

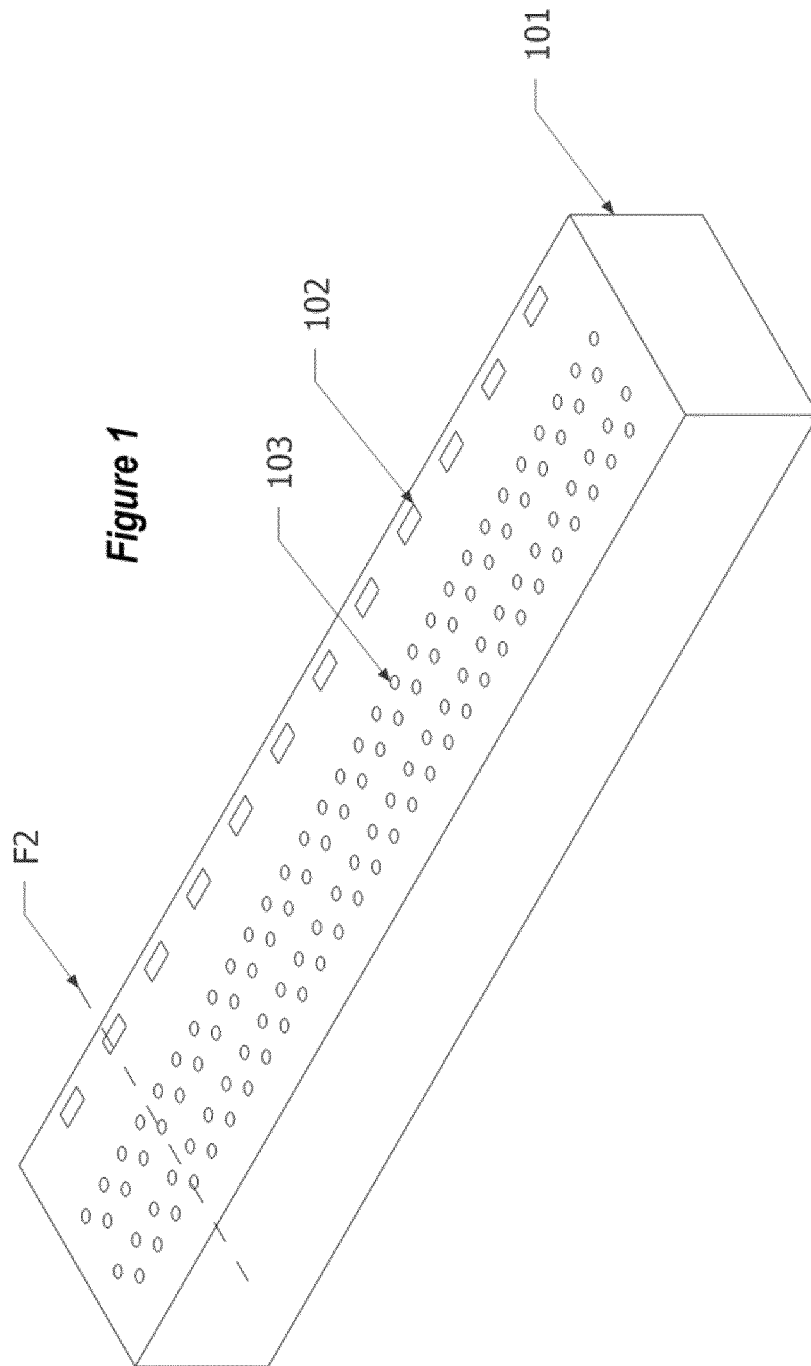


Figure 2

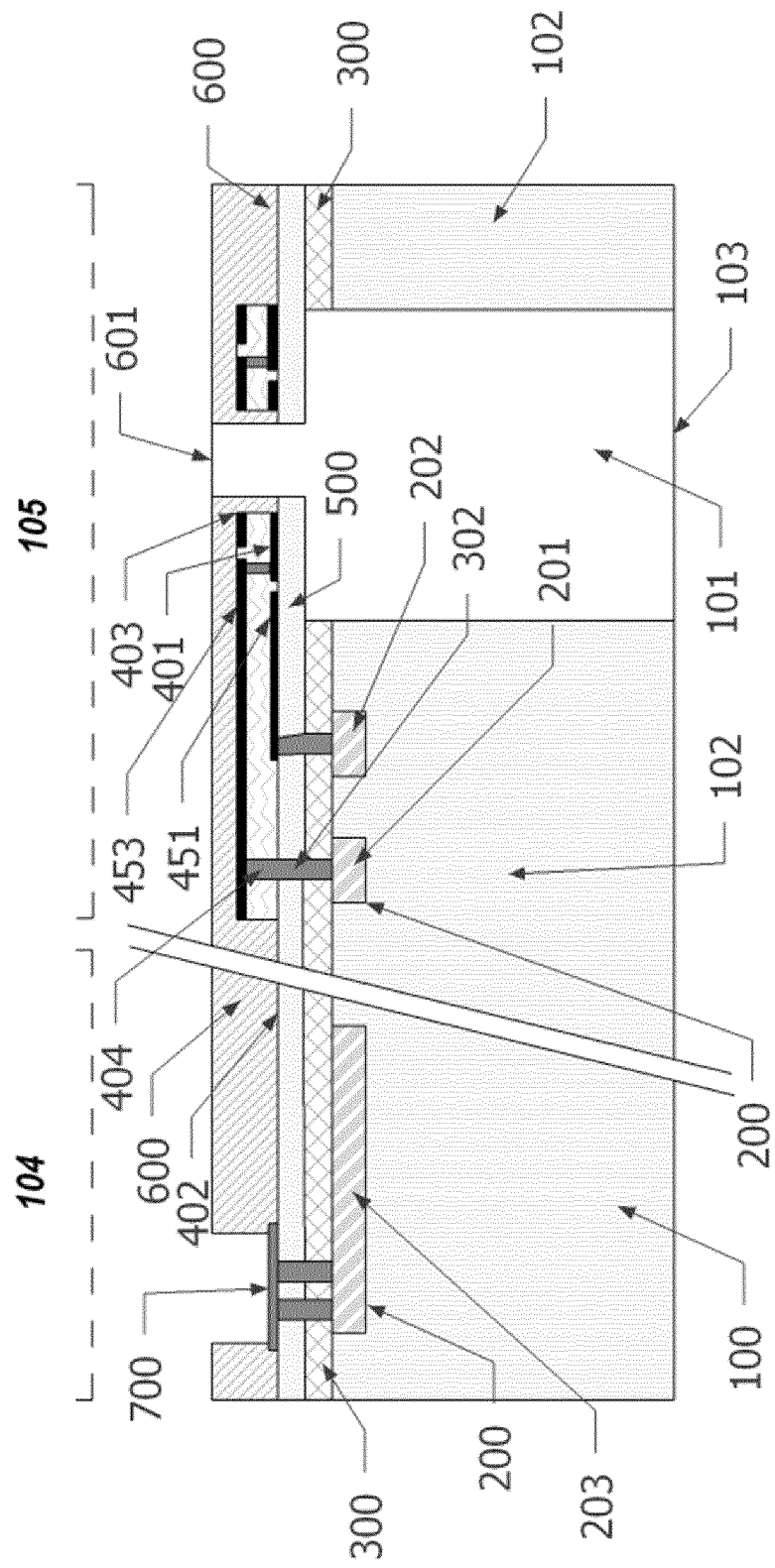
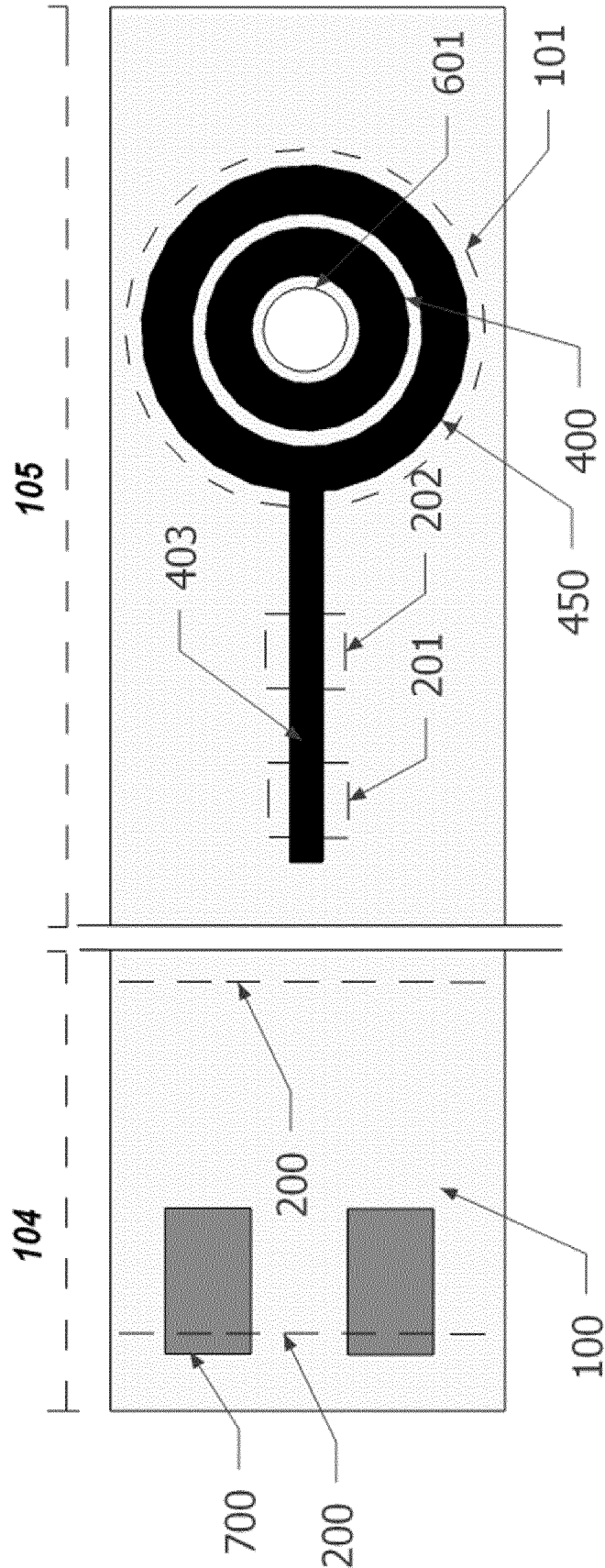


Figure 3



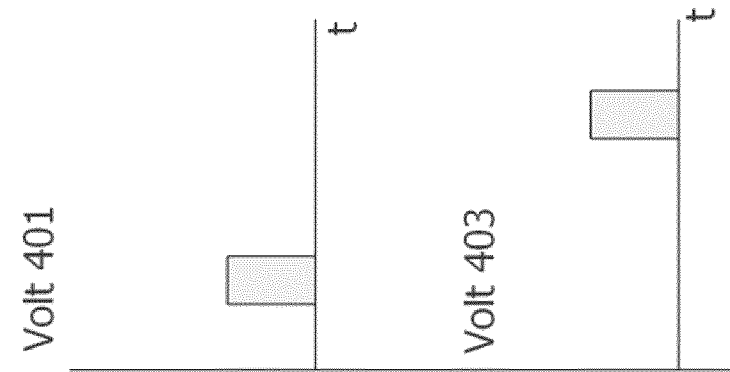


Figure 4(b)

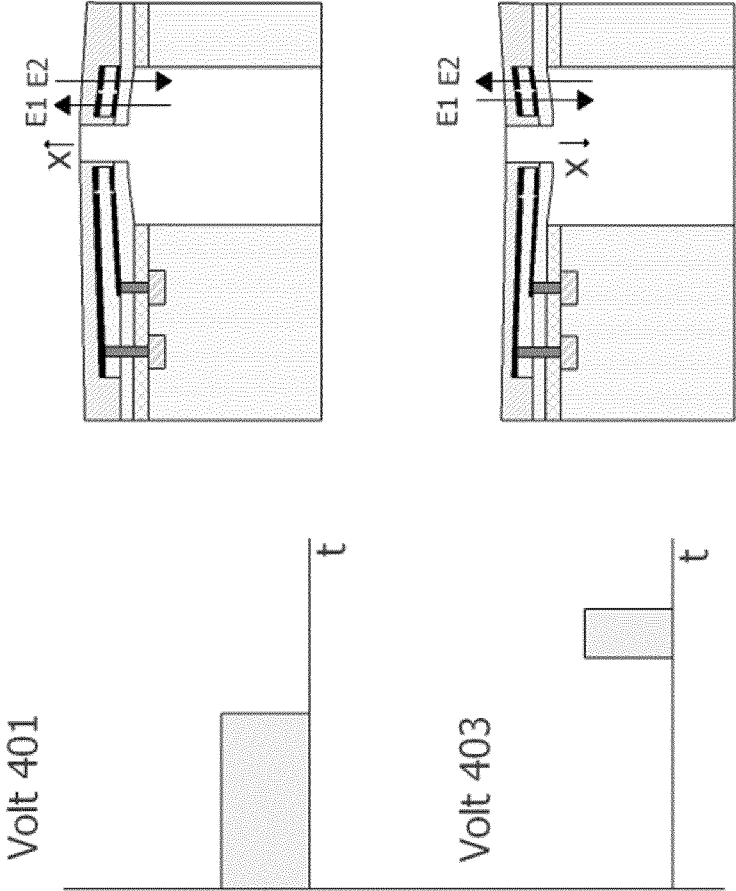


Figure 4(a)

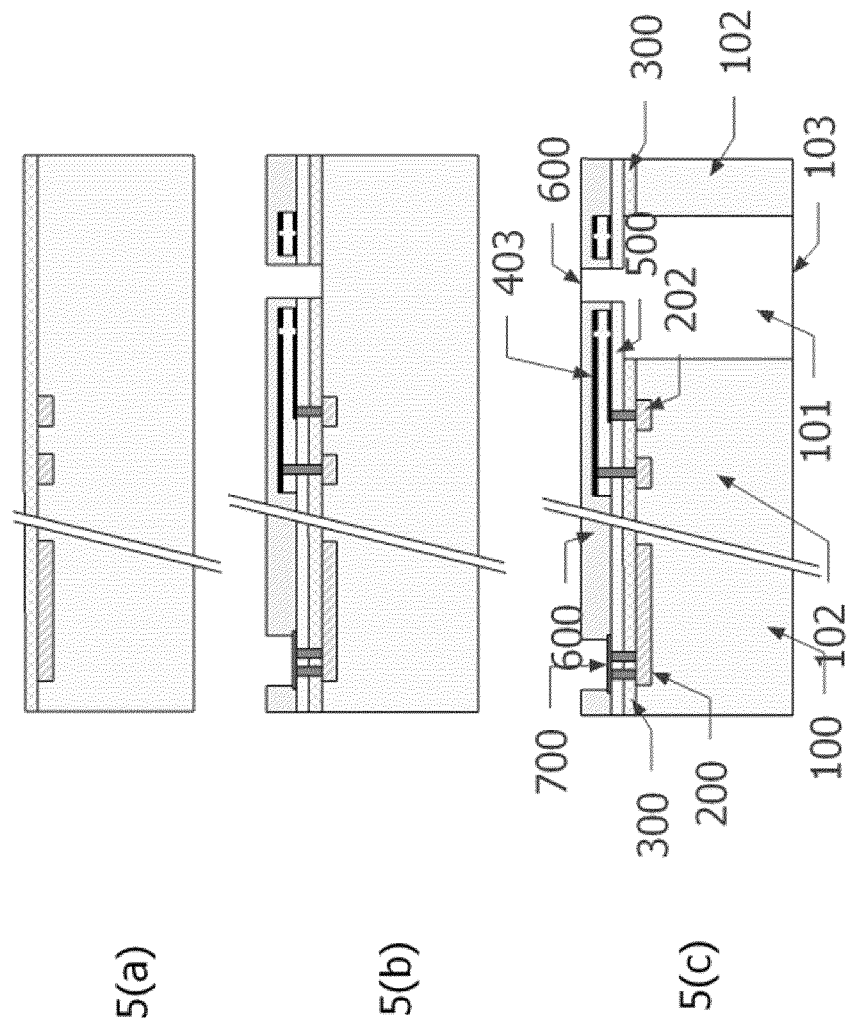
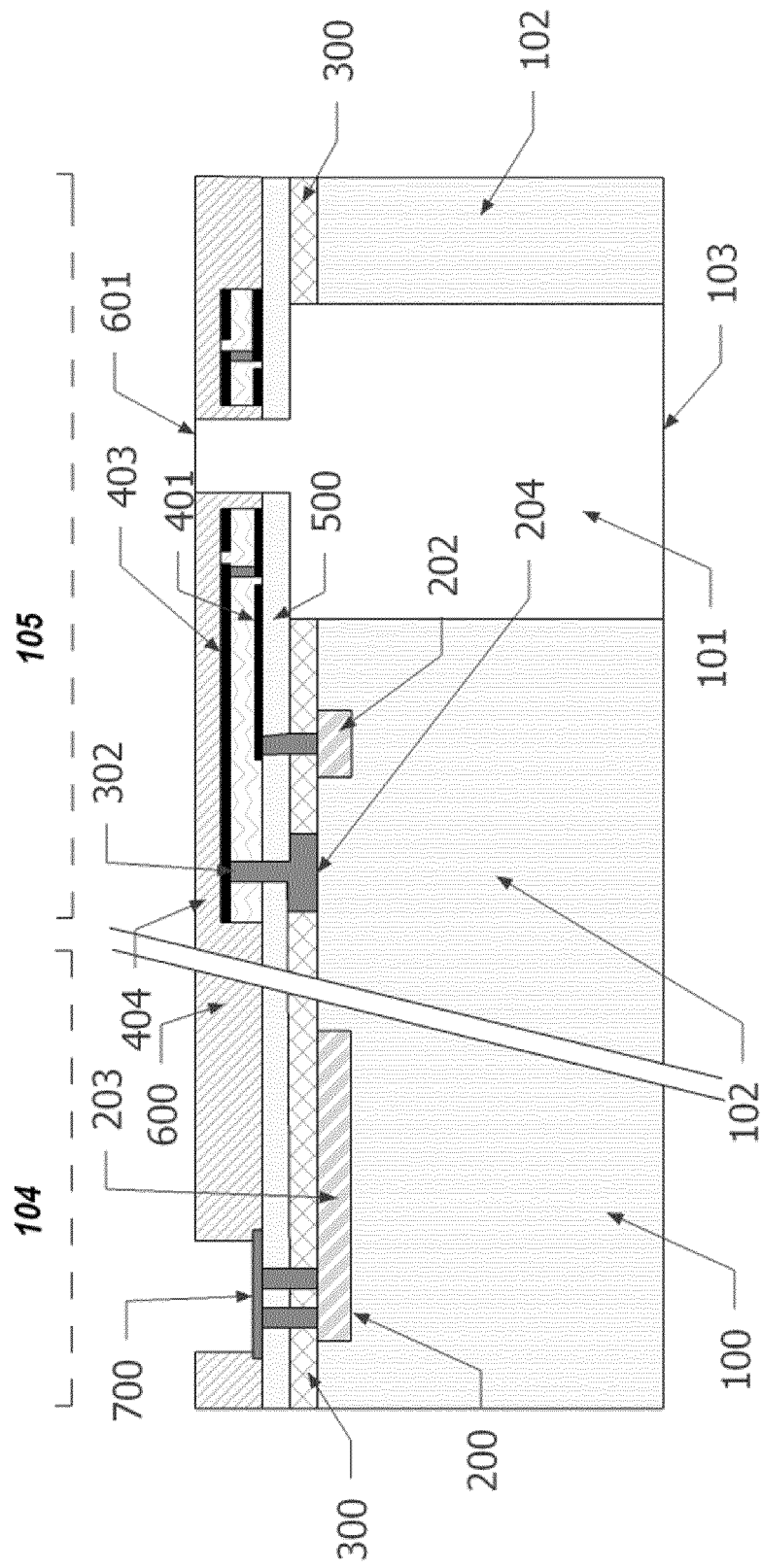


Figure 5

Figure 6



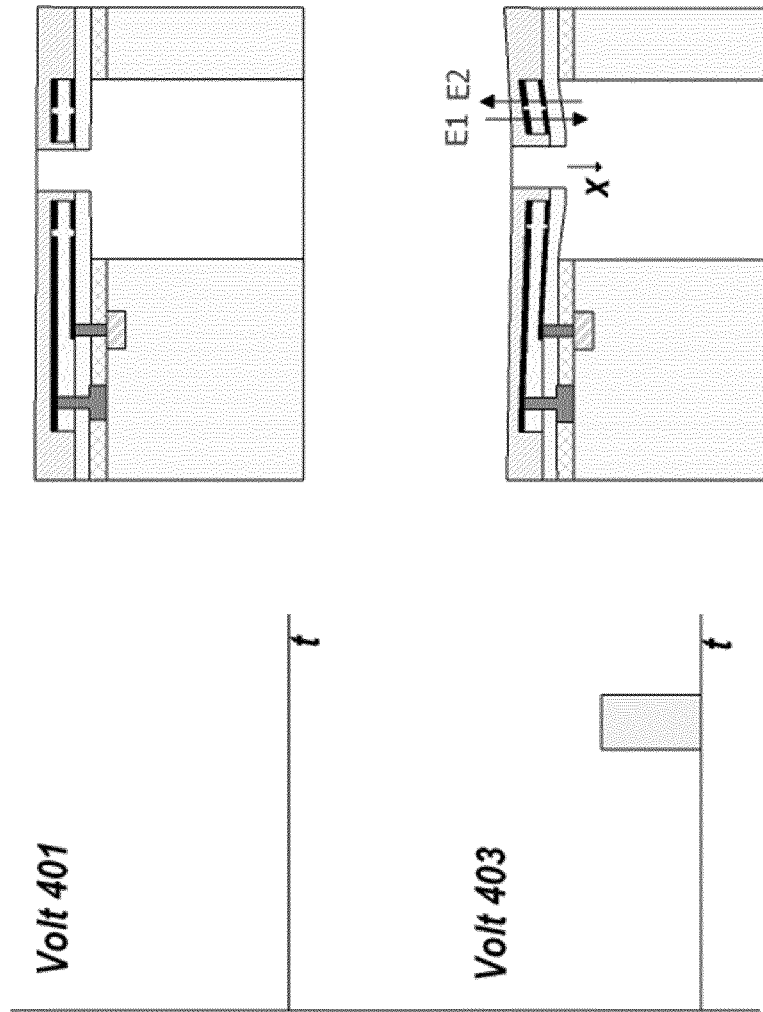
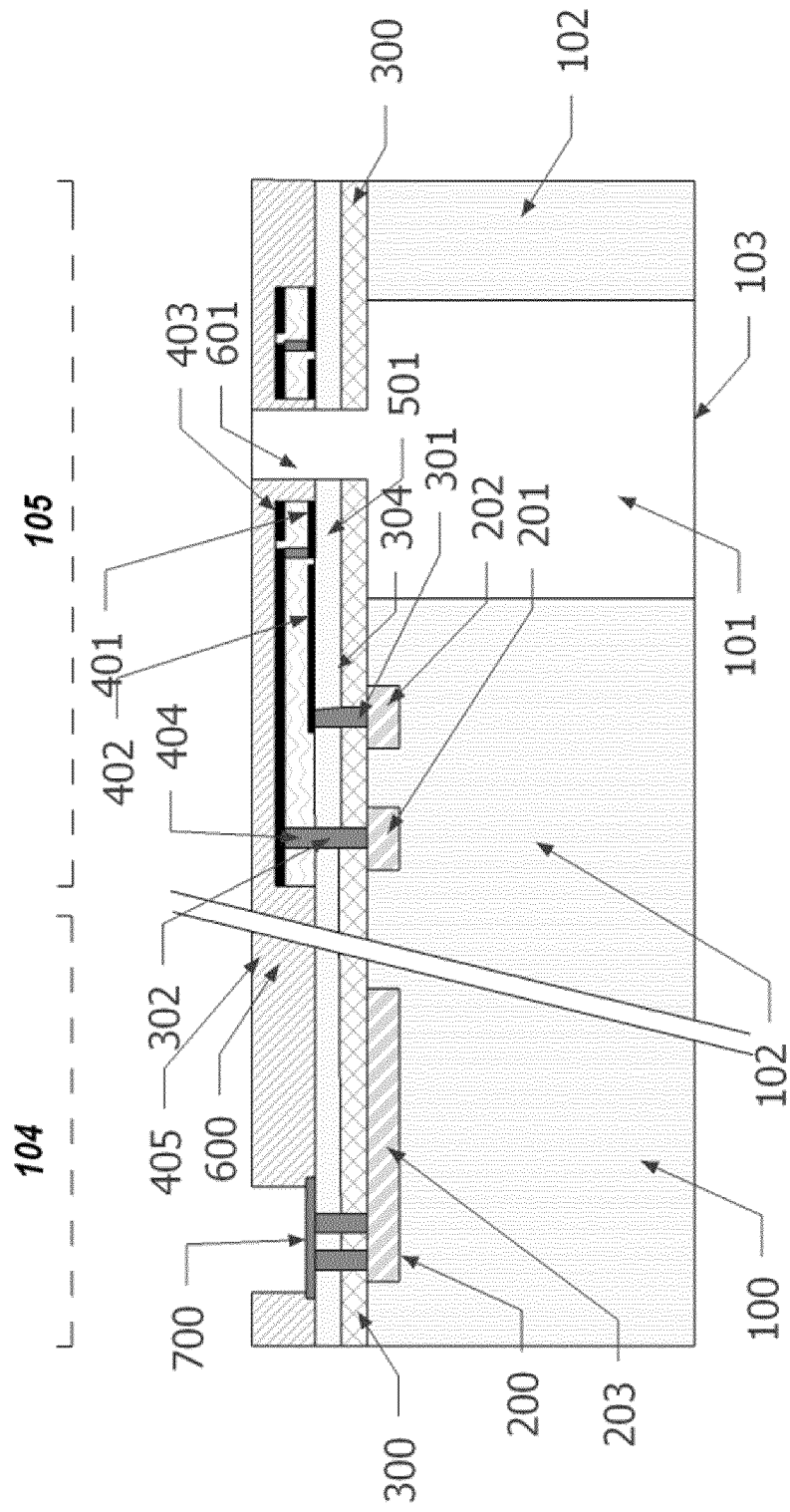


Figure 7

Figure 8



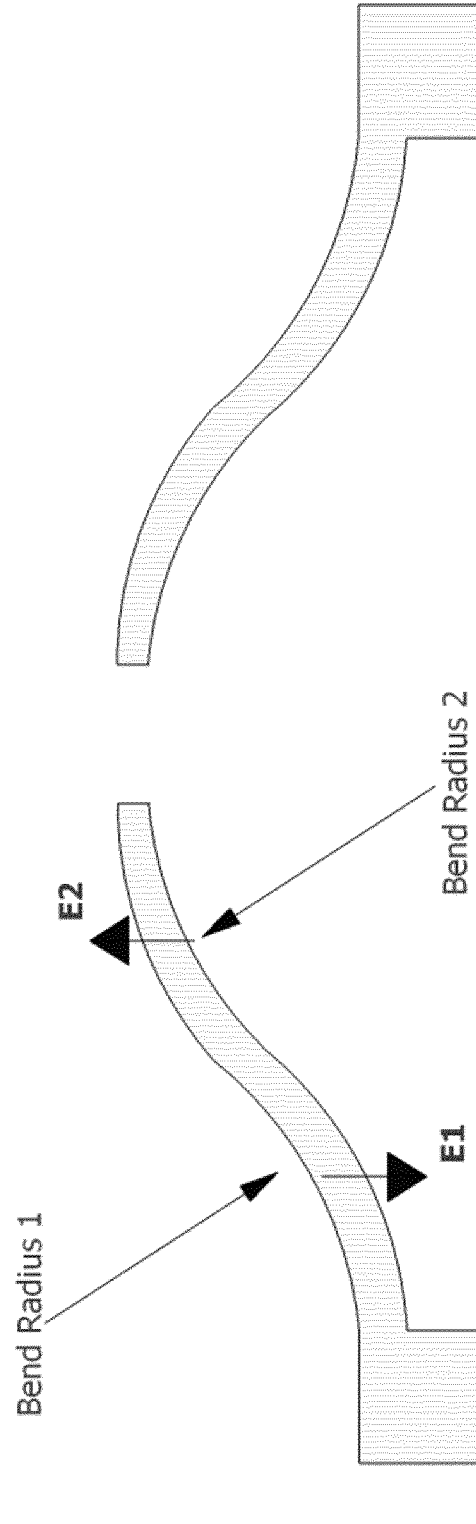


Figure 10

Figure 11

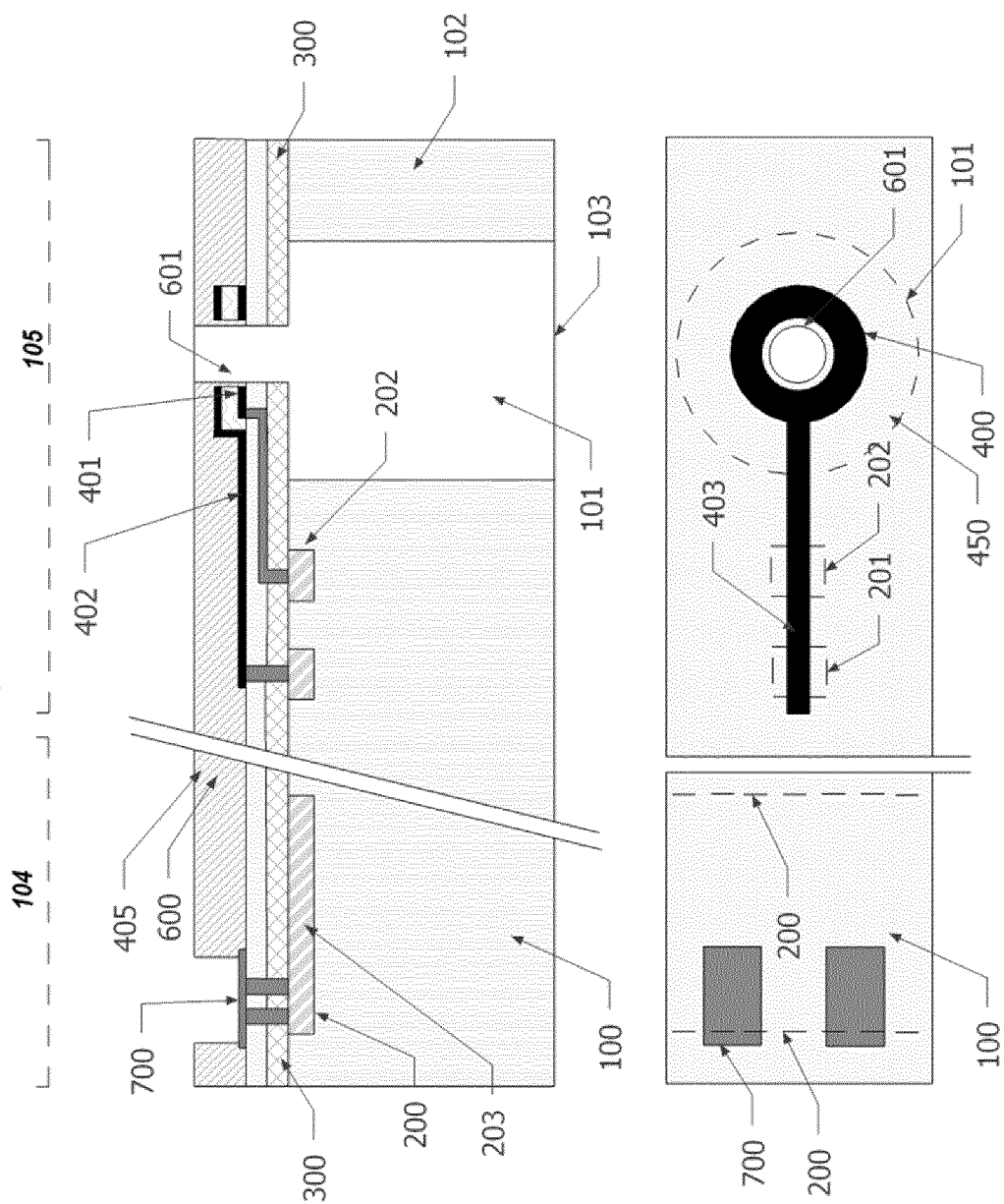


Figure 12

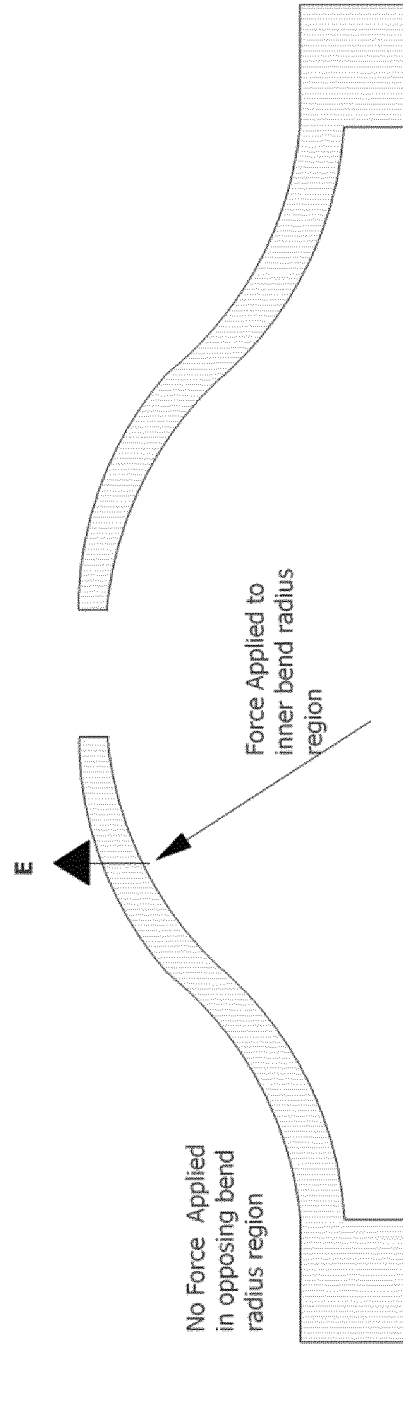


Figure 13

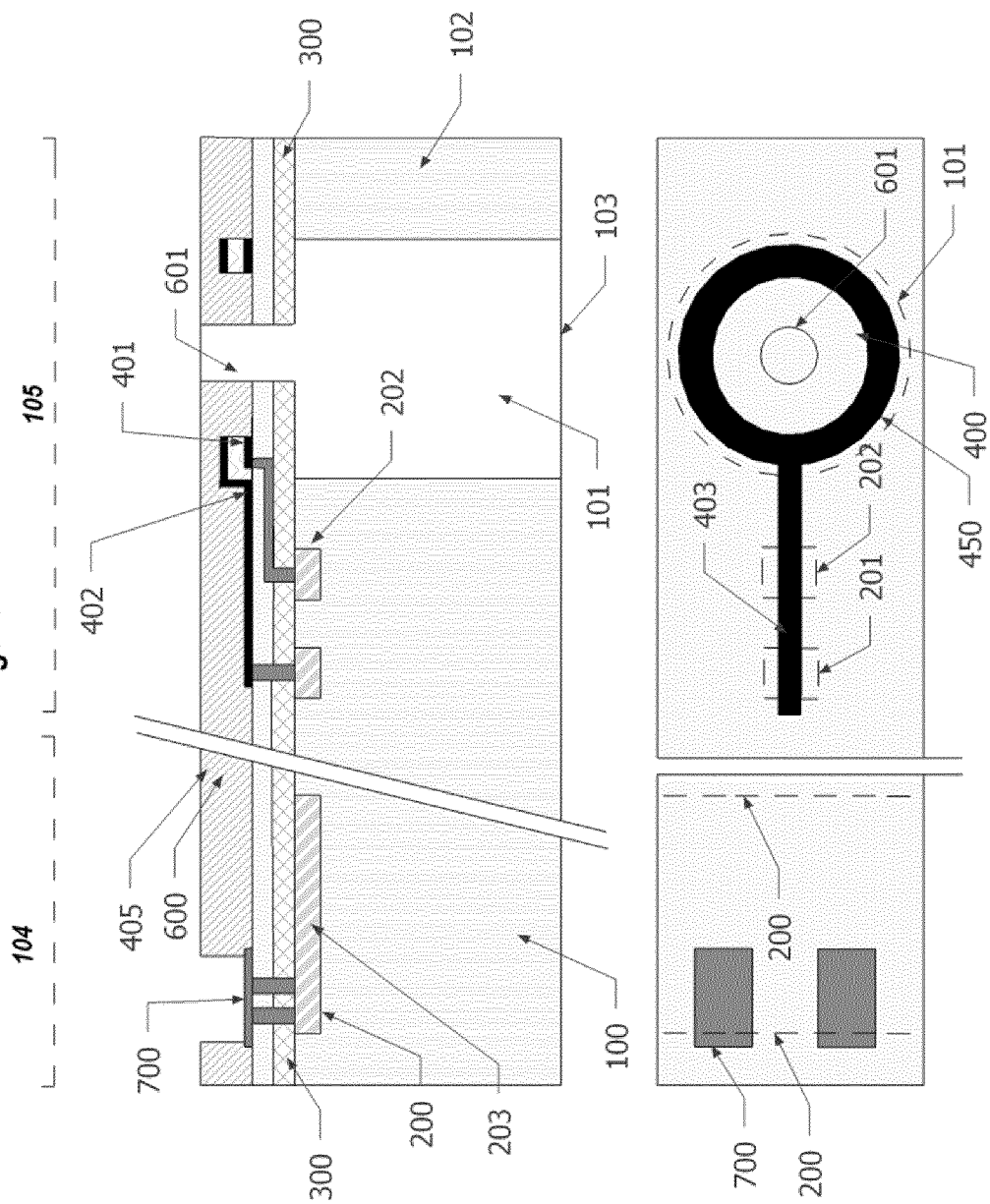
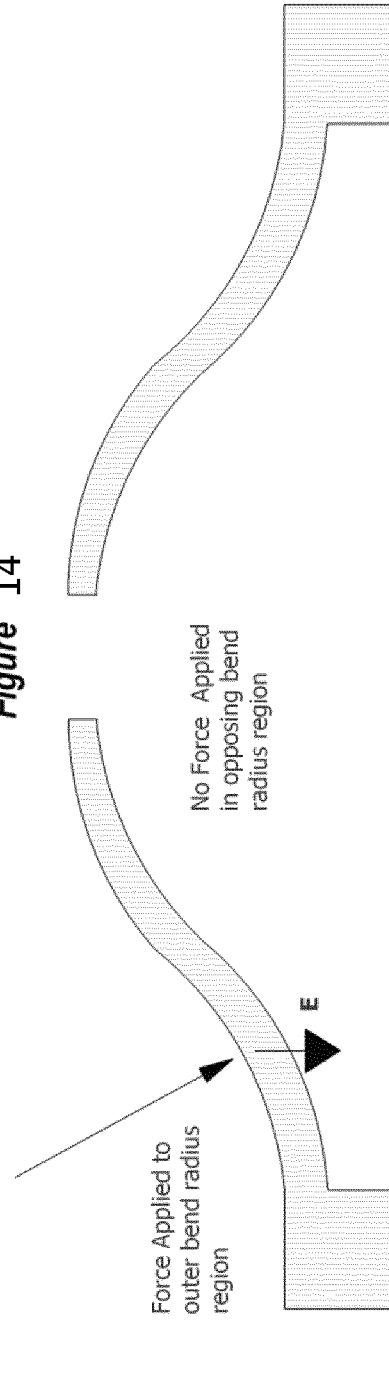


Figure 14

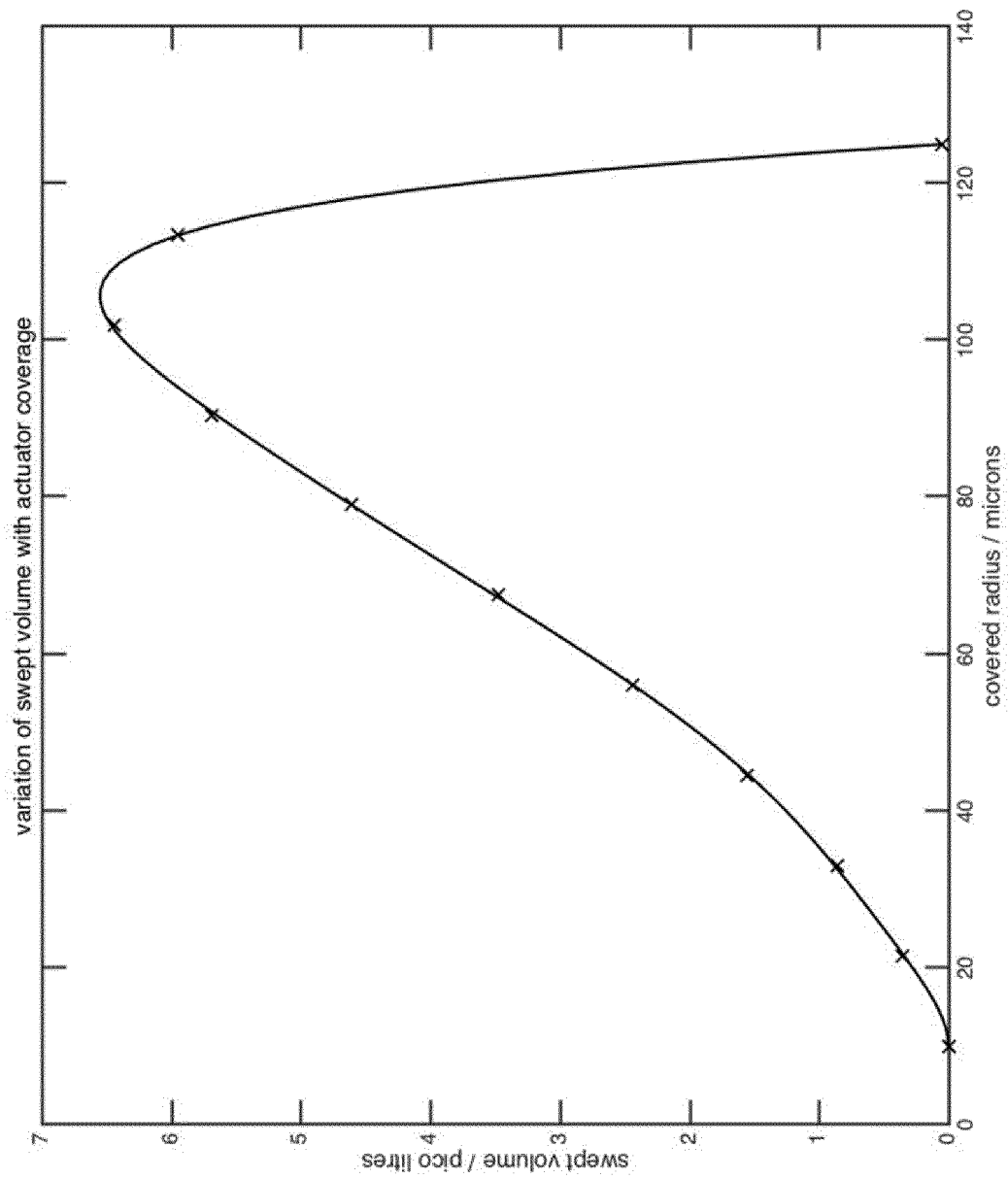


Fig. 15

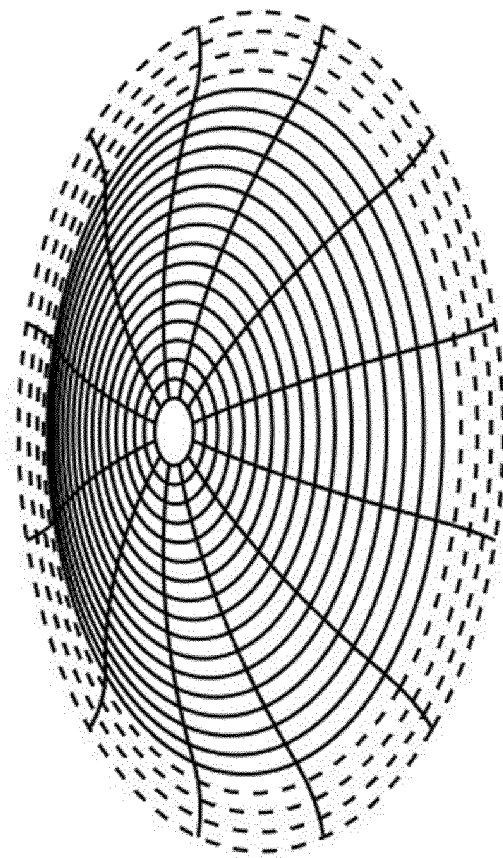


Fig. 16

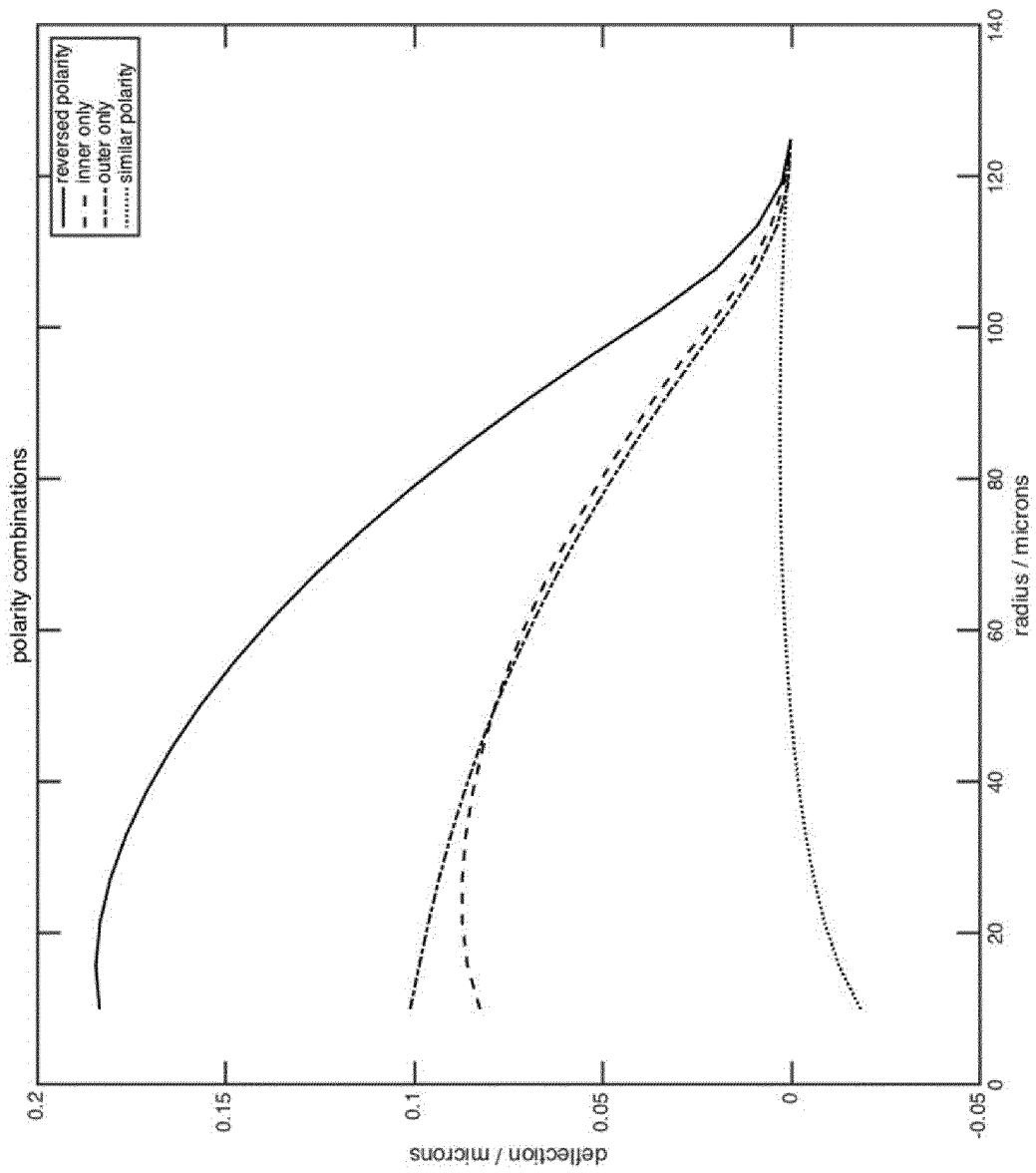


Fig. 17

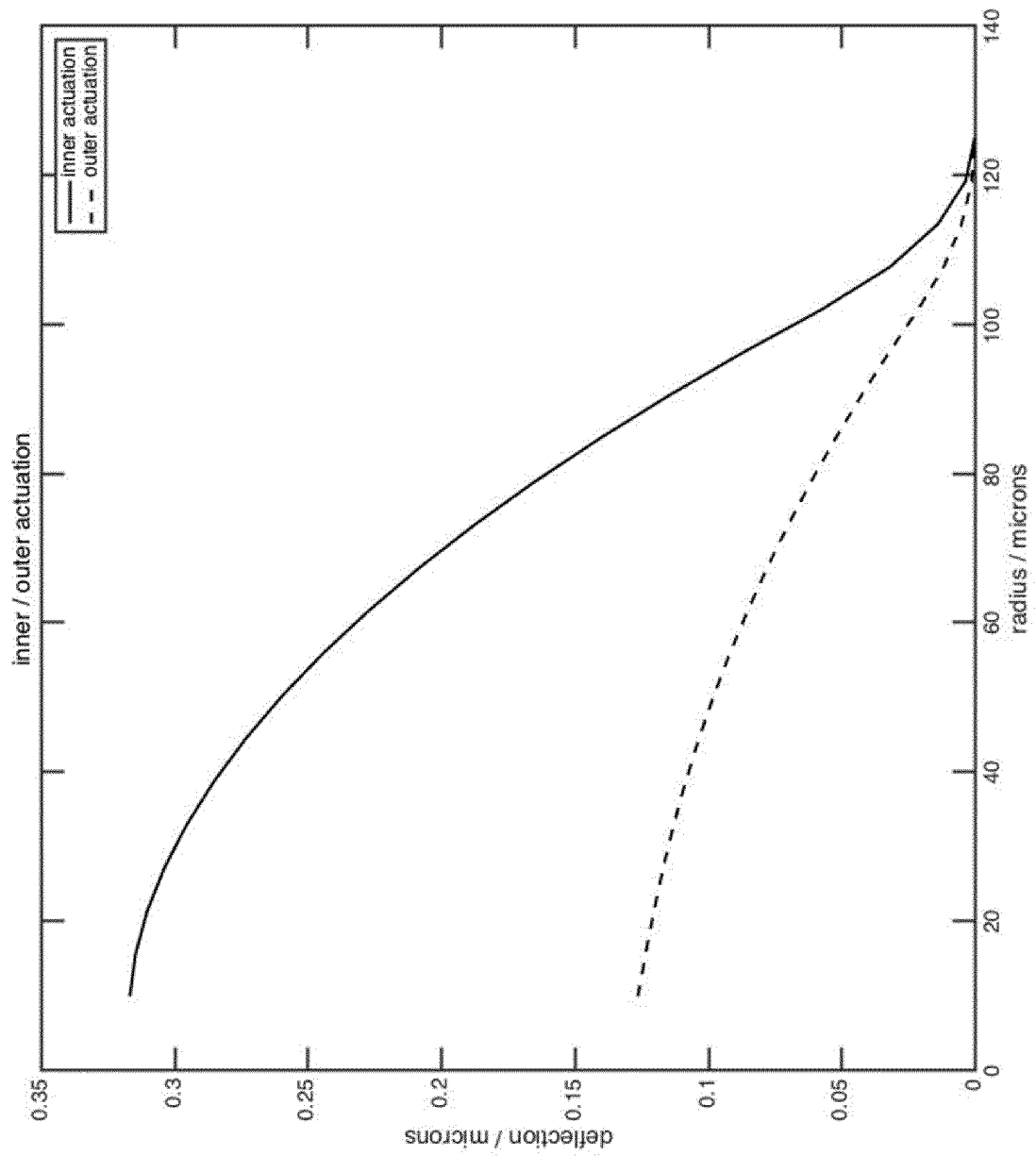


Fig. 18

Material	Deposition Method	Peak Temperature	CMOS compatability	d_{31} (pC/N)
PZT	PVD + Anneal + Poling	>450°C	No	-152 to -259
PZT	Sol Gel + Anneal + Poling	650°C	No	-116
ZnO	PVD	Room Temp	Yes	-3.3
AlN	PVD	200° C	Yes	-1.9
ScAlN	PVD	Room Temp	Yes	-5.8

Table 1