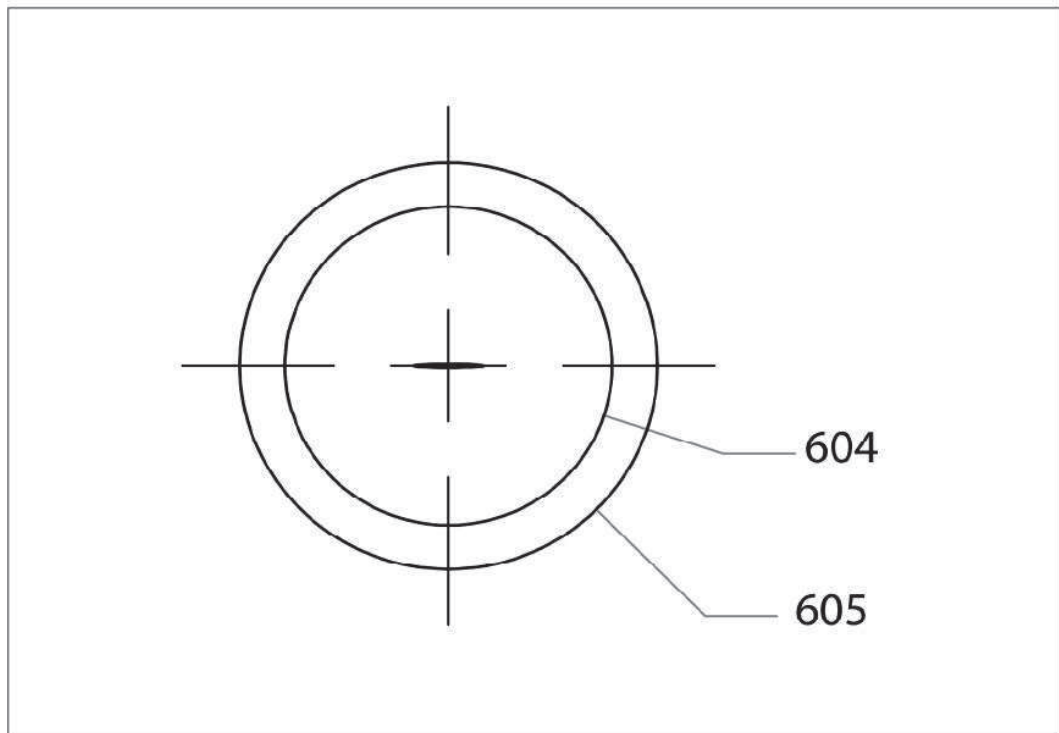


Fig.6C

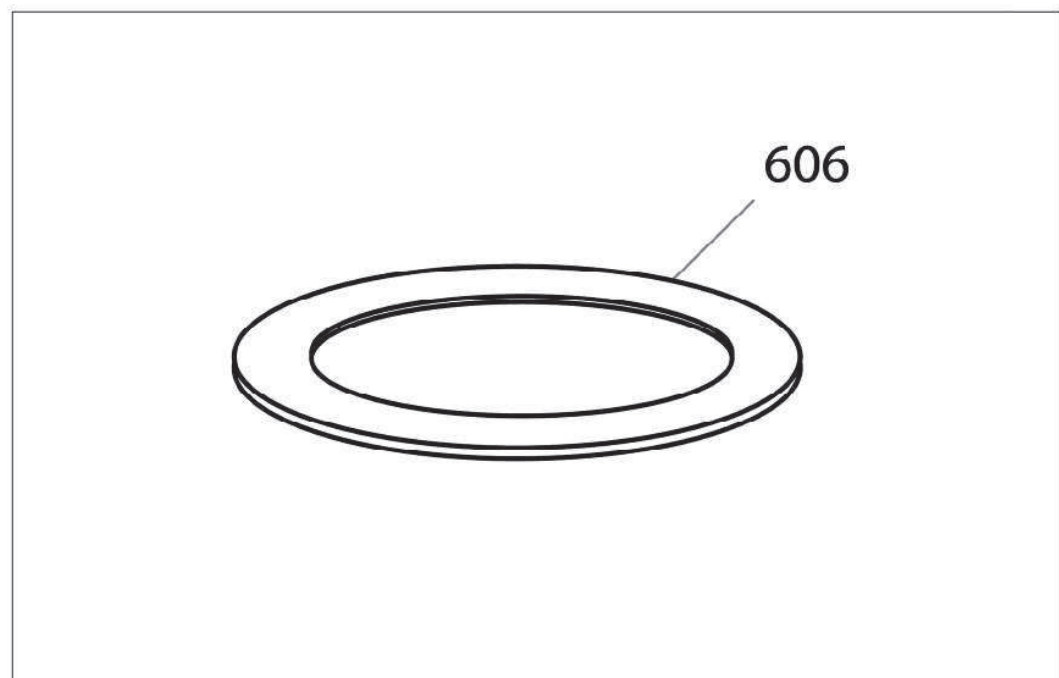


Fig.6D

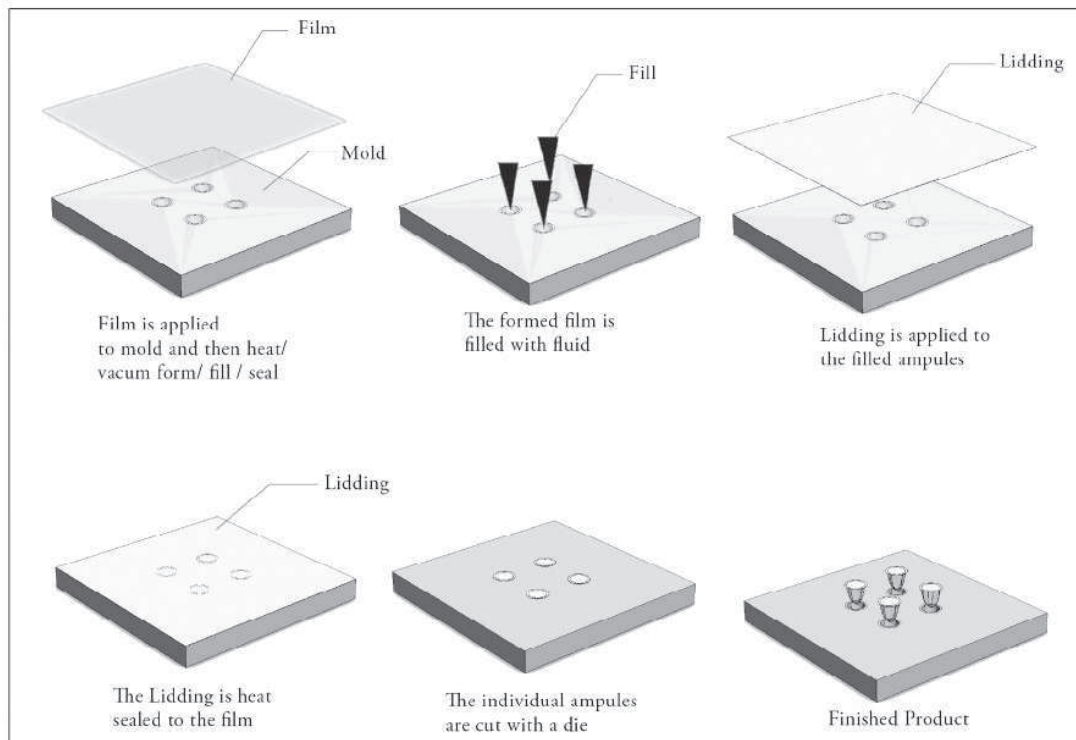


Fig.7

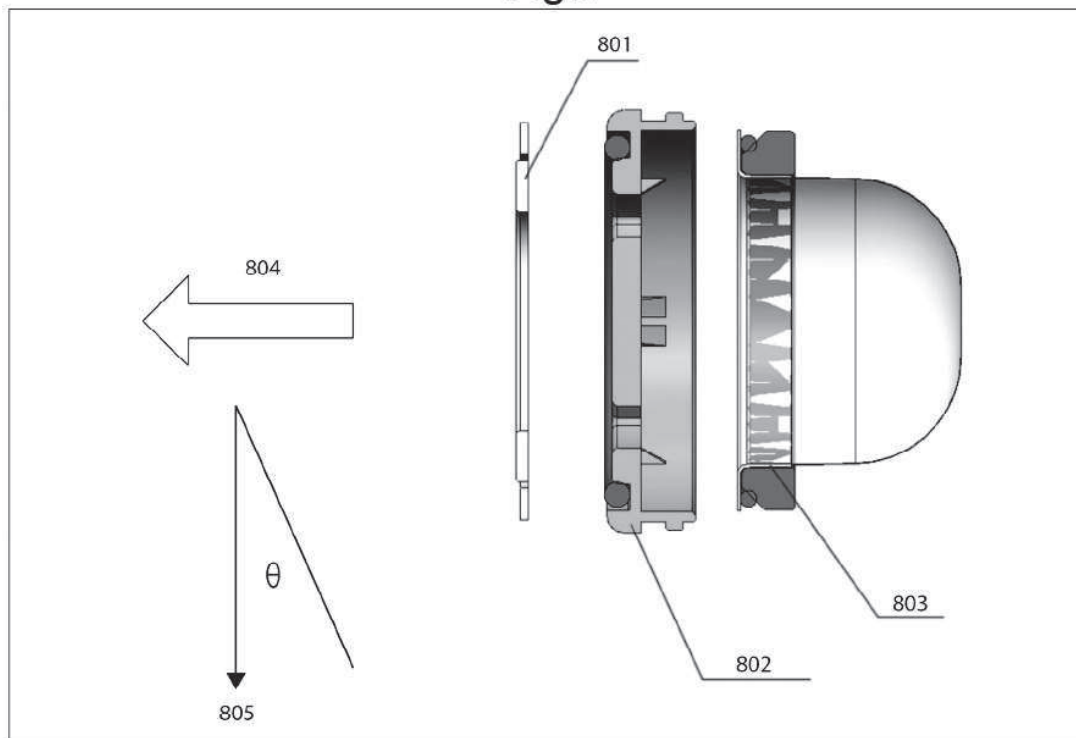


Fig.8

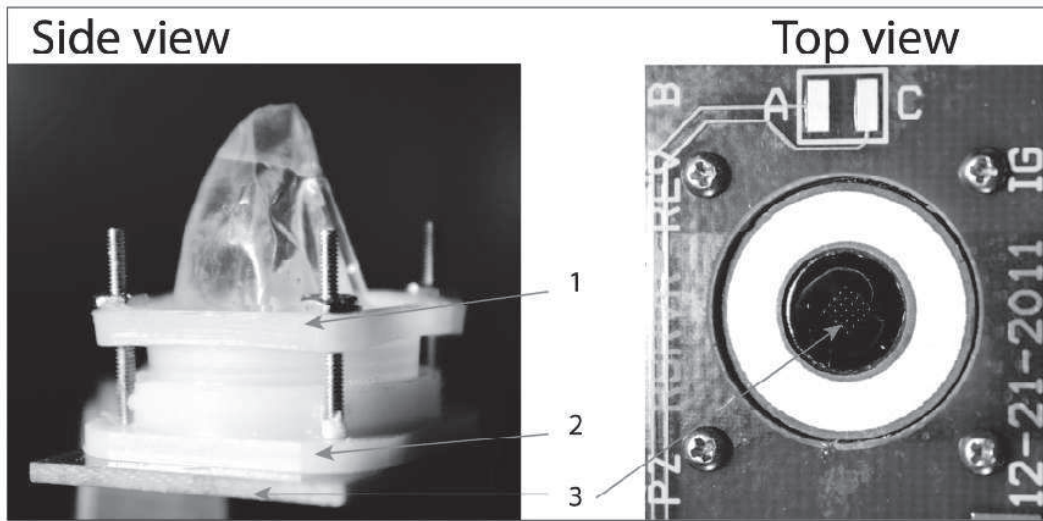


Fig.9

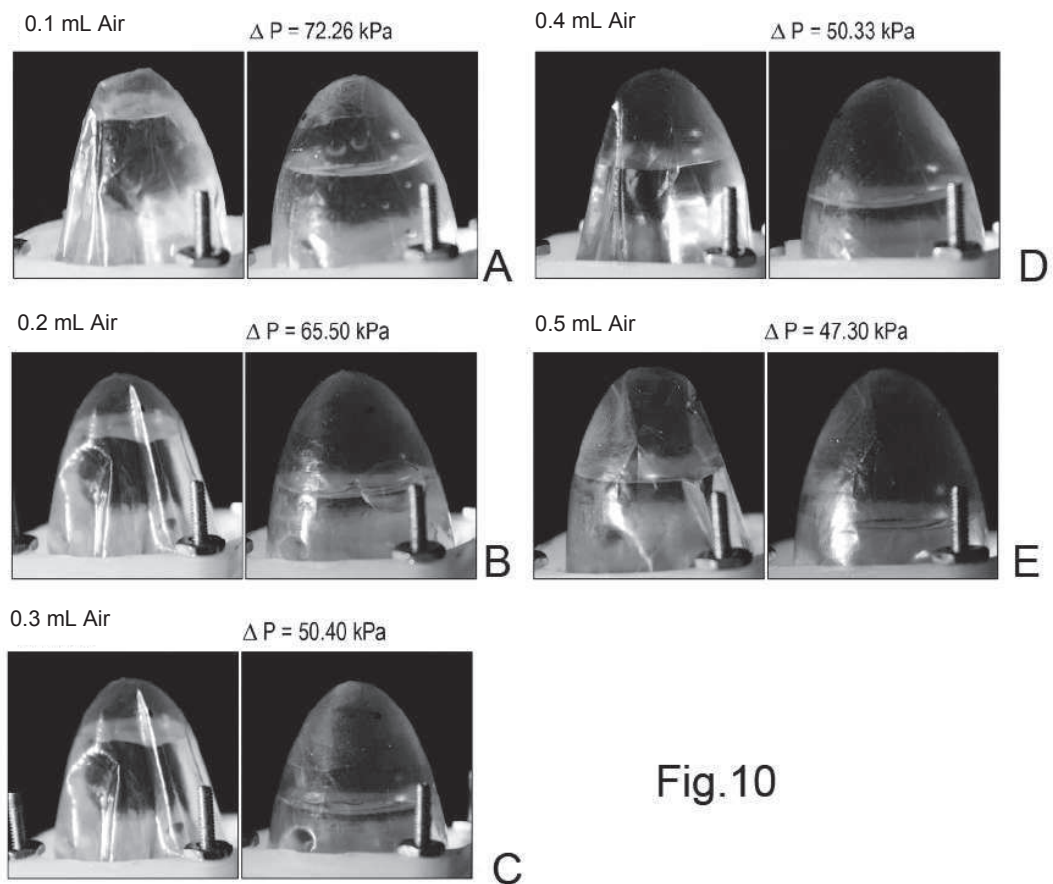
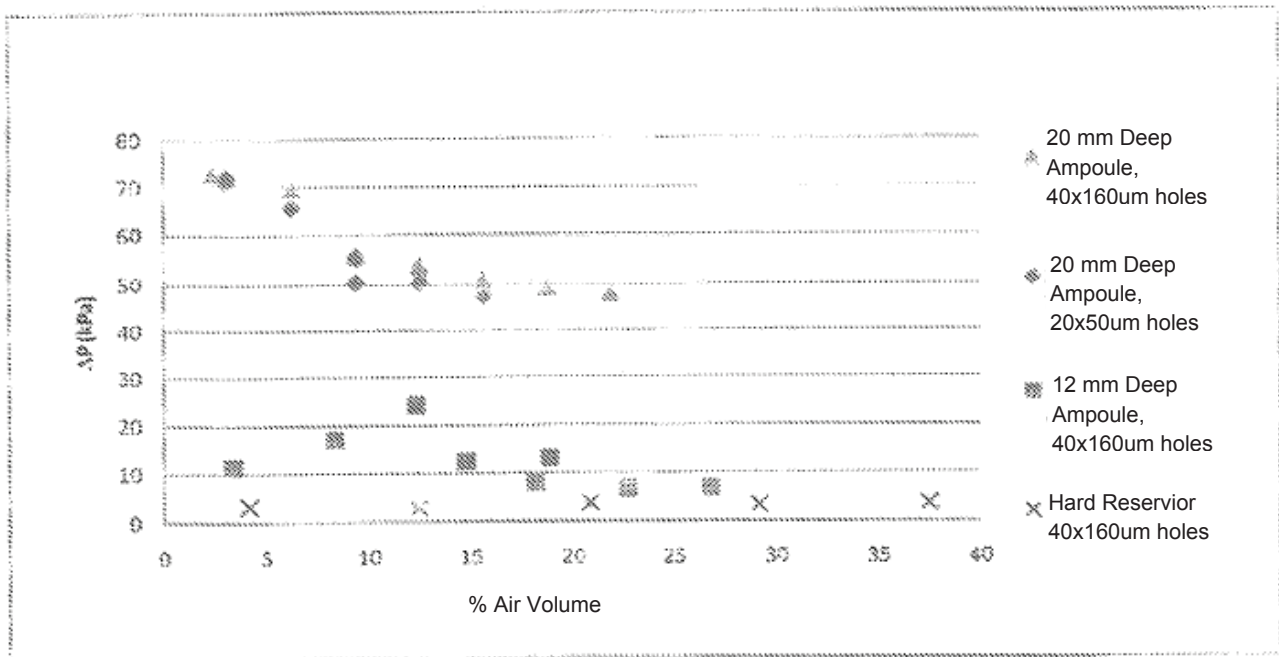
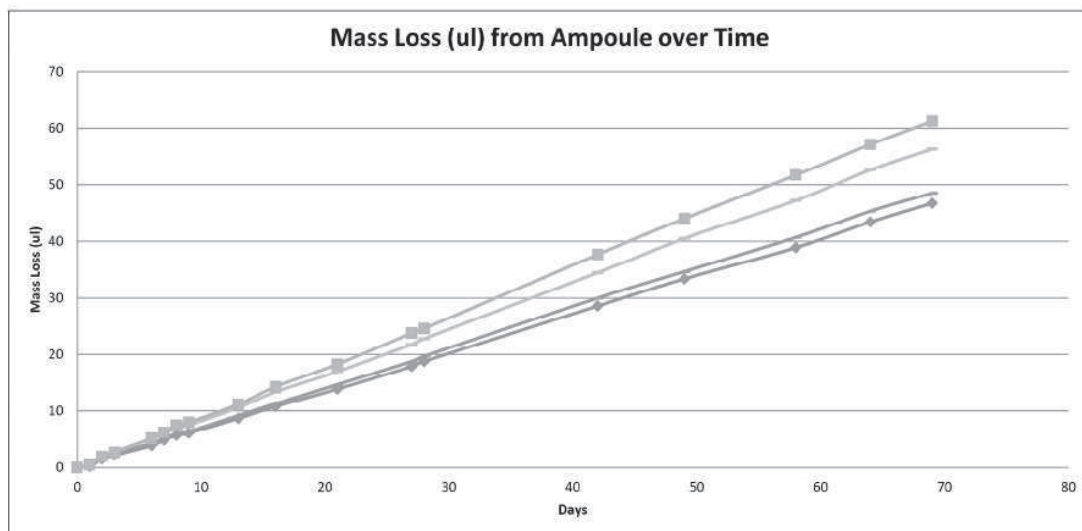


Fig.10



6000 ft = 1828.8 m = $\Delta P = 20 \text{ kPa} = 2.9 \text{ psi}$
 8000 ft = 2438.4 m = $\Delta P = 29 \text{ kPa} = 4.2 \text{ psi}$

Fig.11



Less than 1 microliter per day is lost from evaporation through the ampoule film / lidding system

Fig.12

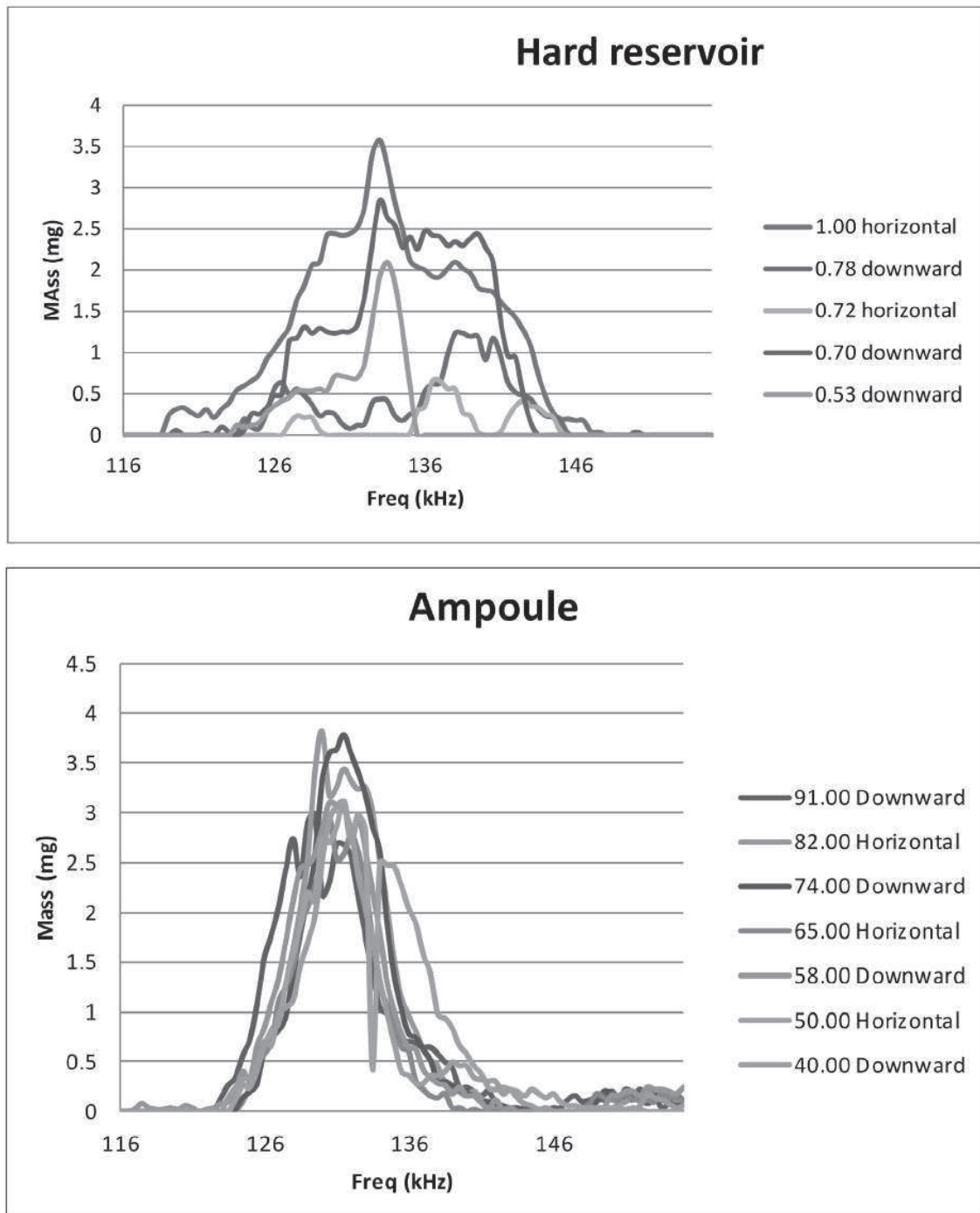


Fig.13

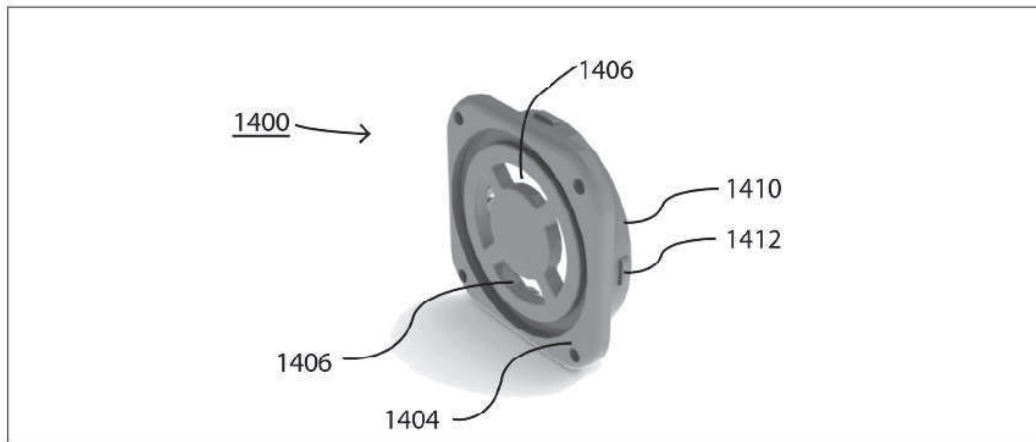


Fig. 14A

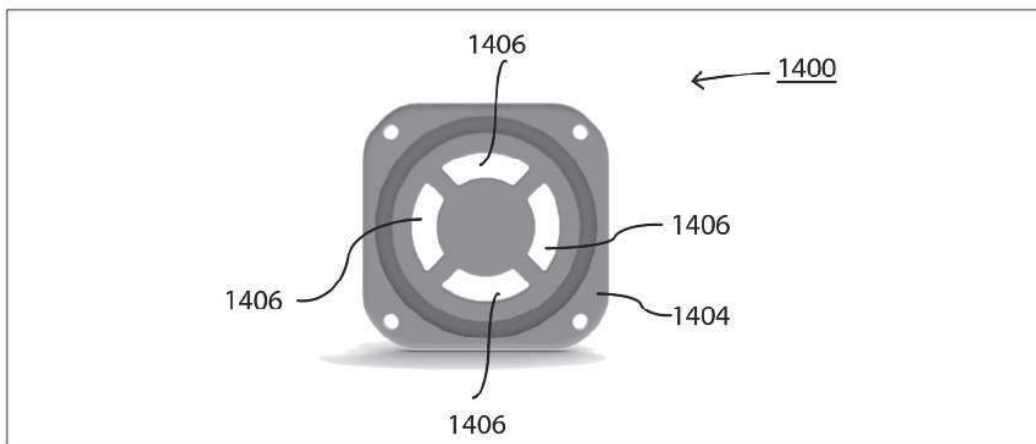


Fig. 14B

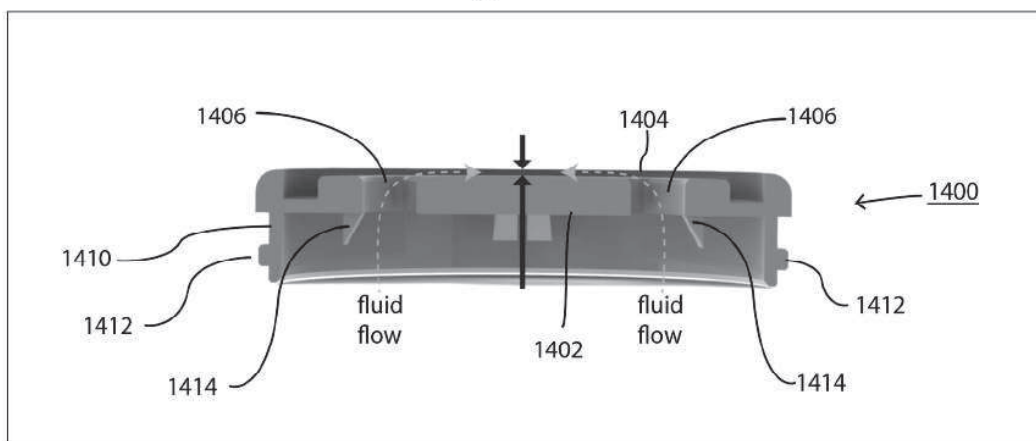


Fig. 14C

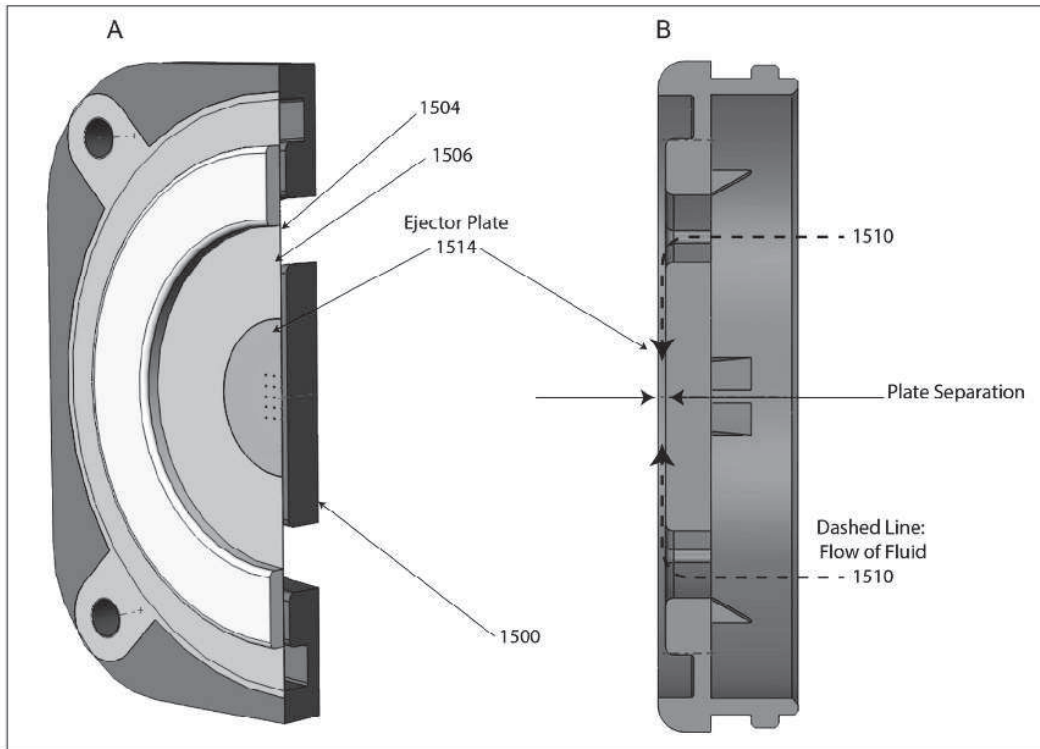


Fig. 15A

Fig. 15B

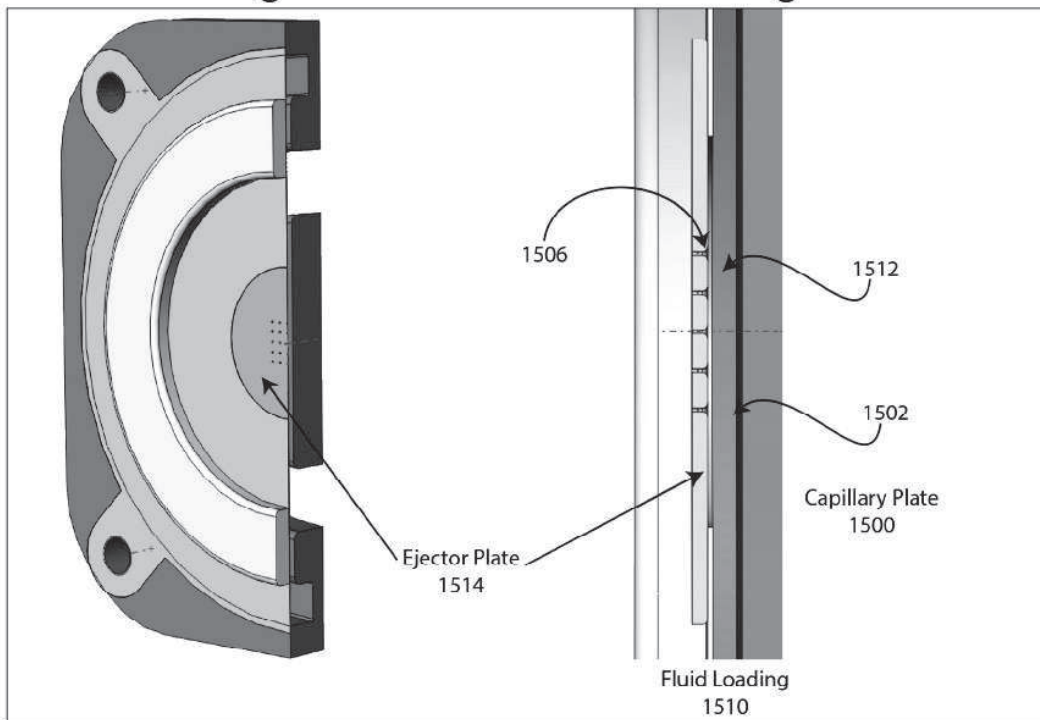


Fig. 15C

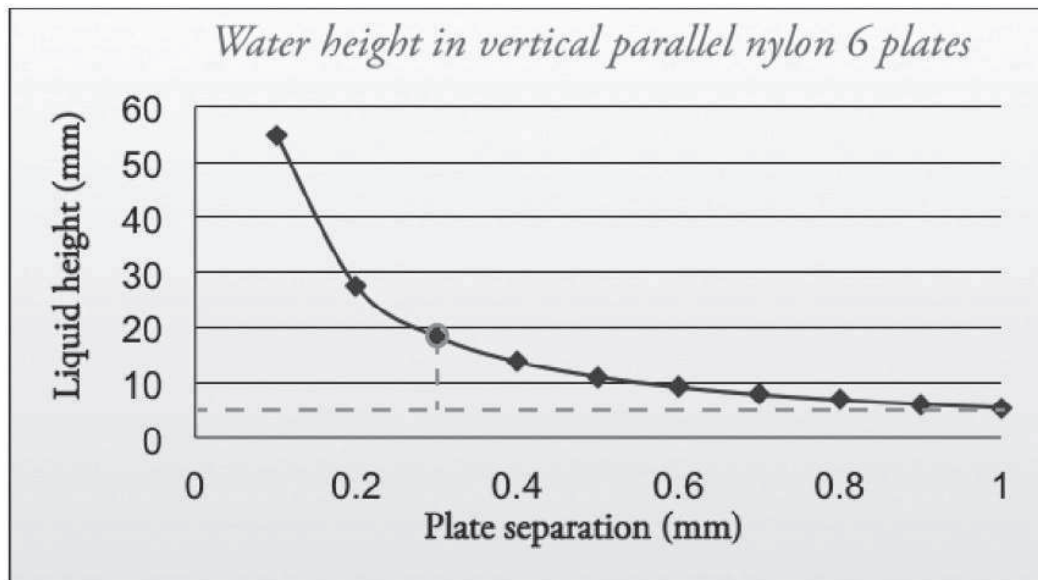


Fig.16A

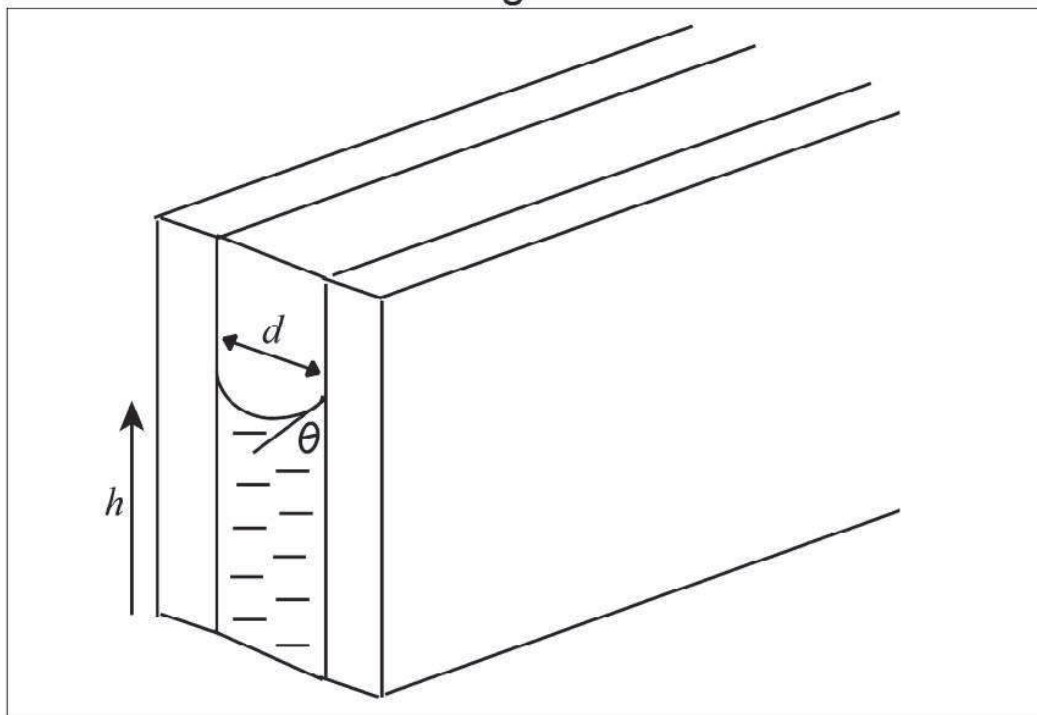


Fig.16B

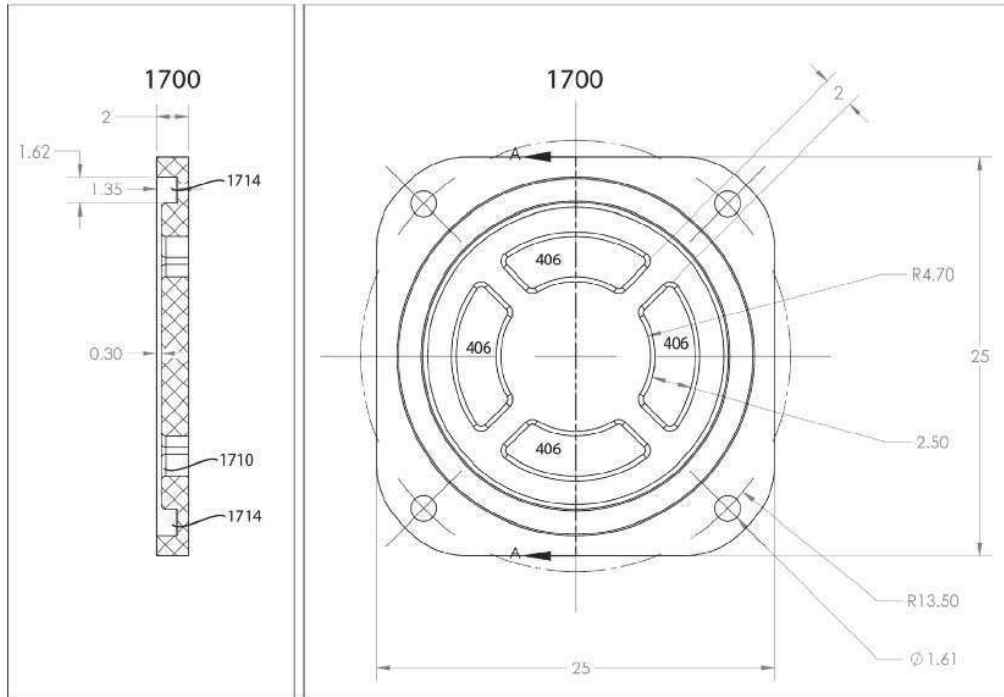
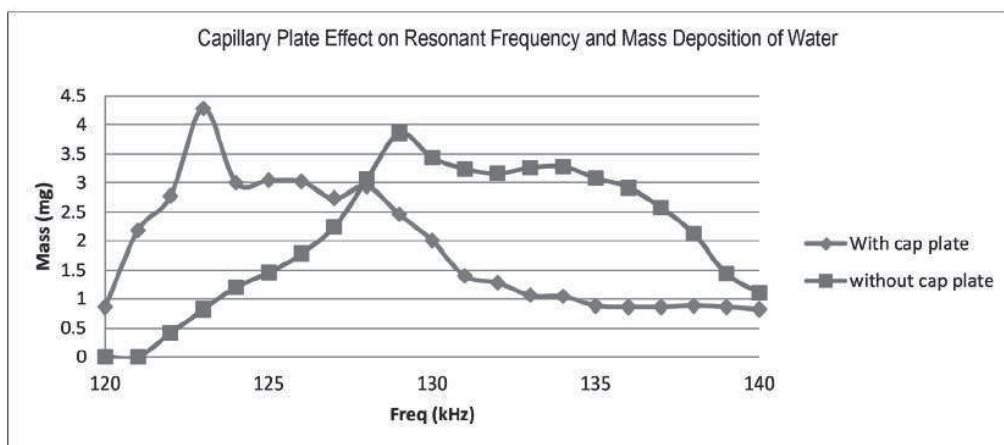


Fig.17A

Fig.17B



NiCo ejector plate with 25, 40 micron holes, and 160 microns thick

Fig.18

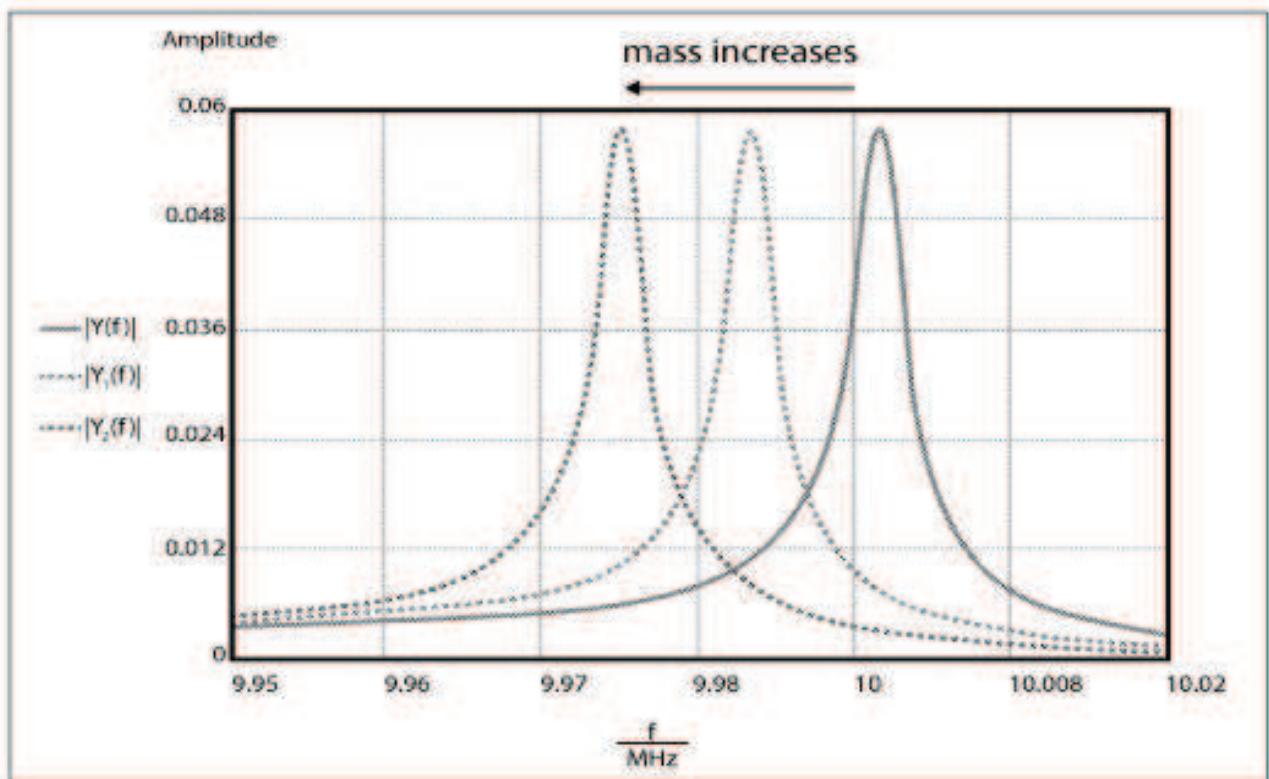
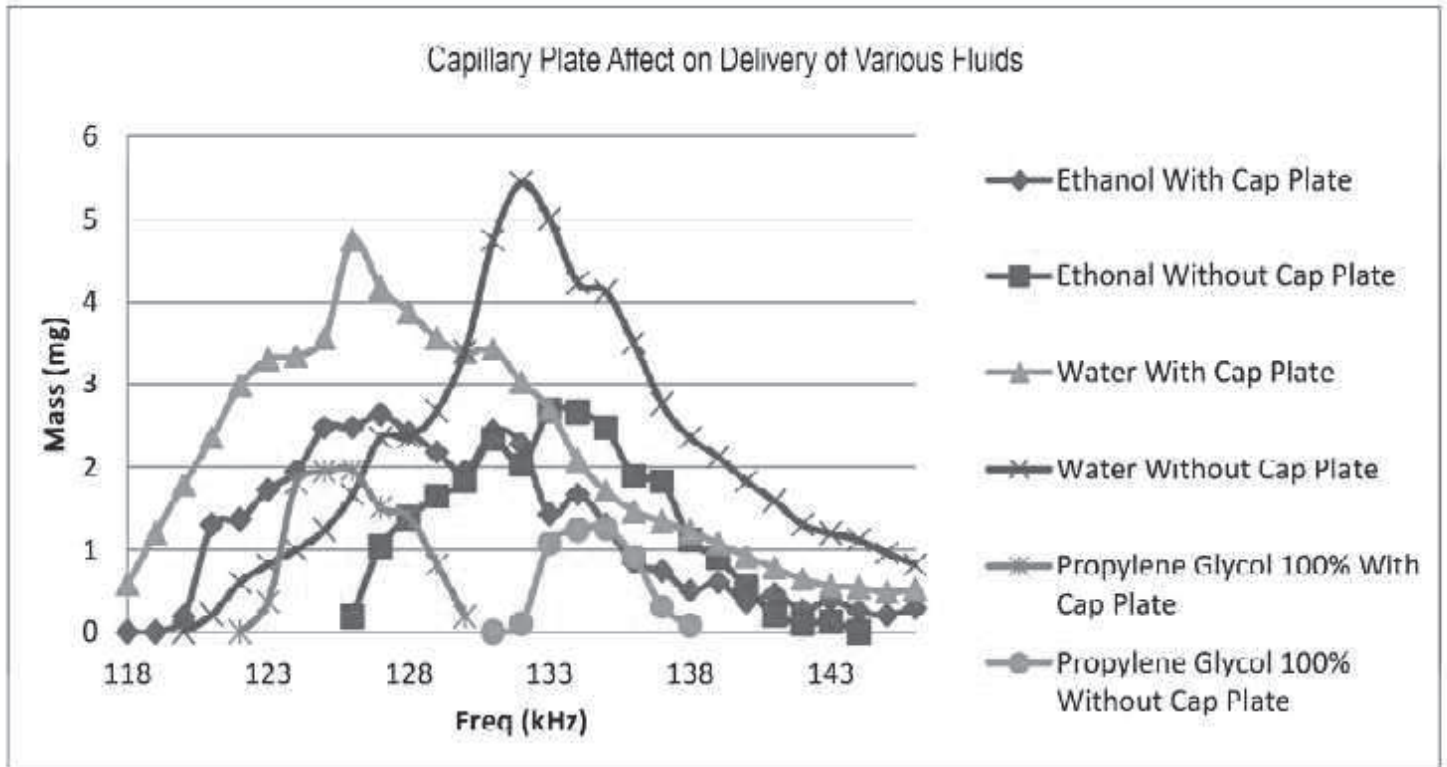
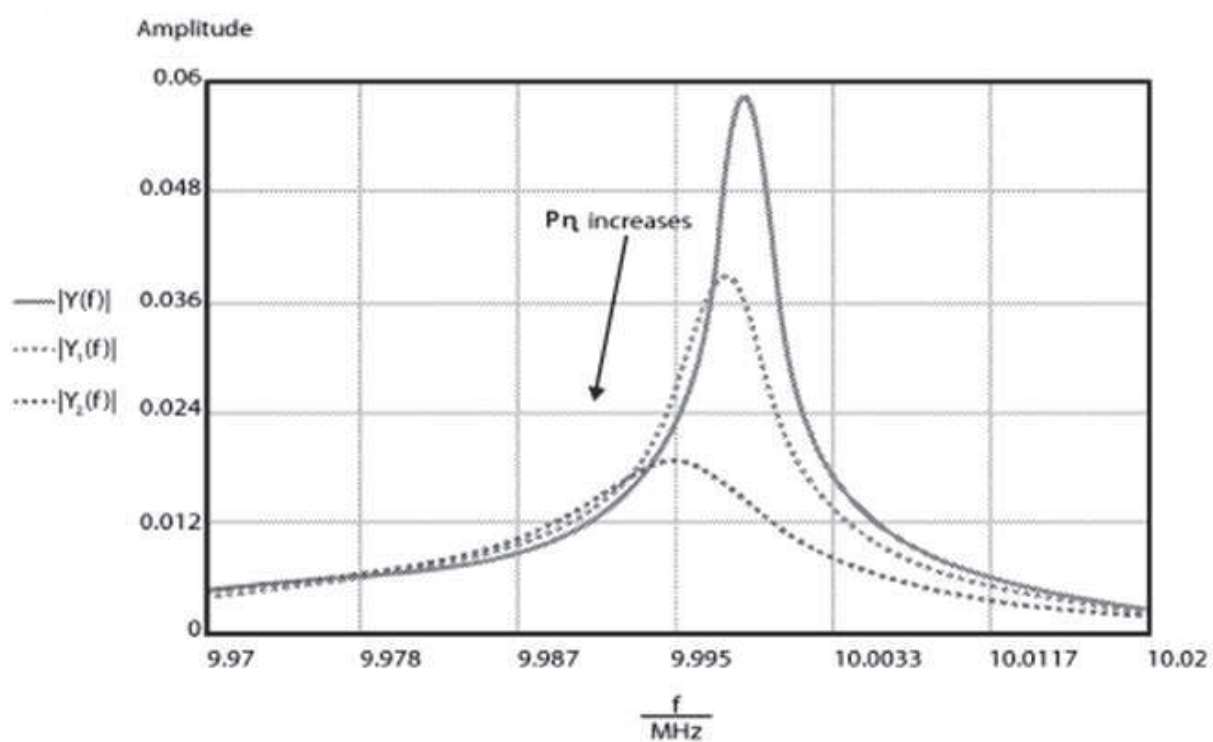


FIG. 19



NiCo ejector plate with 25, 40 micron holes, and 160 micron thick

Fig.20



<i>Liquid</i>	<i>Density (r) (g/cm³)</i>	<i>Viscosity (h) (cP)</i>
<i>Water</i>	<i>0.998</i>	<i>1.002</i>
<i>Ethanol</i>	<i>0.789</i>	<i>1.162</i>
<i>Propylene glycol</i>	<i>1.036</i>	<i>50</i>

FIG. 21

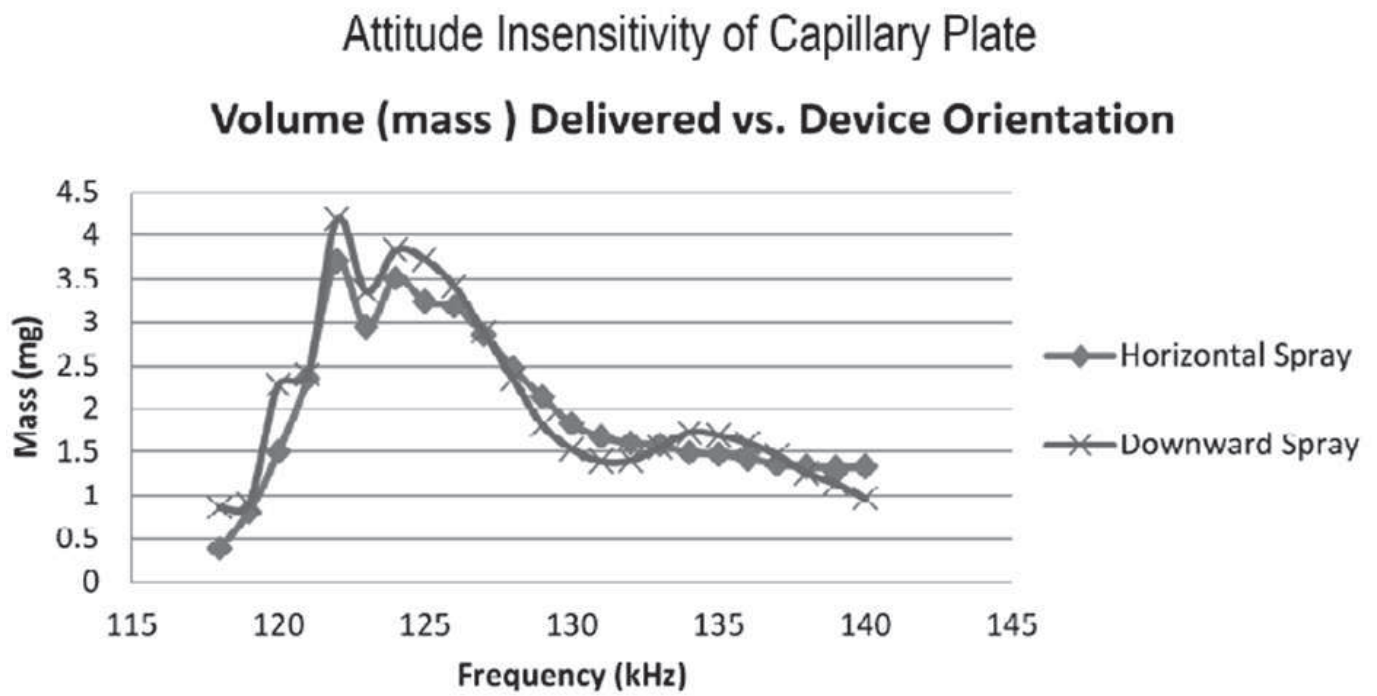


FIG. 22

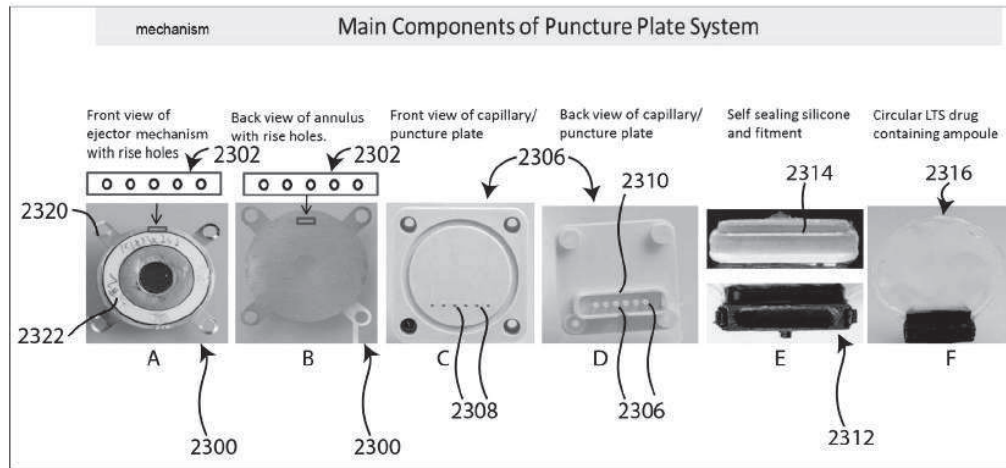


Fig.23

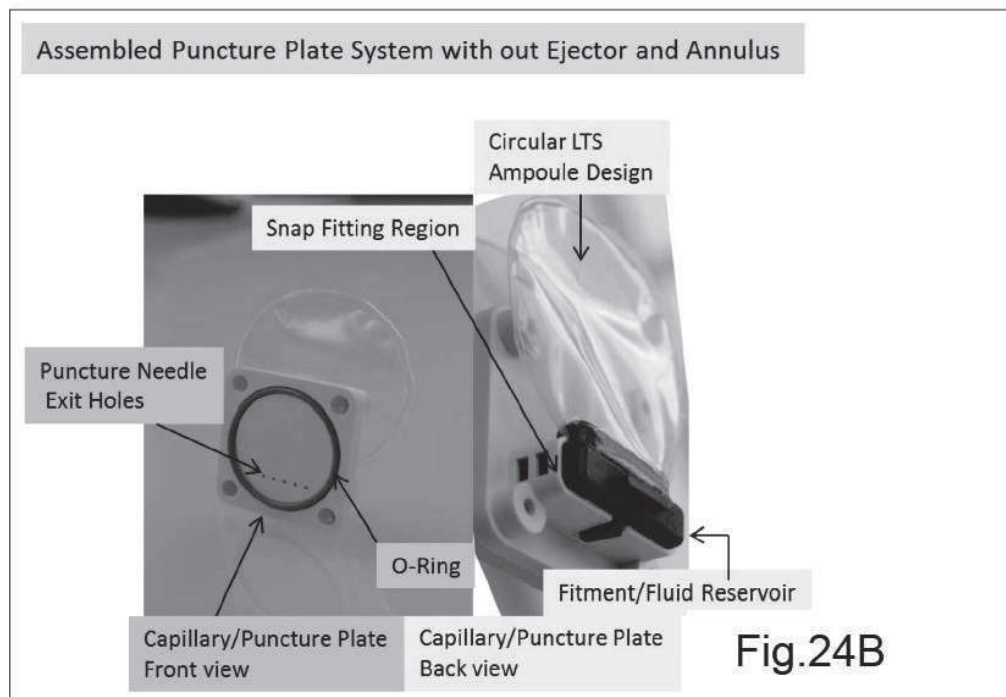


Fig.24A

Fig.24B

Capillary Rise Holes 10-50 microns in Diameter

Back View without Mesh

Front View with Piezoelectric Ring and Mesh

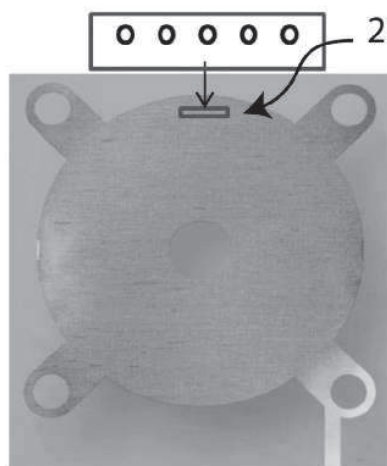


Fig.25A

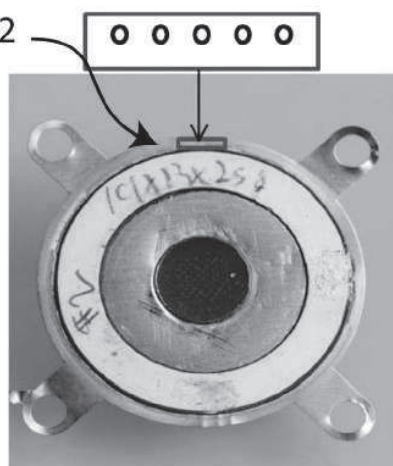


Fig.25B

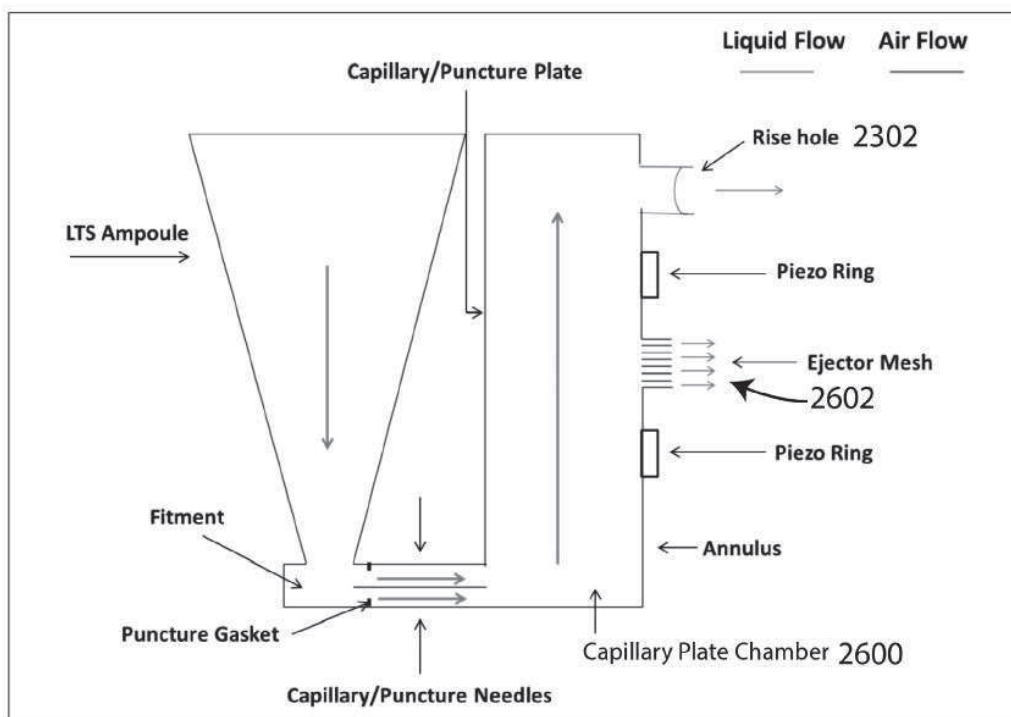


Fig.26

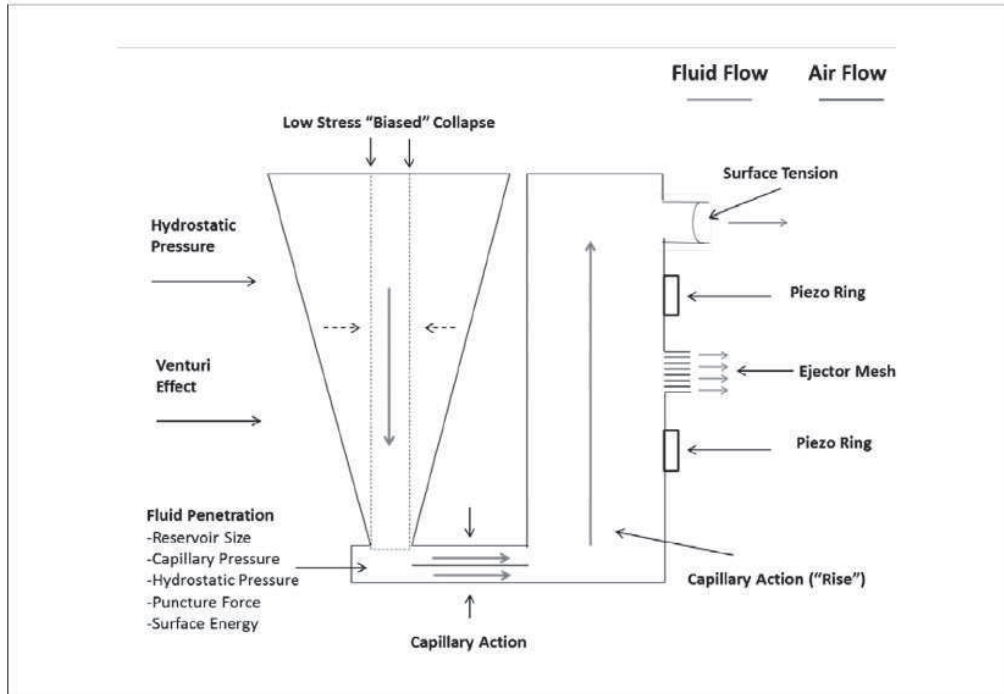
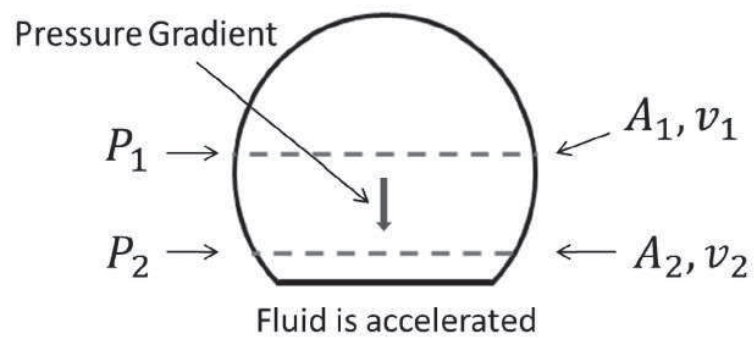


Fig.27

Bernoulli Equation for incompressible flows



$$p_1 - p_2 = \frac{\rho}{2} (v_2^2 - v_1^2)$$

Fig.28

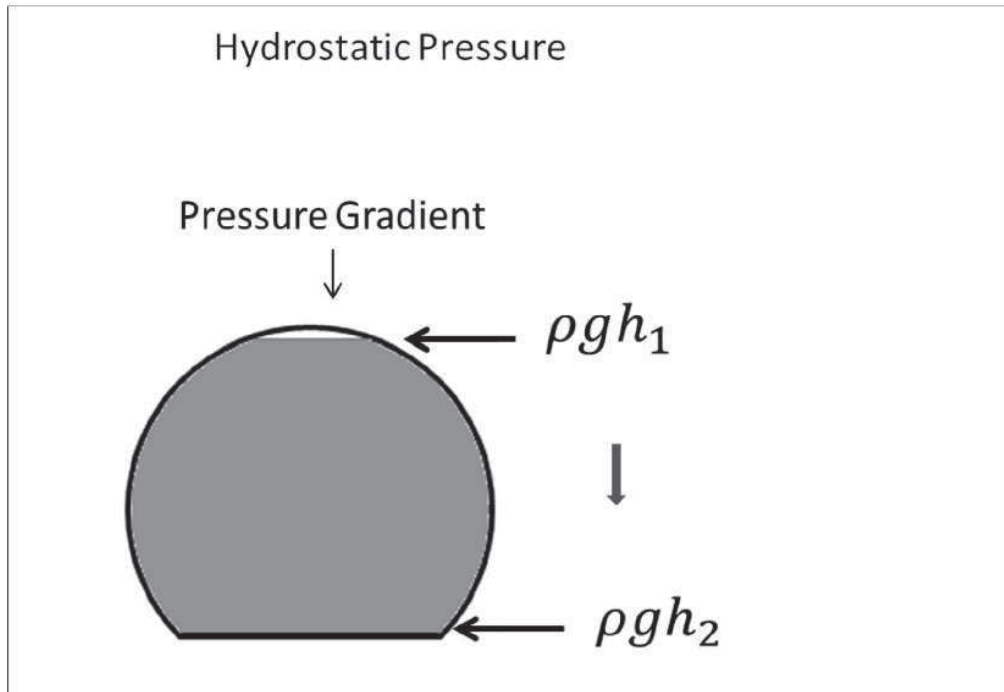


Fig.29

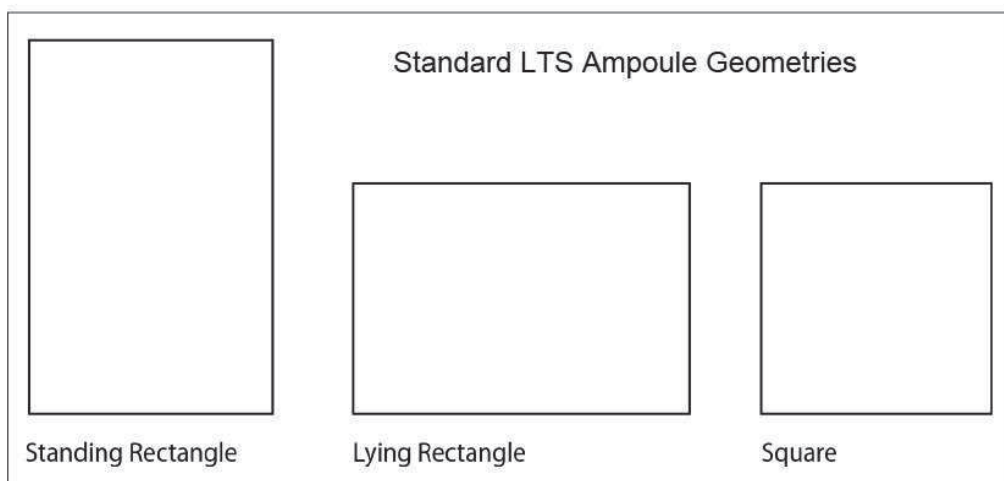
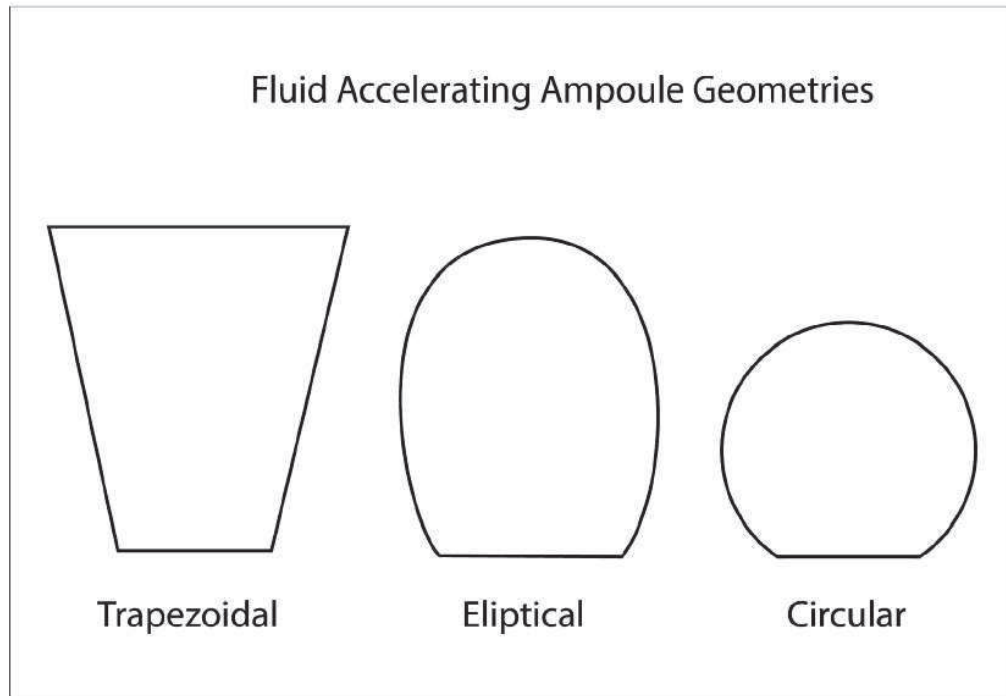
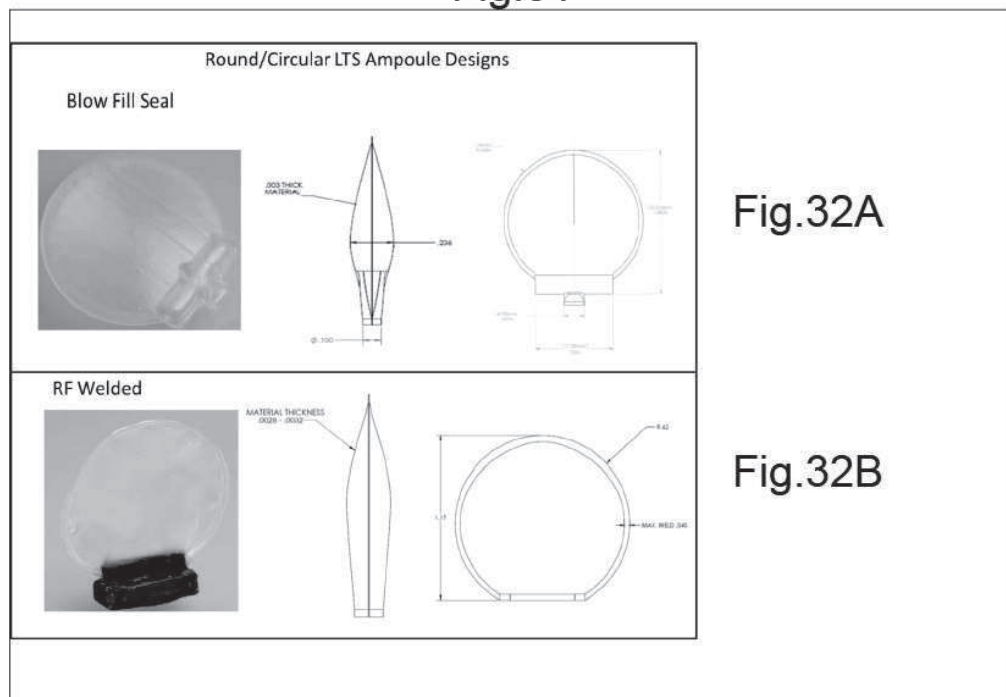


Fig.30

**Fig.31****Fig.32A****Fig.32B**

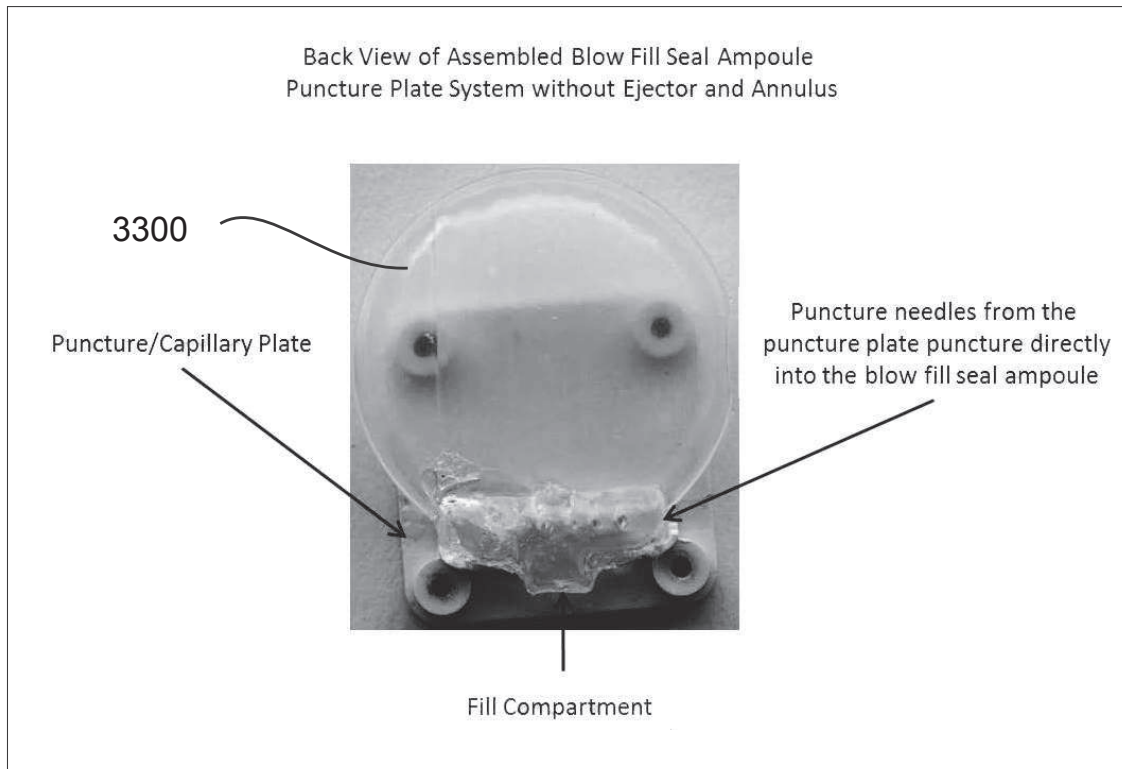


FIG. 33

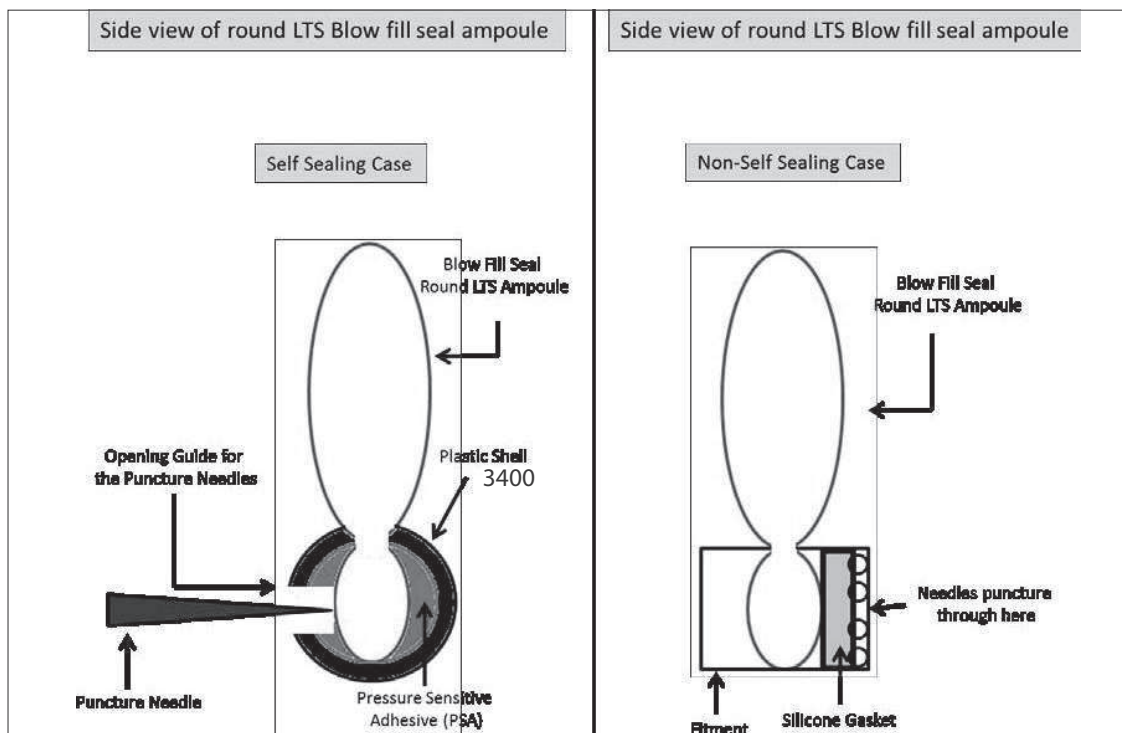
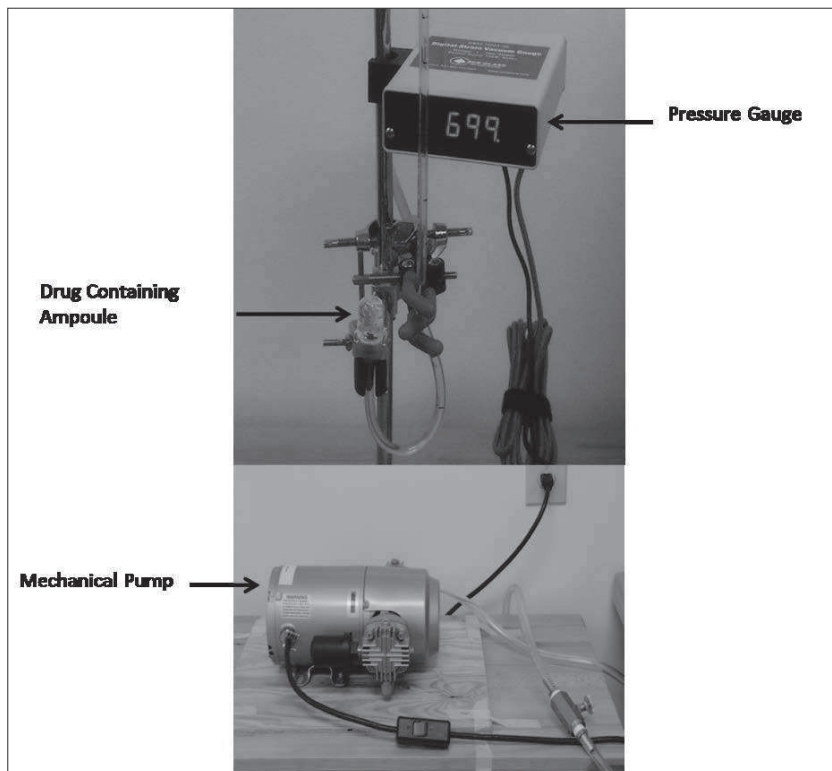
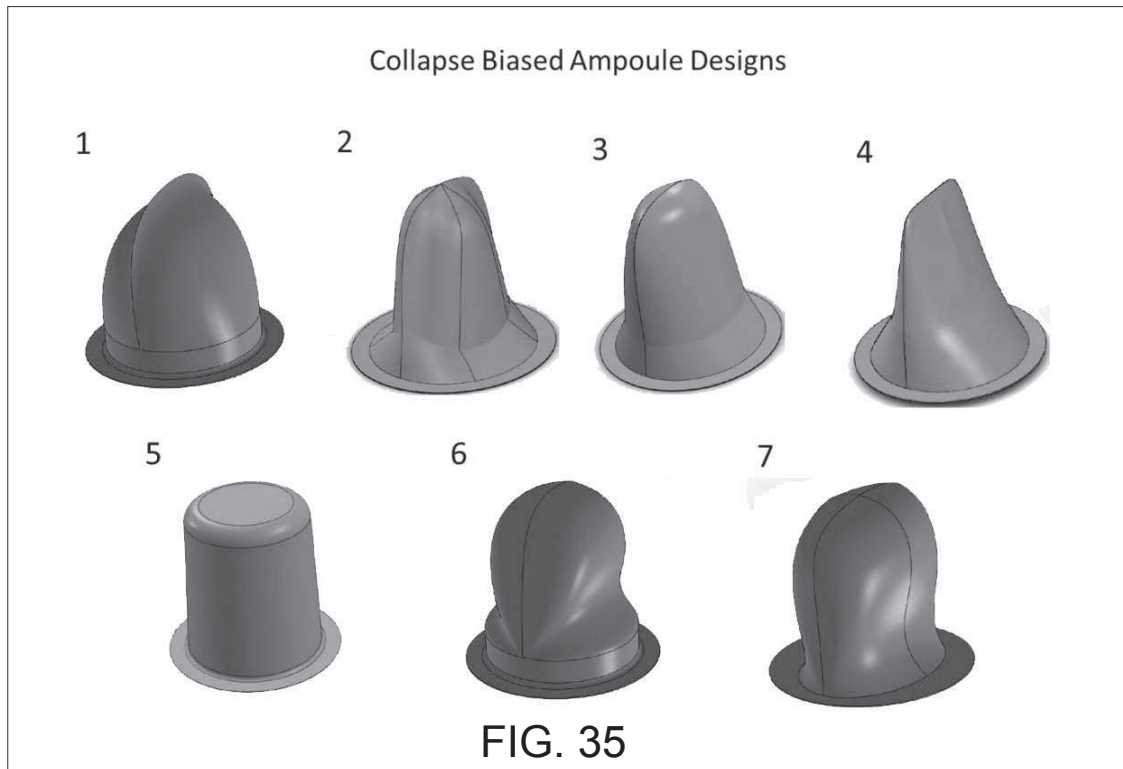


FIG. 34A

FIG. 34B



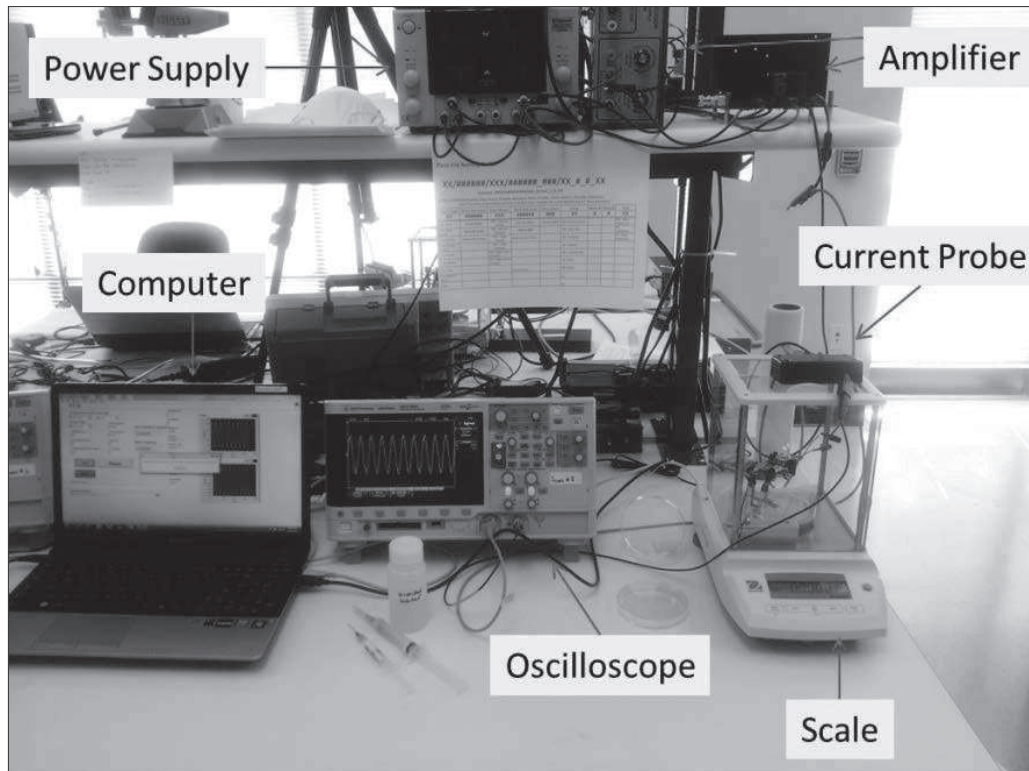


FIG. 37

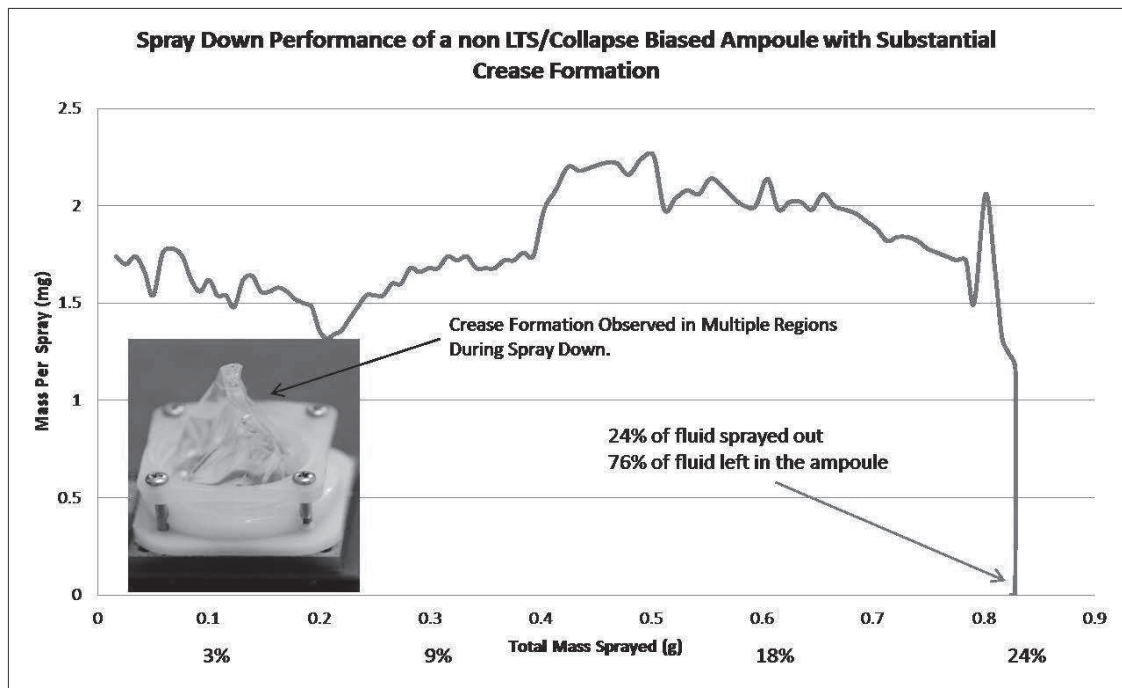


FIG. 38

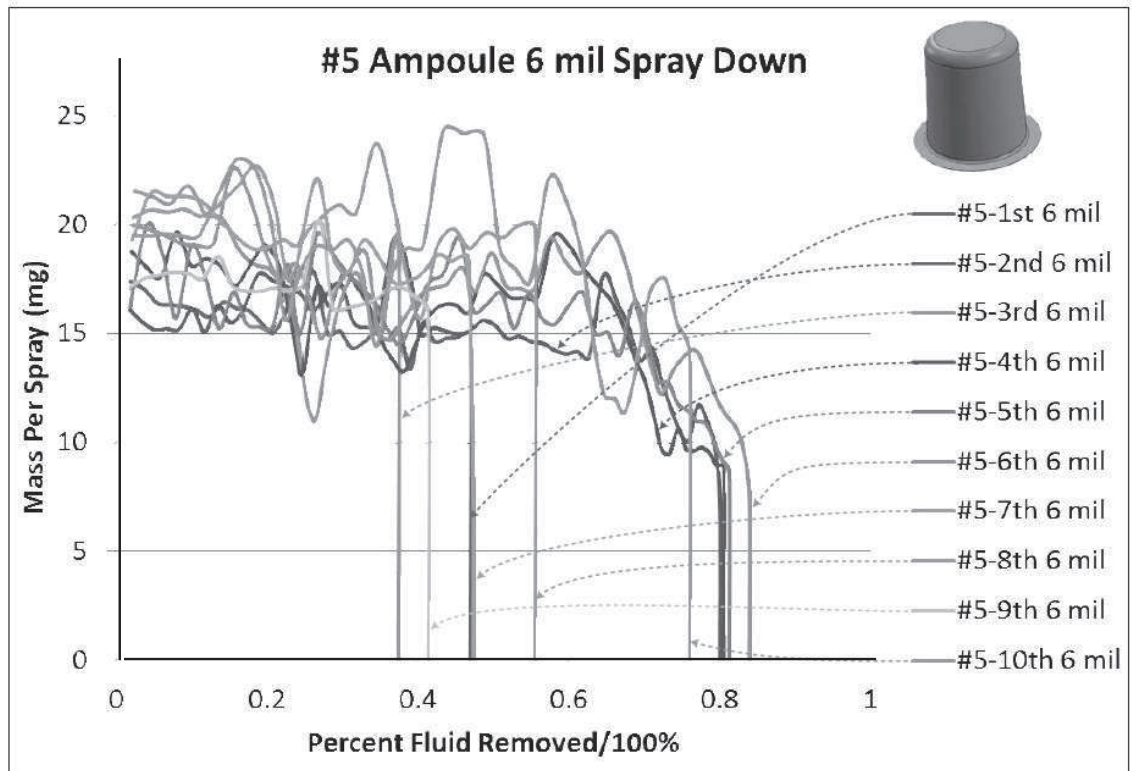


FIG. 39

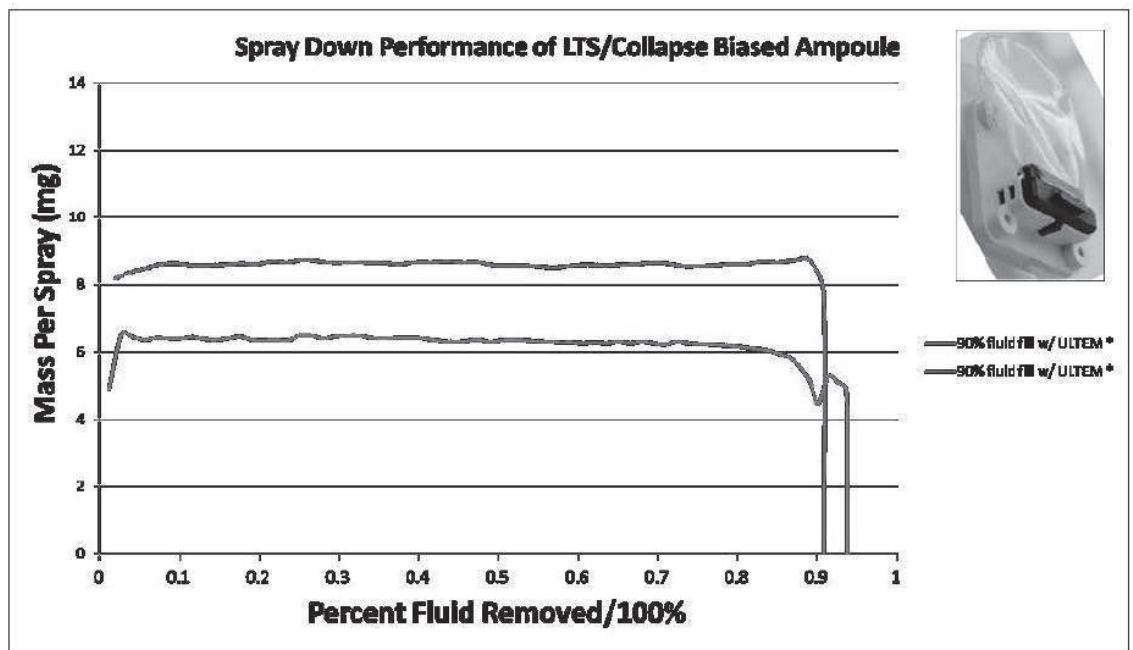


FIG. 40

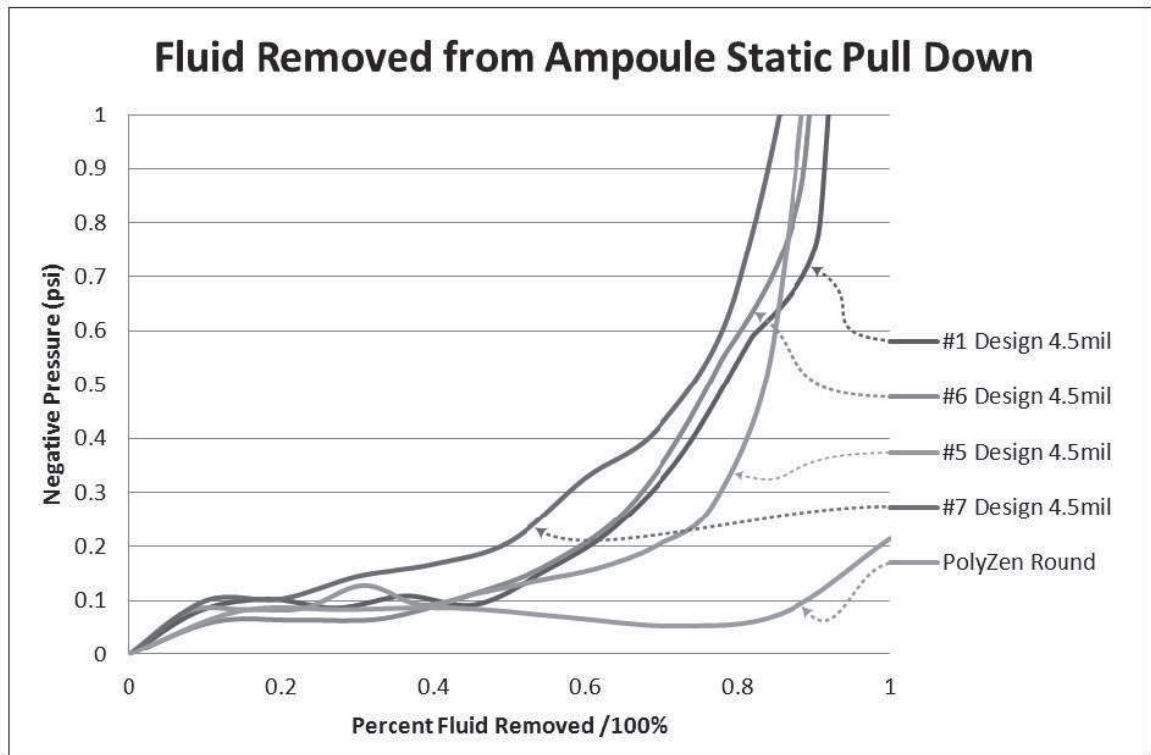


FIG. 41

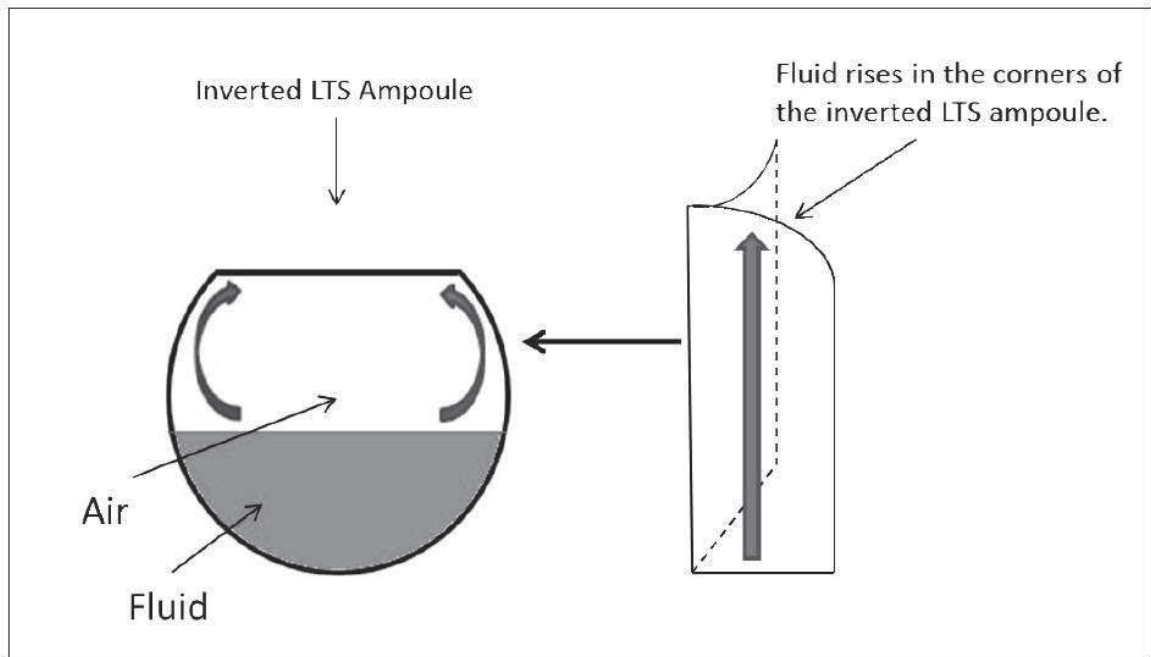


FIG. 42

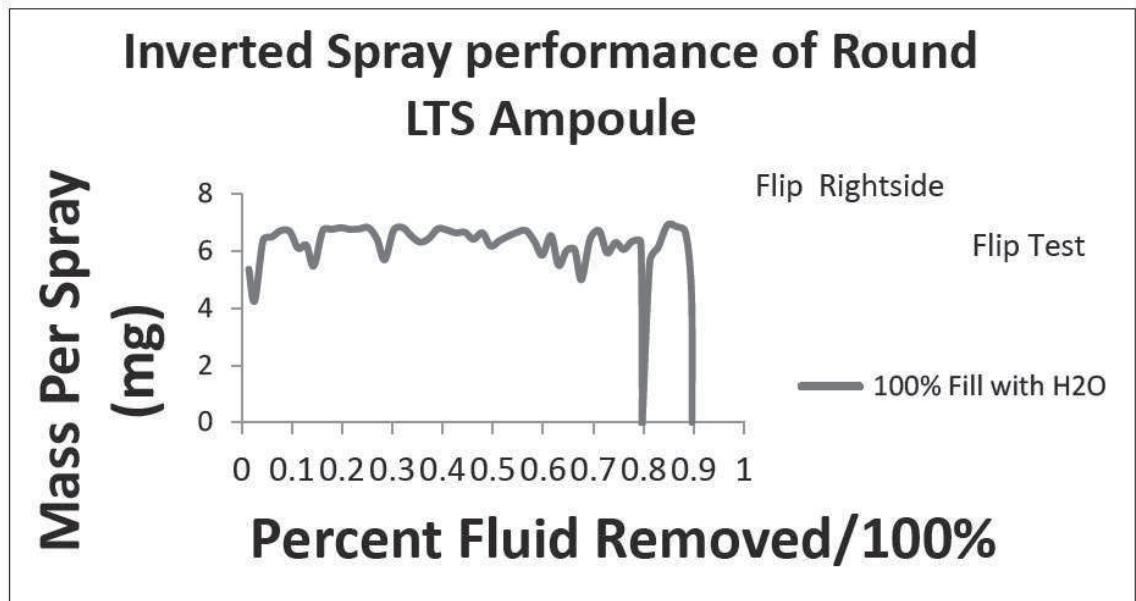


FIG. 43

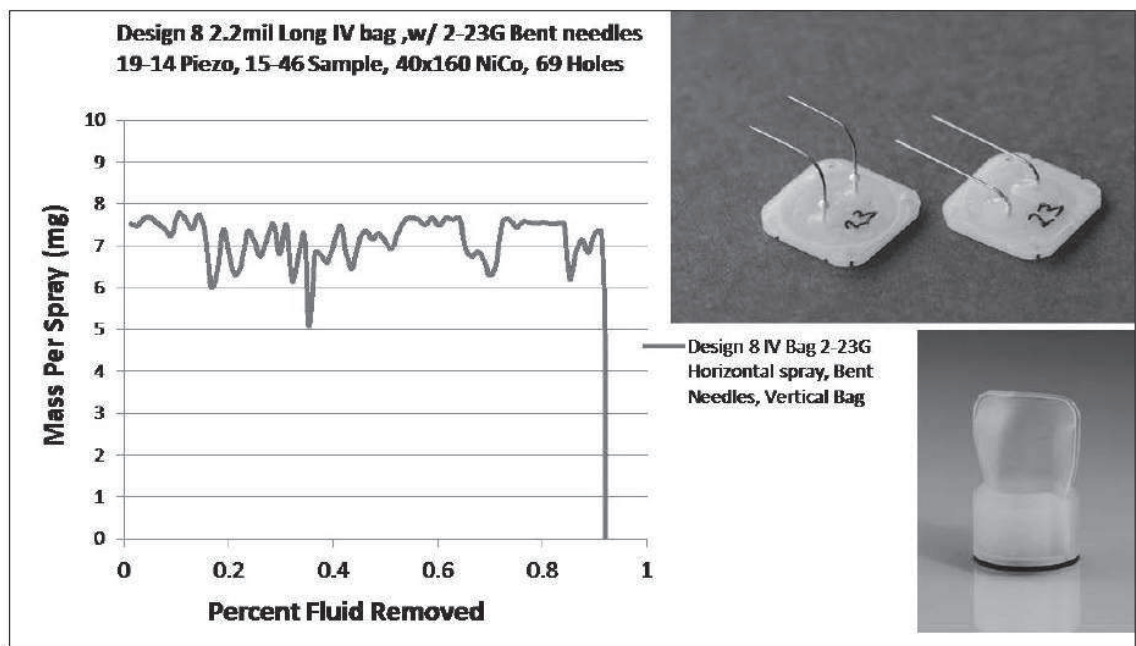


FIG. 44

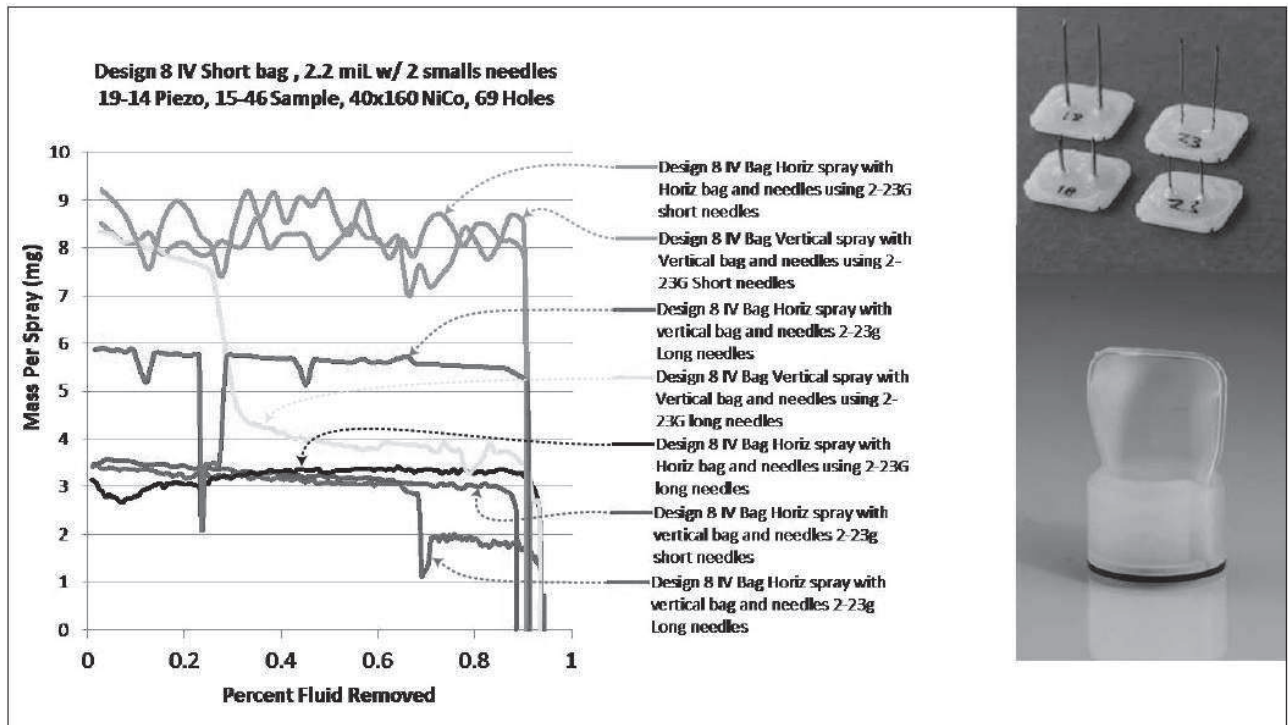


FIG. 45

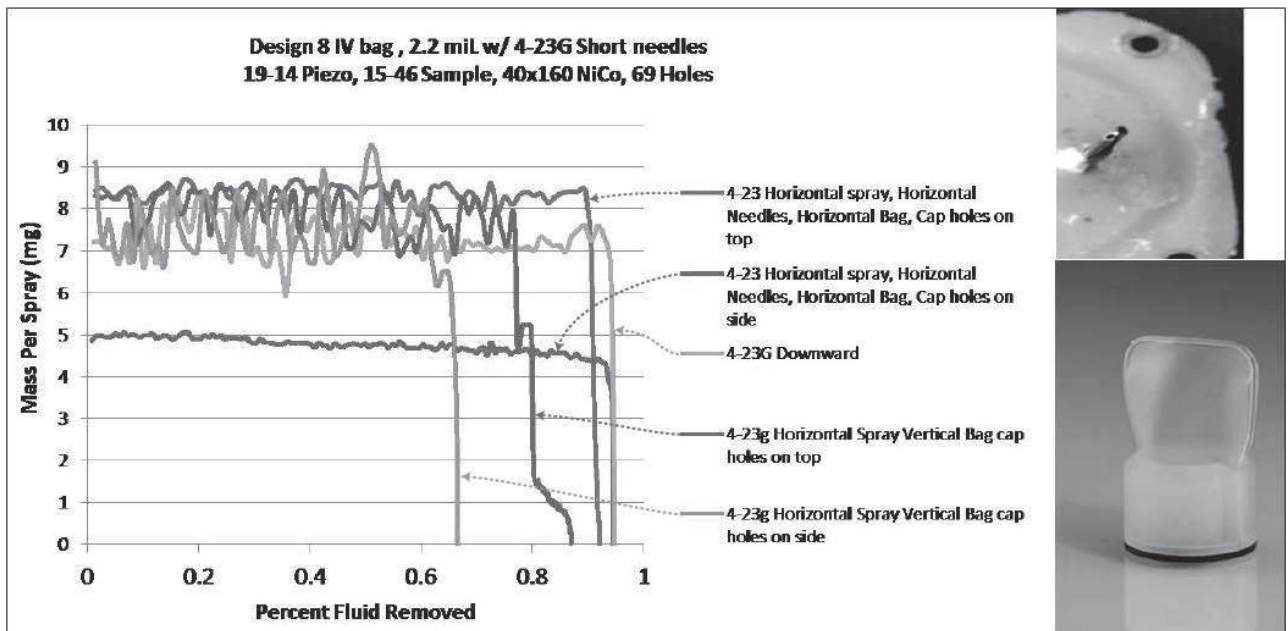


FIG. 46

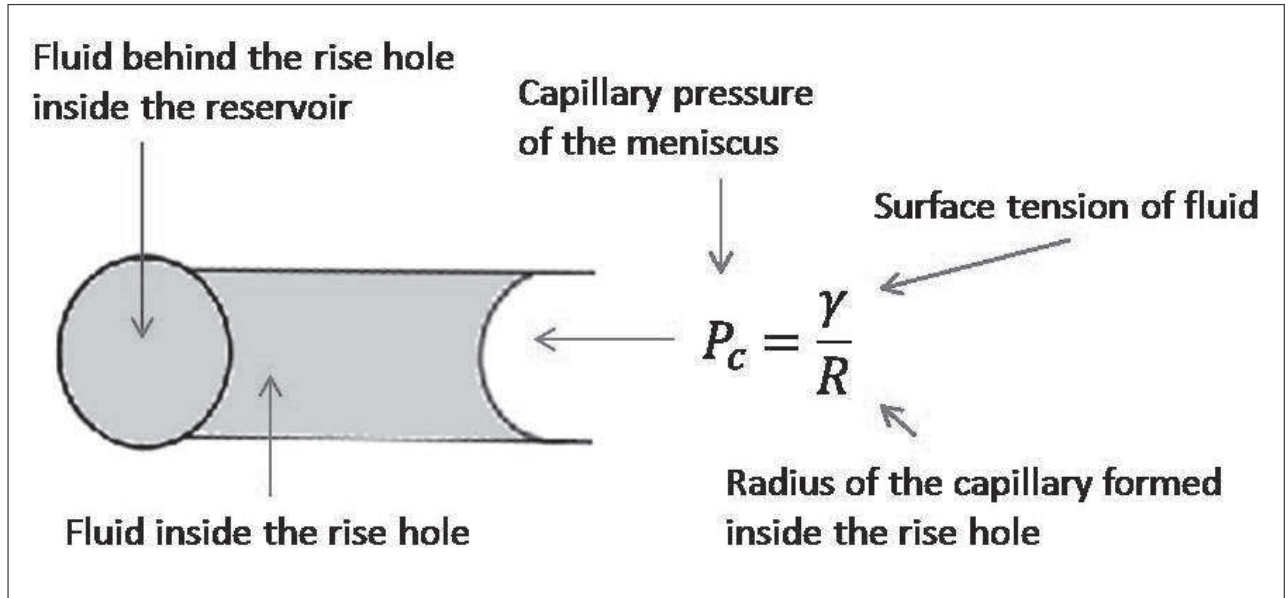


FIG. 47

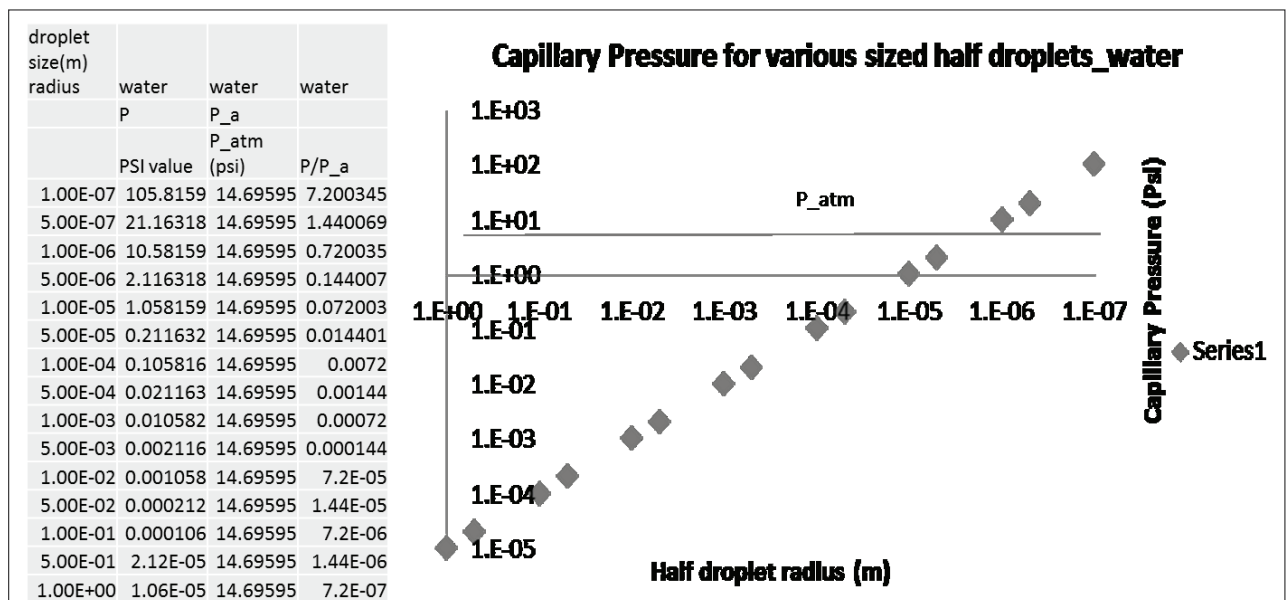


FIG. 48

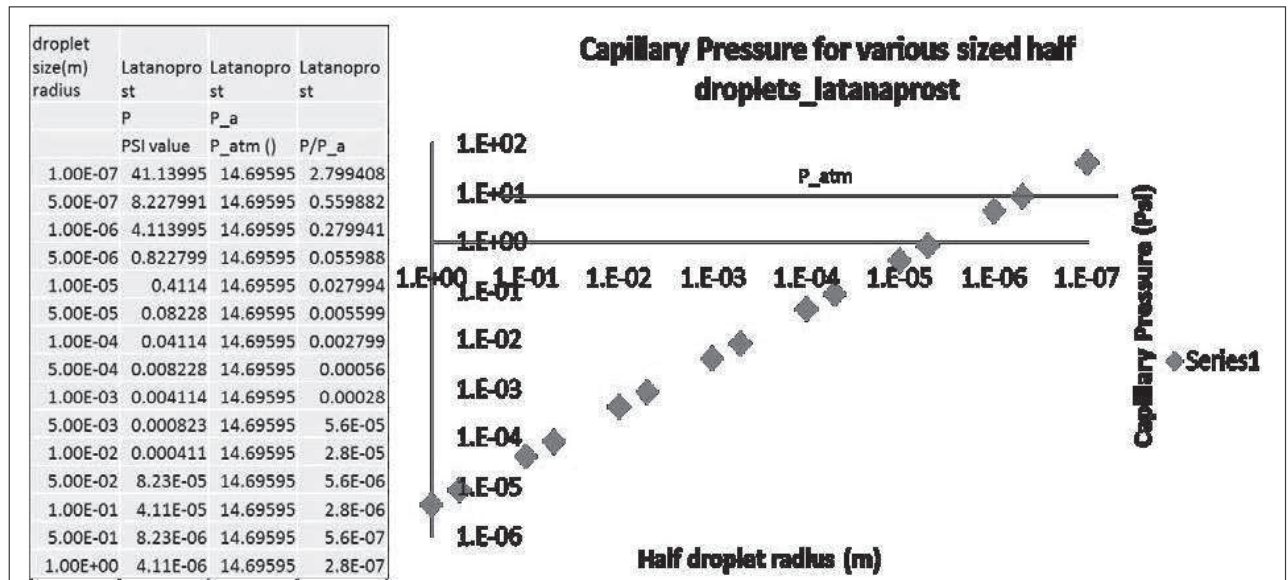


FIG. 49

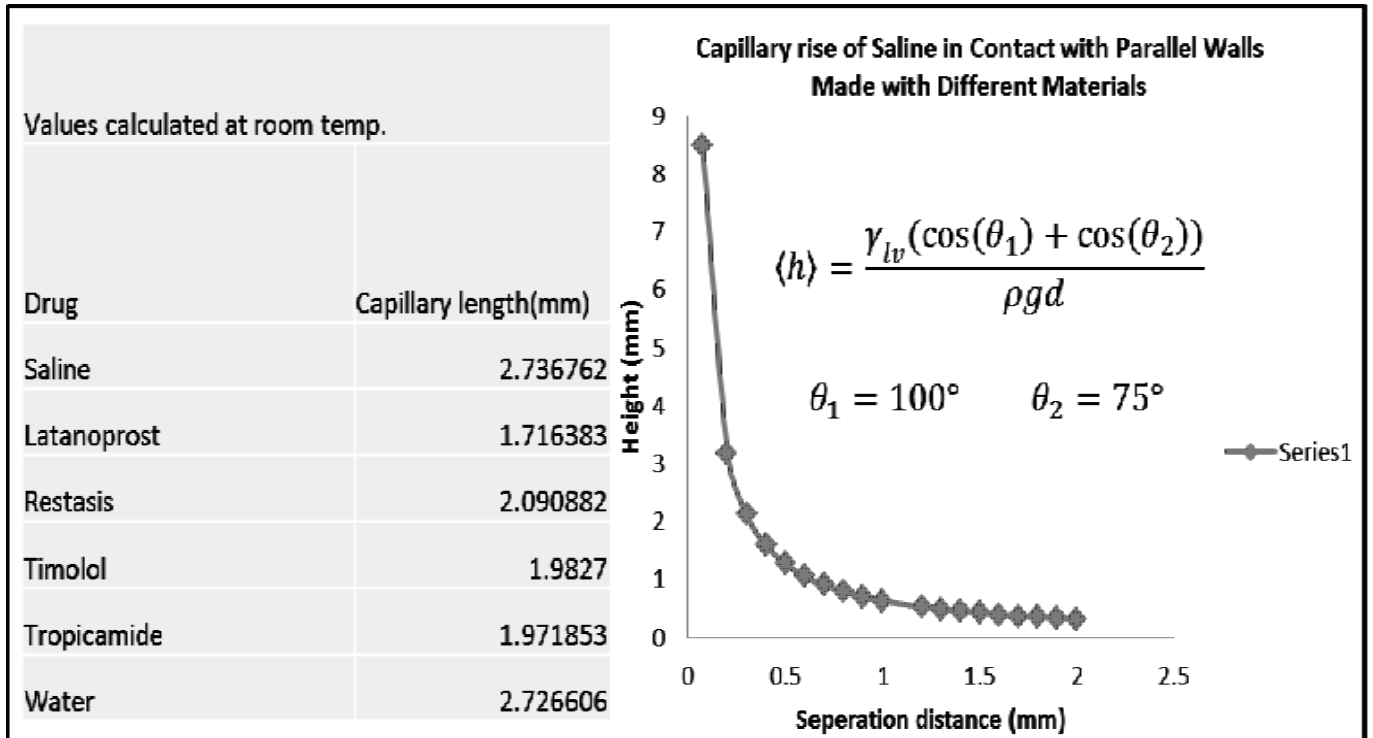


FIG. 50

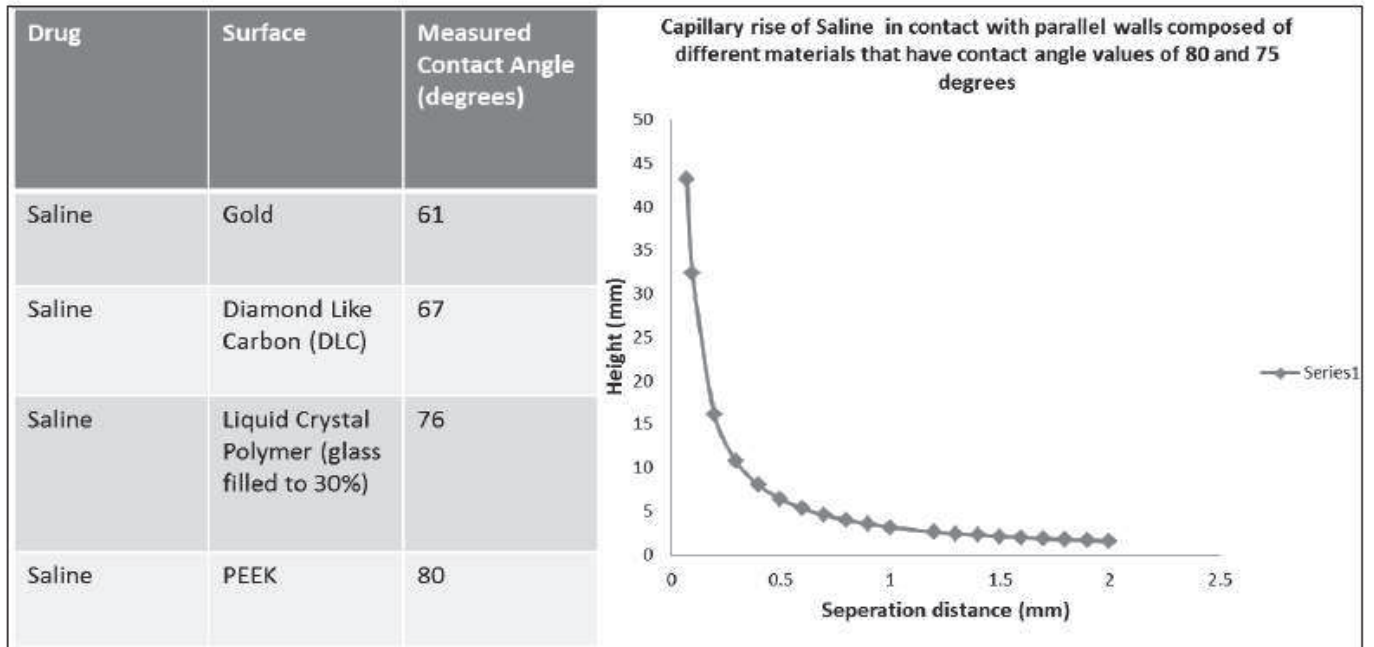


FIG. 51

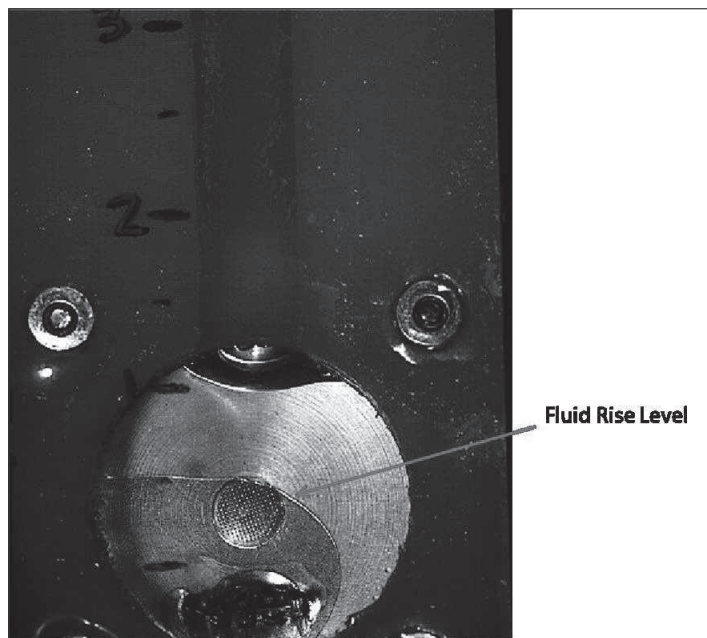


FIG. 52

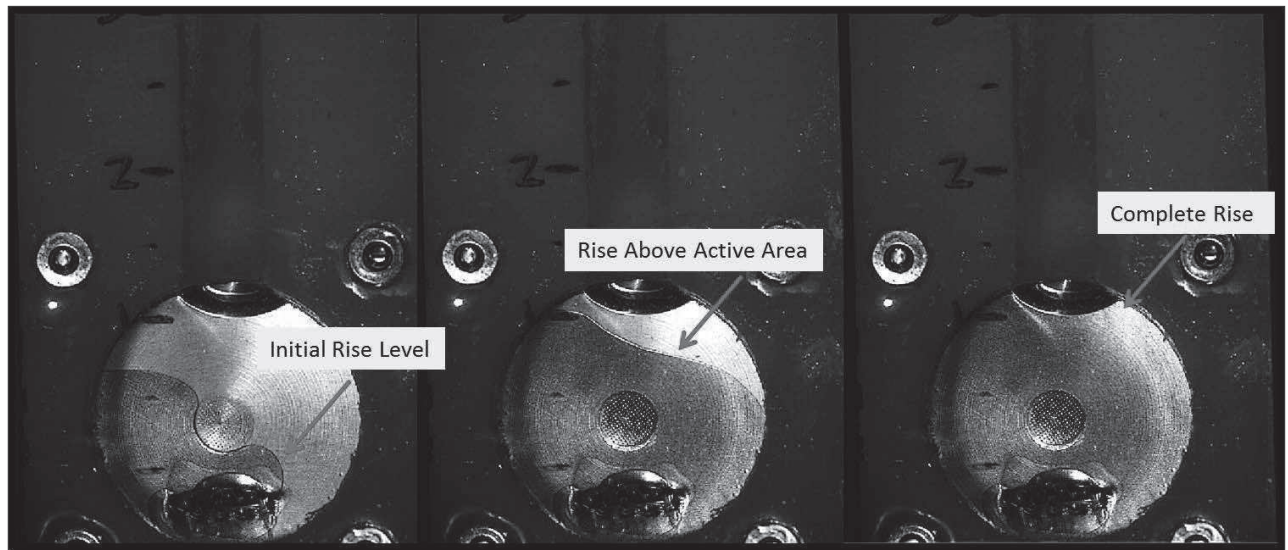


FIG. 53

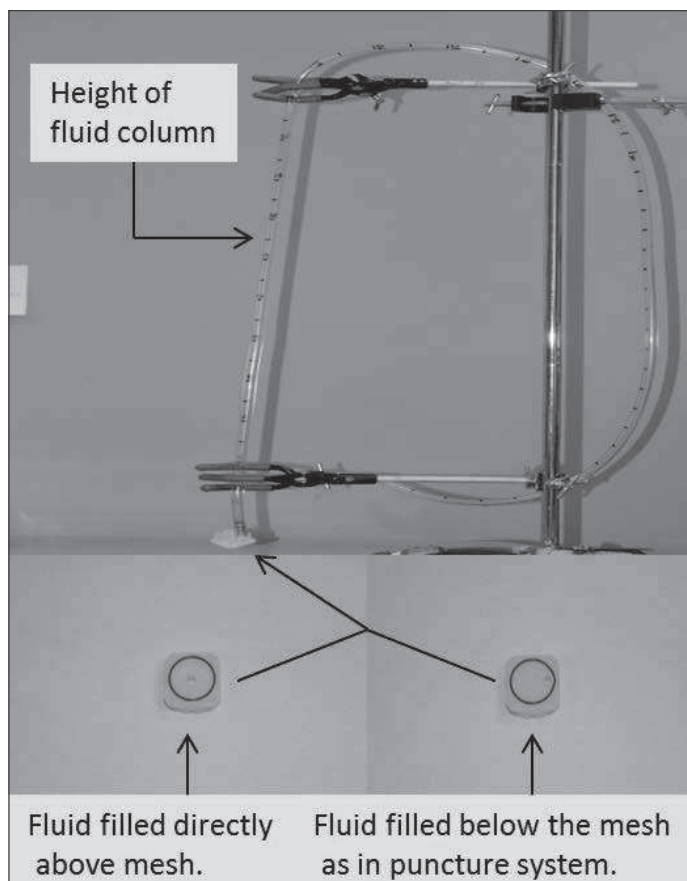


FIG. 54

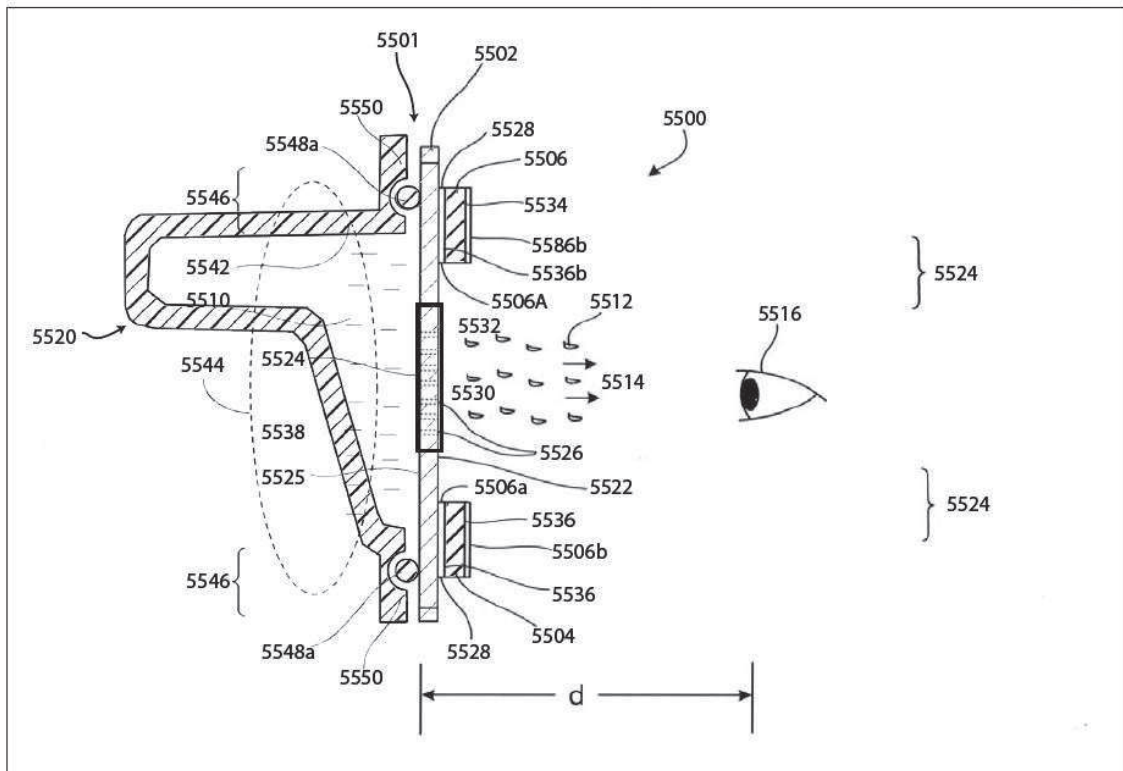


FIG. 55A

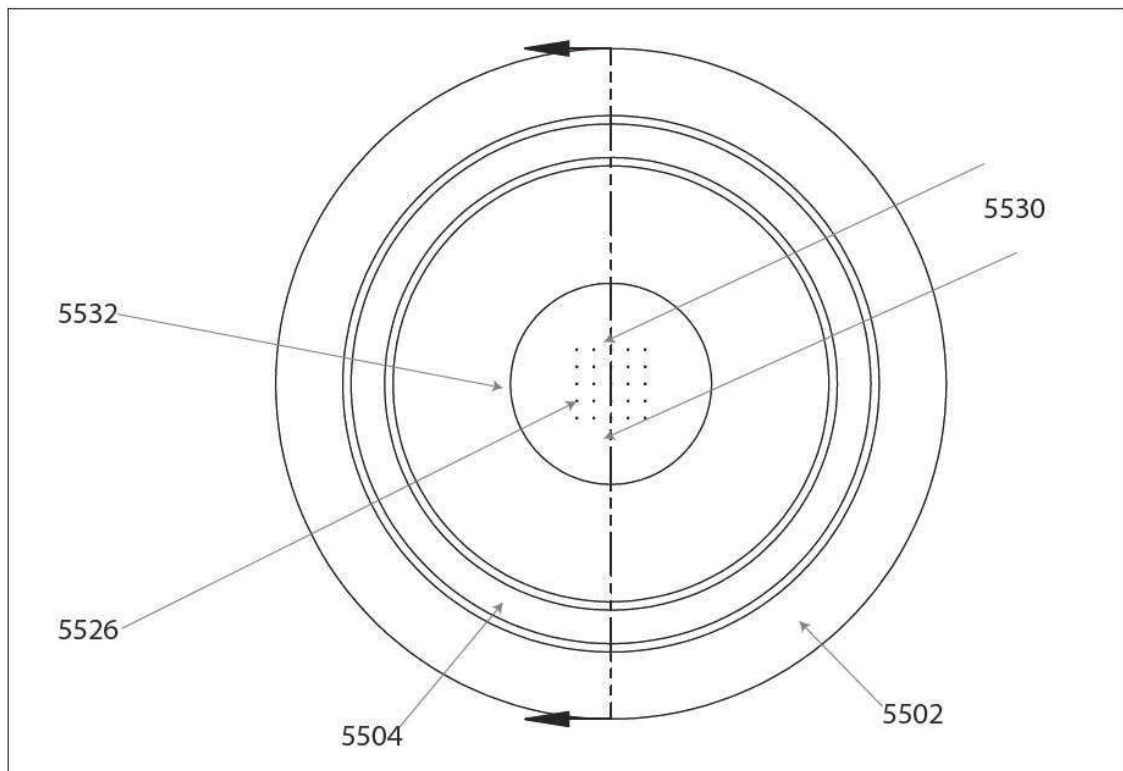


FIG. 55B

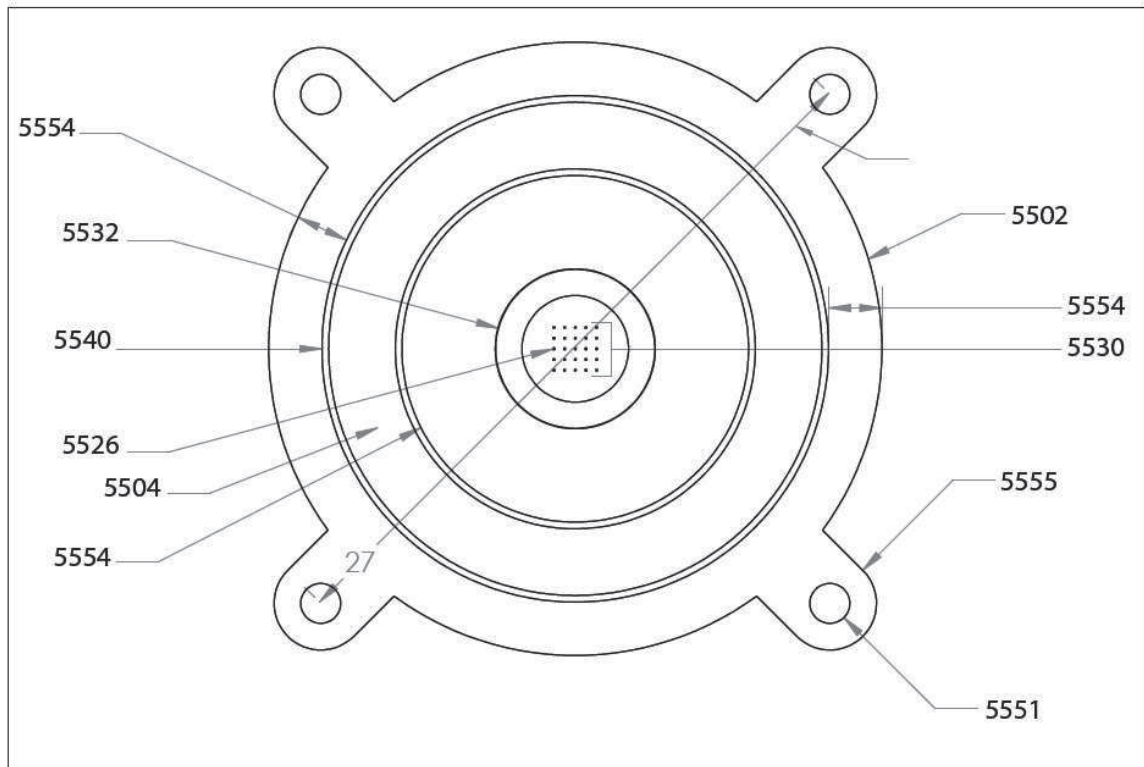


FIG. 55C

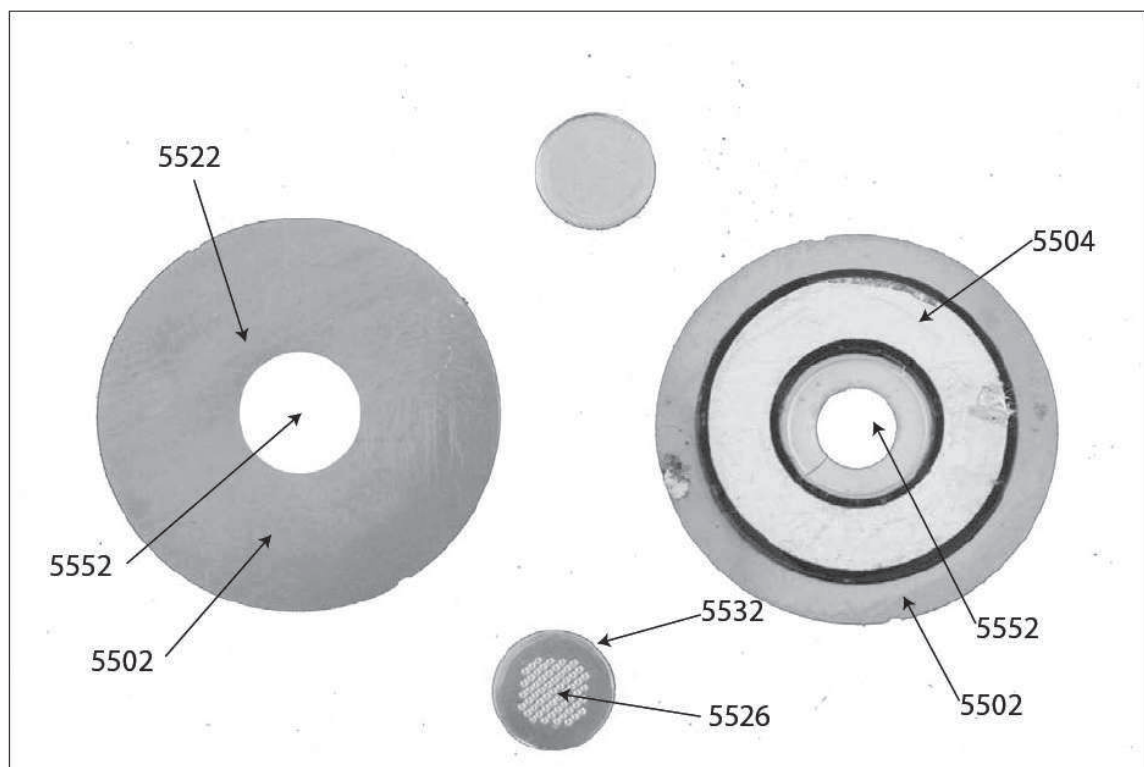


FIG. 55D

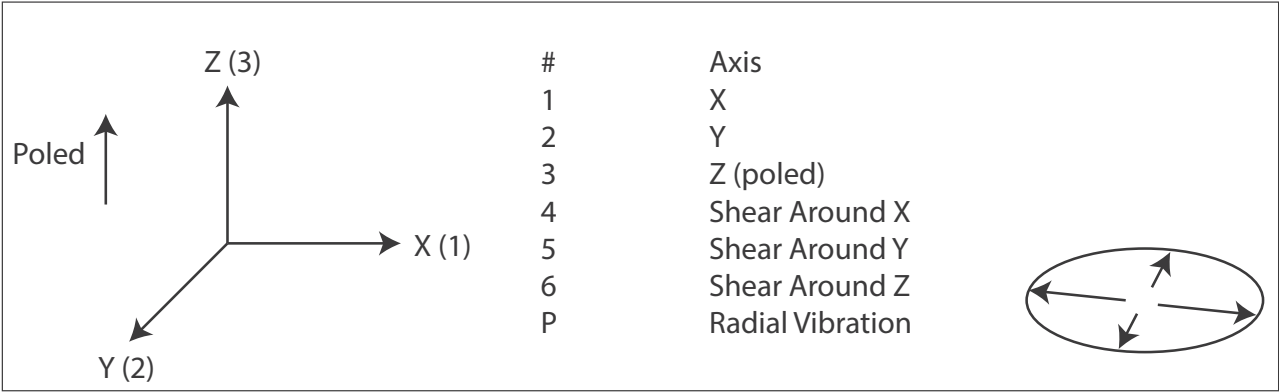


FIG. 56

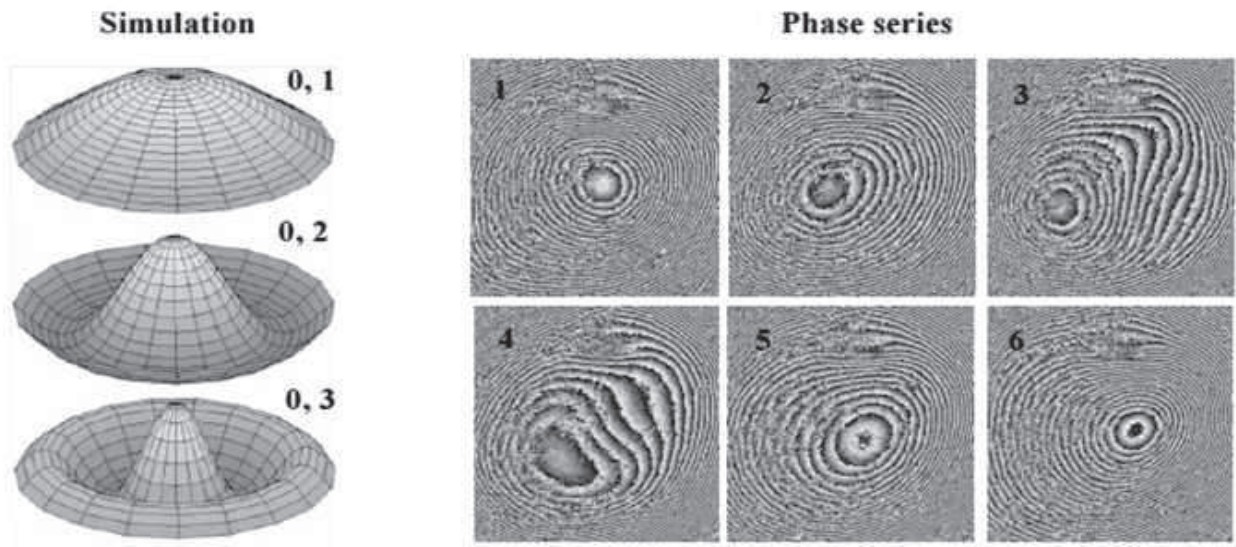


FIG. 57

PZT-BaTiO3 Edge Mount Comparison

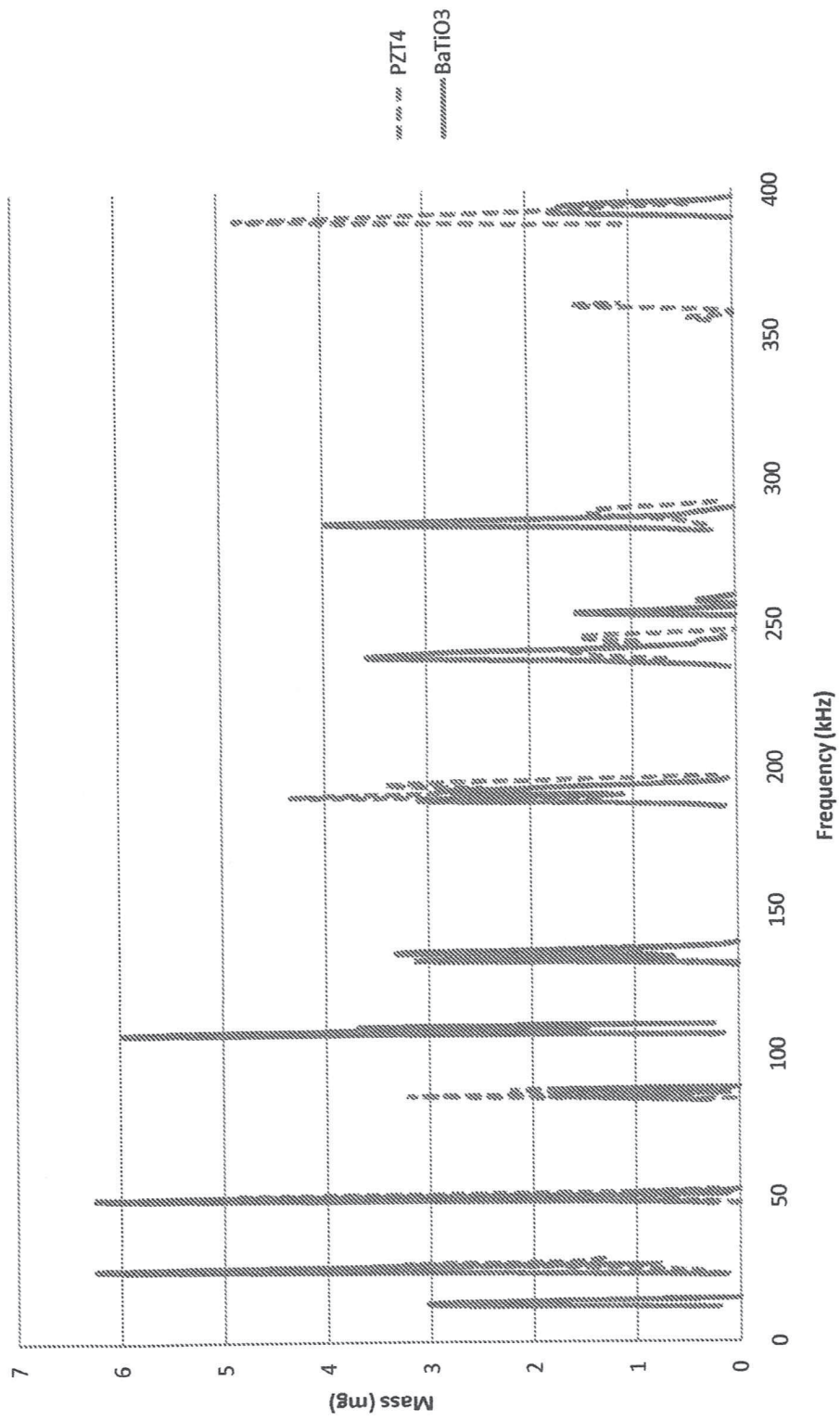


FIG. 58

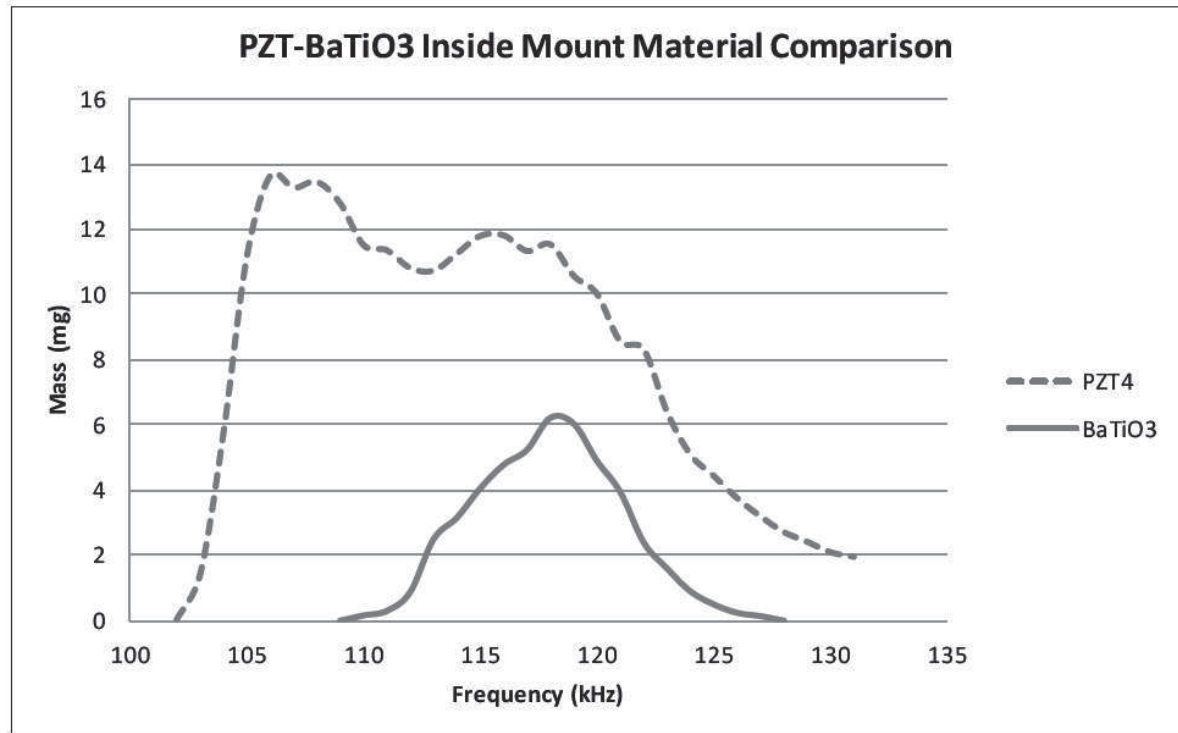


FIG. 59

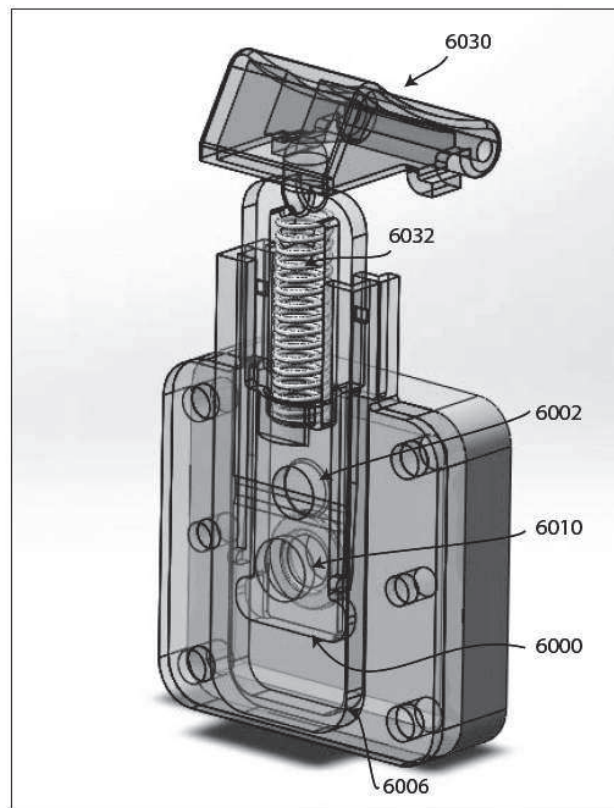


FIG. 60

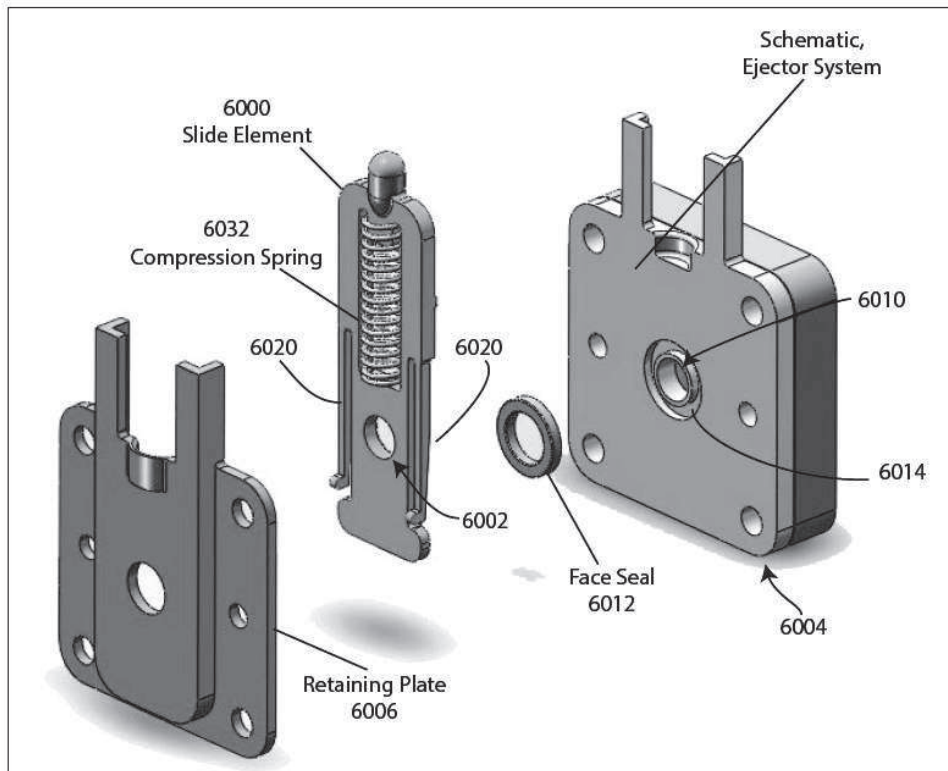


FIG. 61

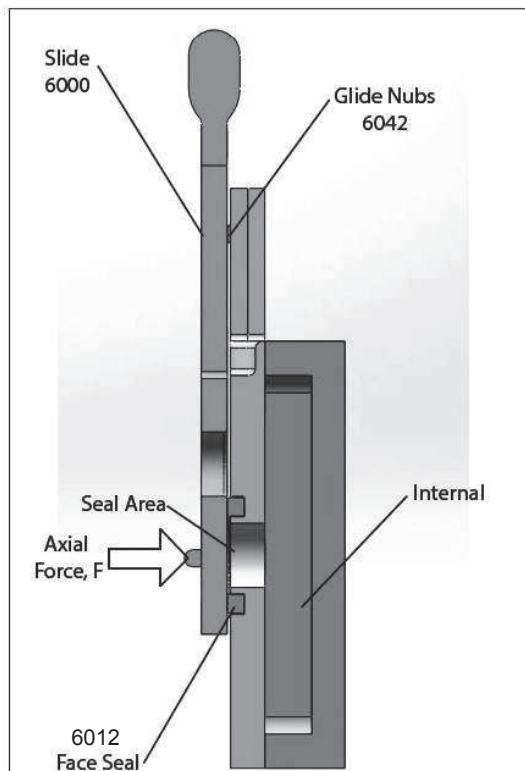


FIG. 62

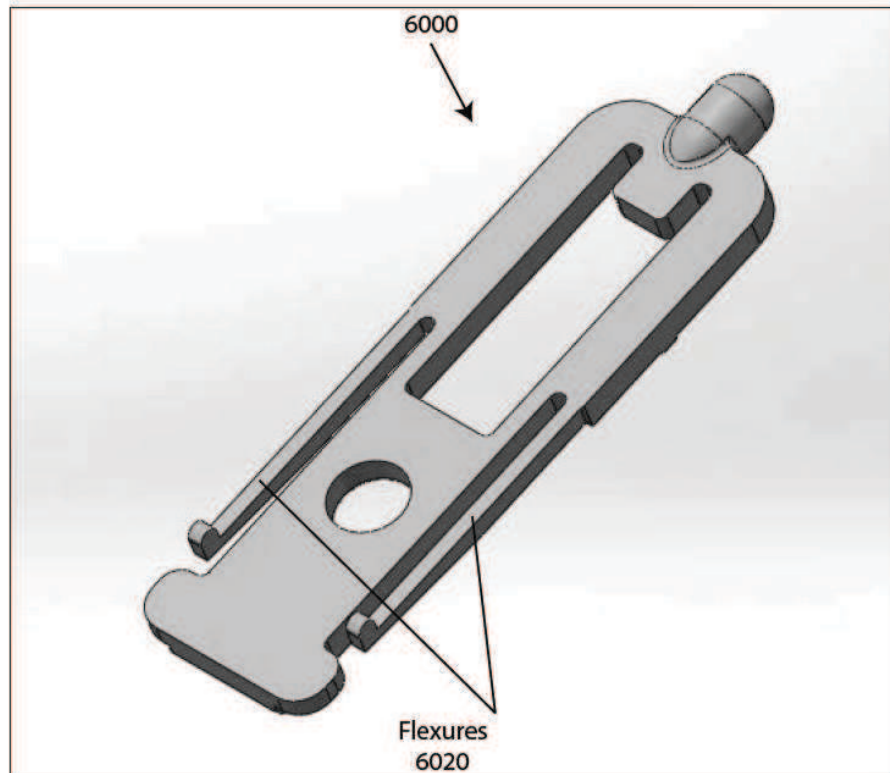


FIG. 63

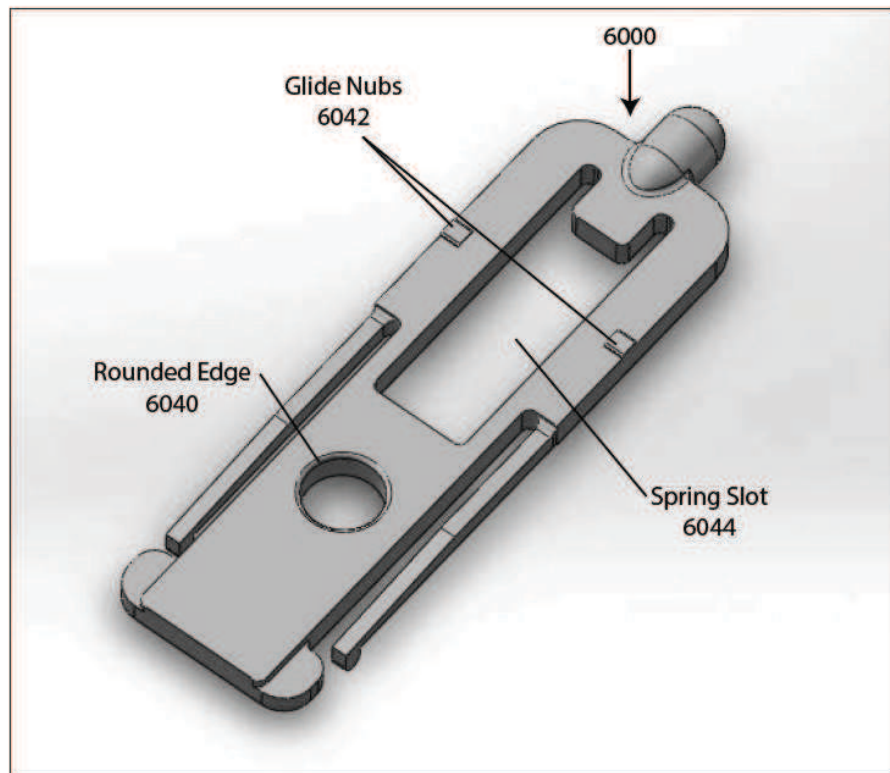


FIG. 64

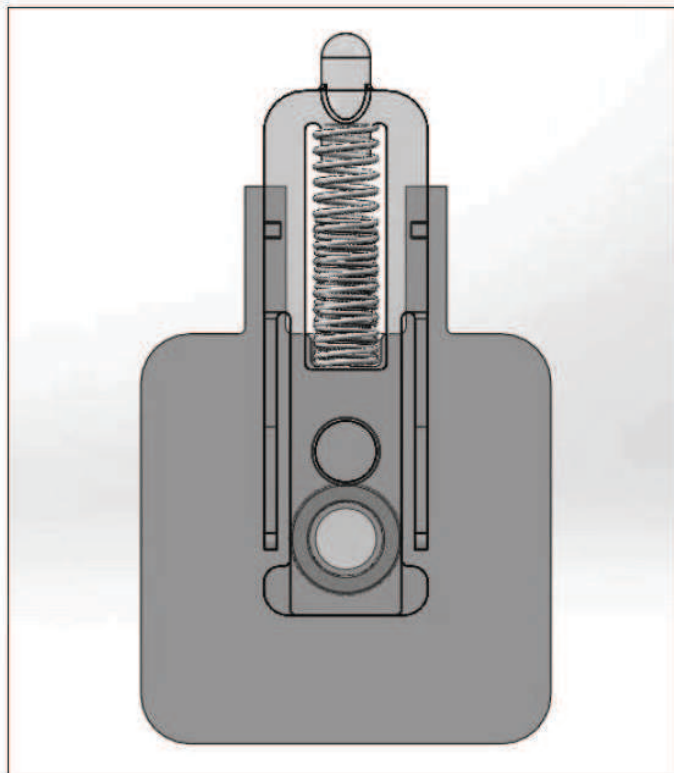


FIG. 65

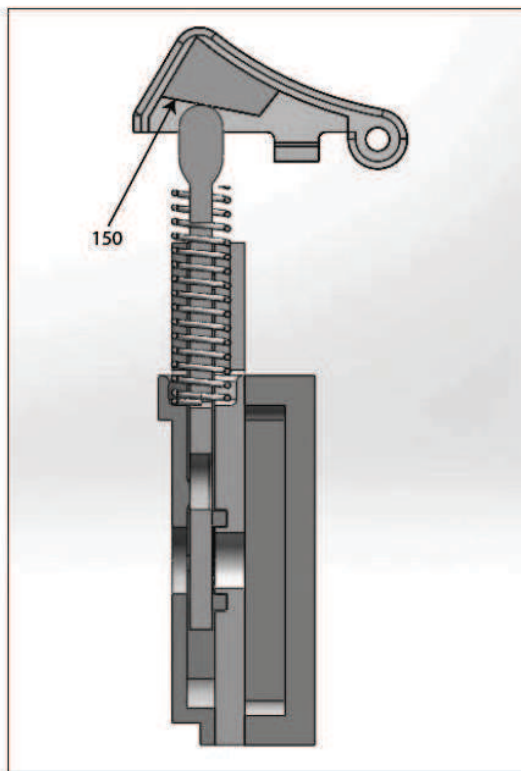


FIG. 66

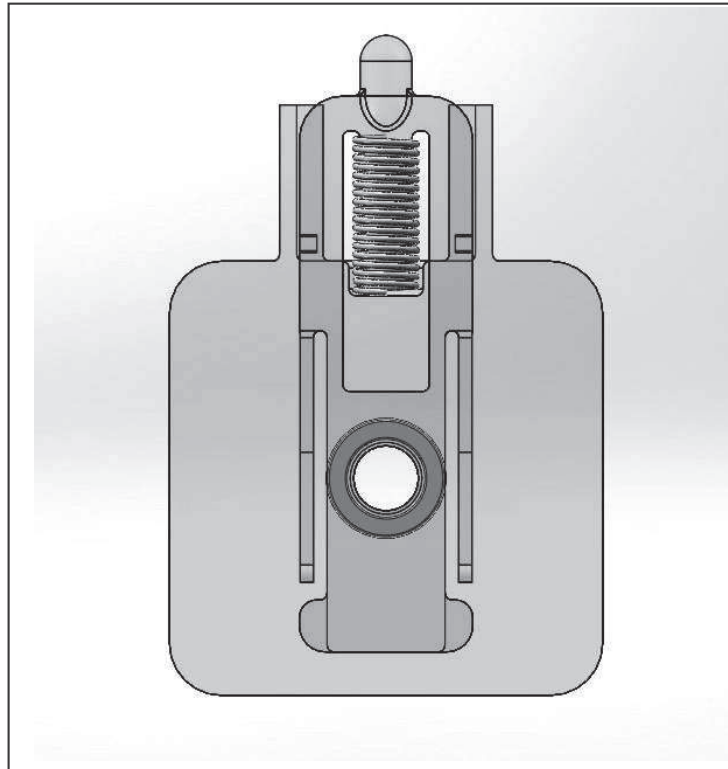


FIG. 67

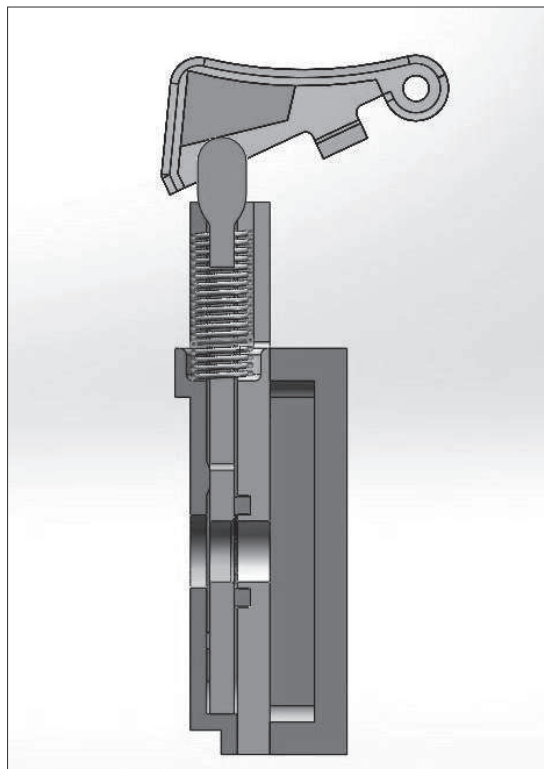


FIG. 68



Fig.69A

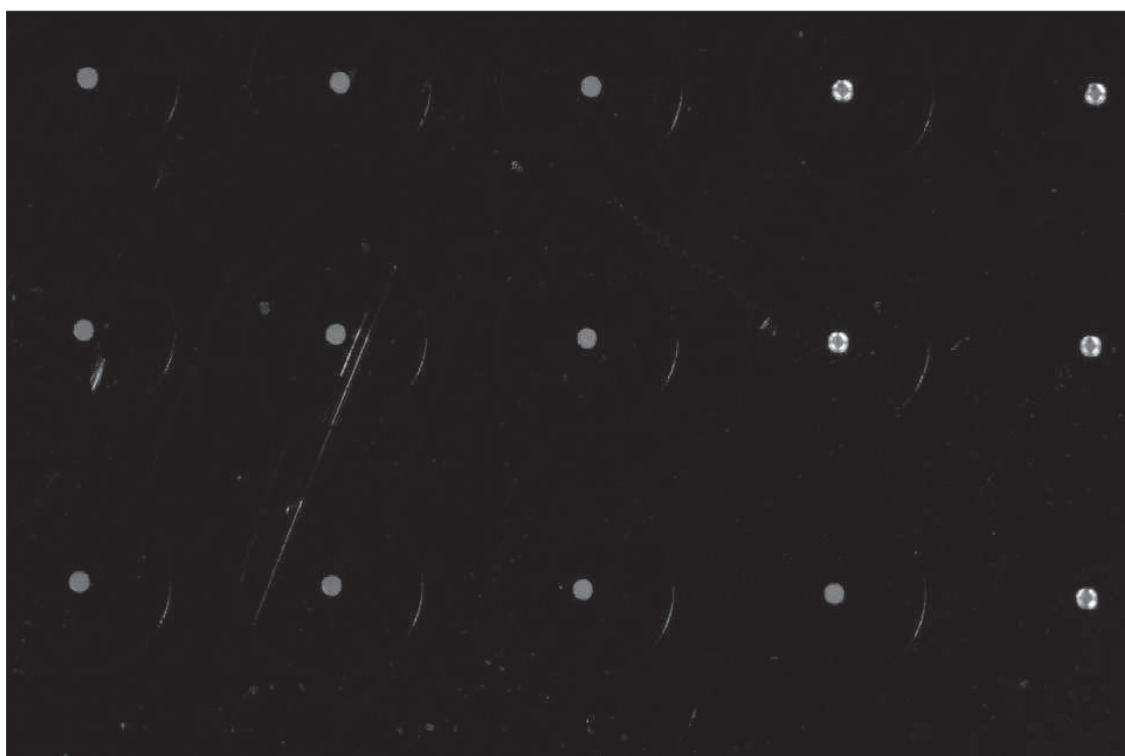


Fig.69B



Fig.69C

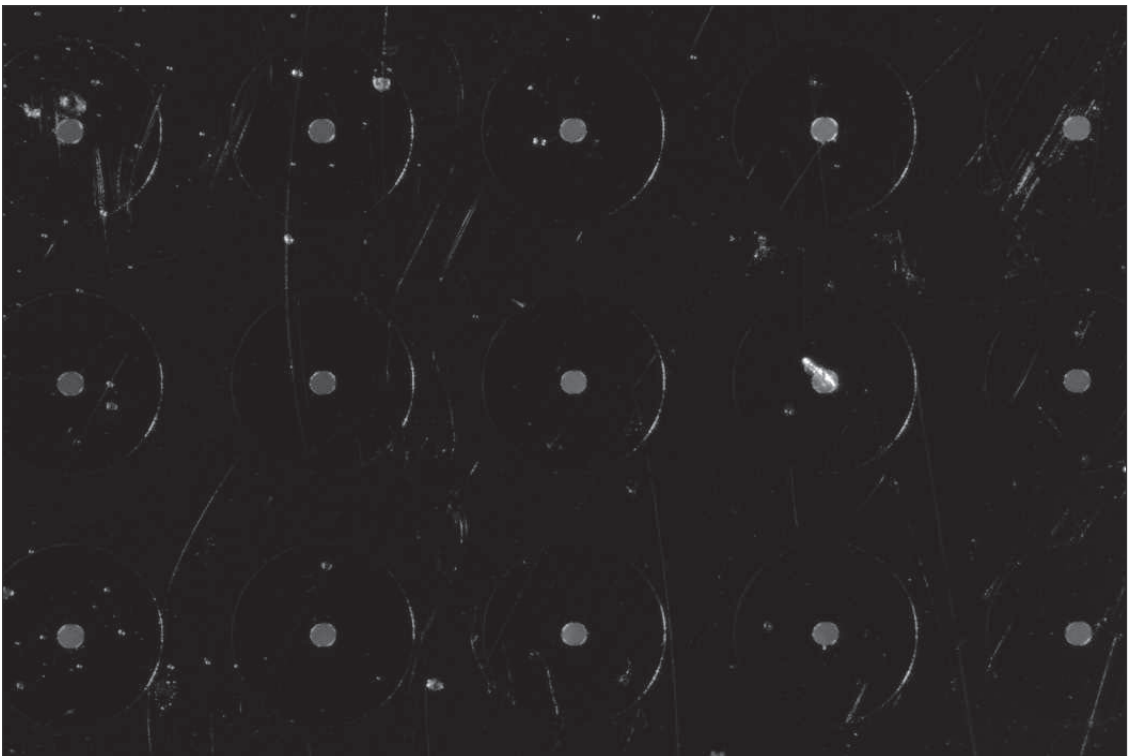


Fig.70A

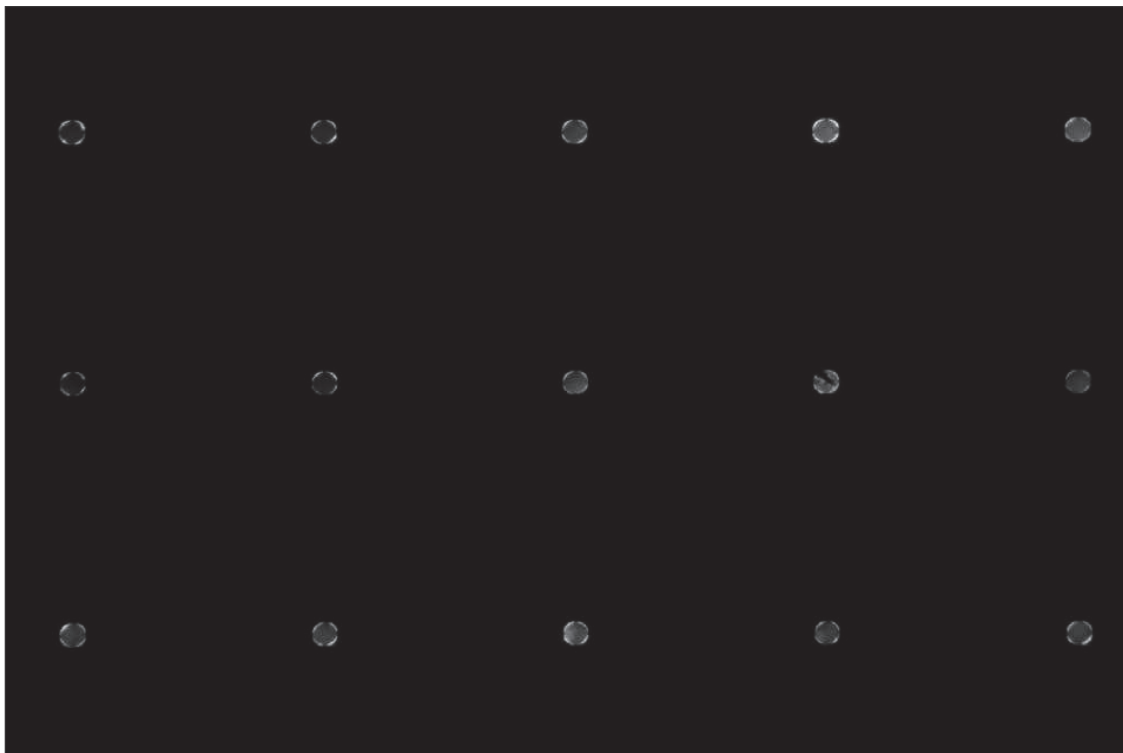


Fig.70B

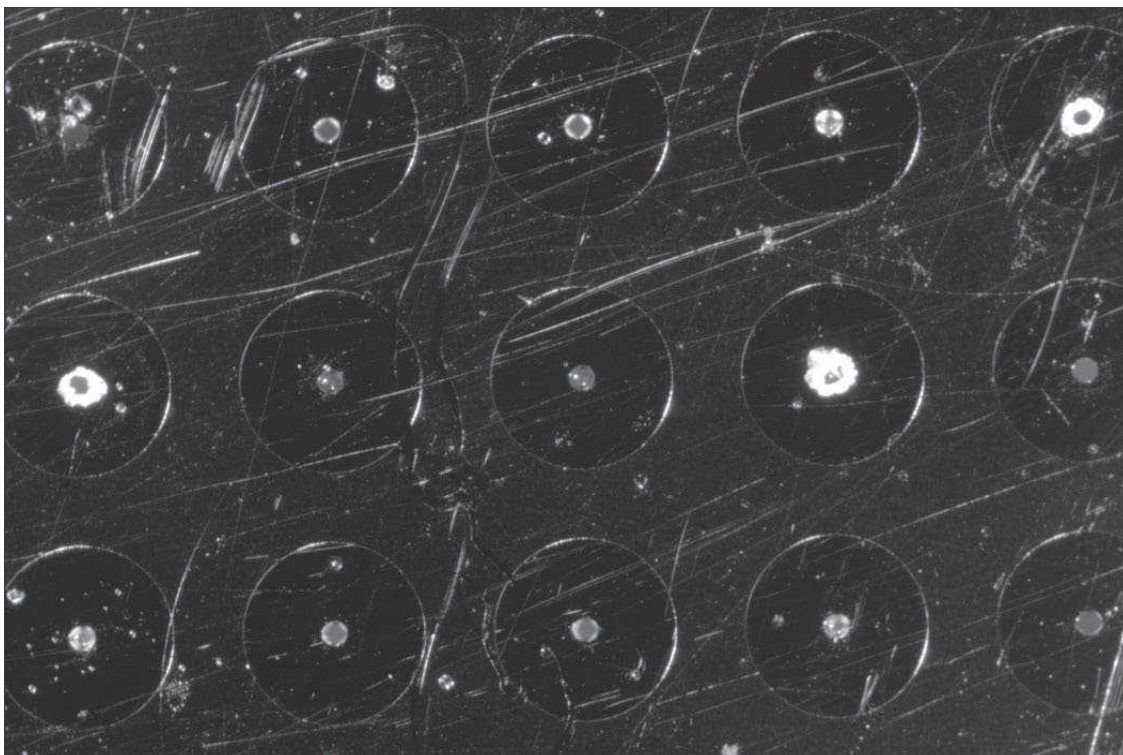


Fig.70C