

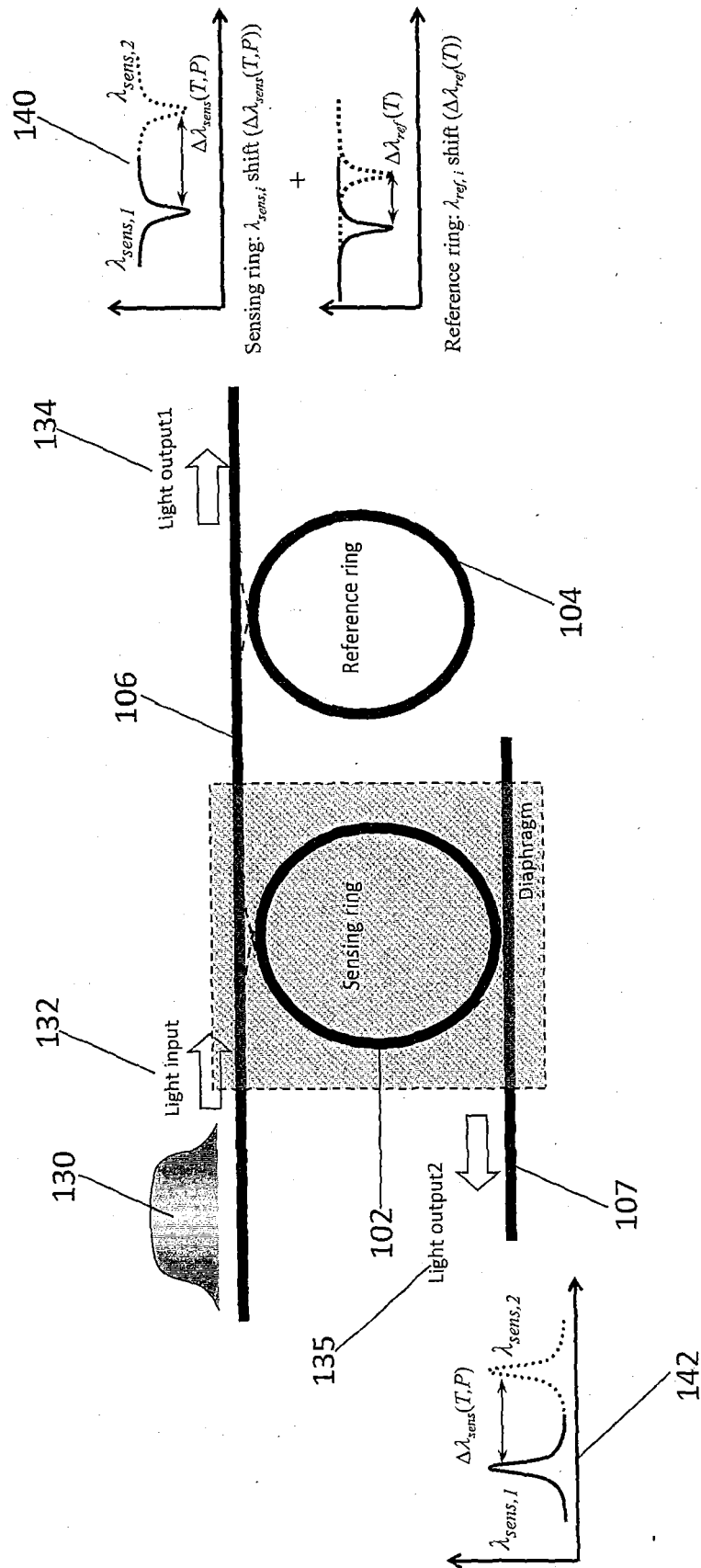


Figure 1

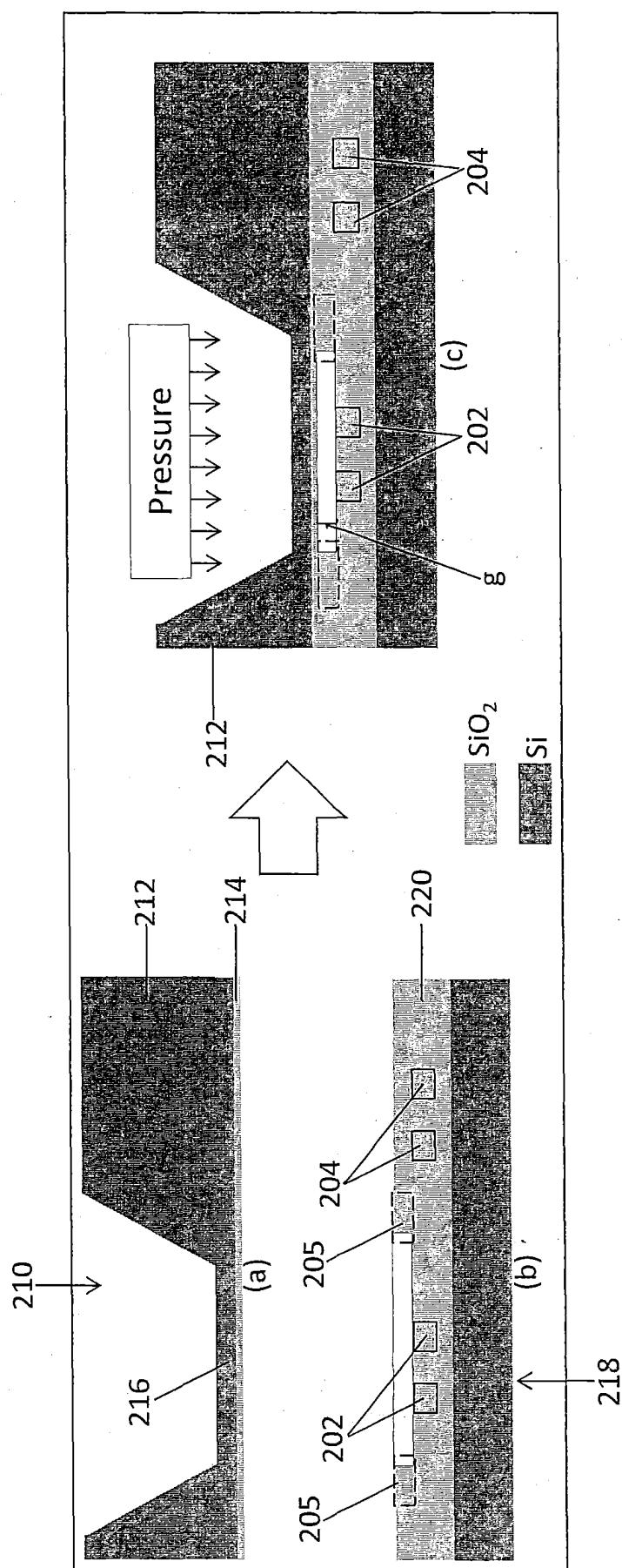


Figure 2

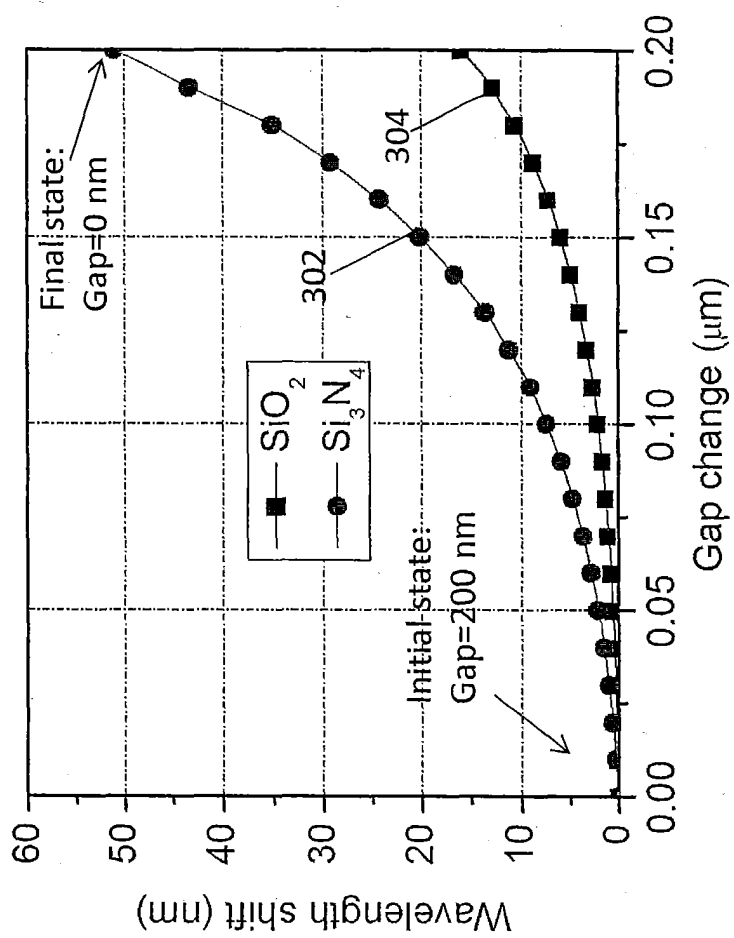


Figure 3(a)

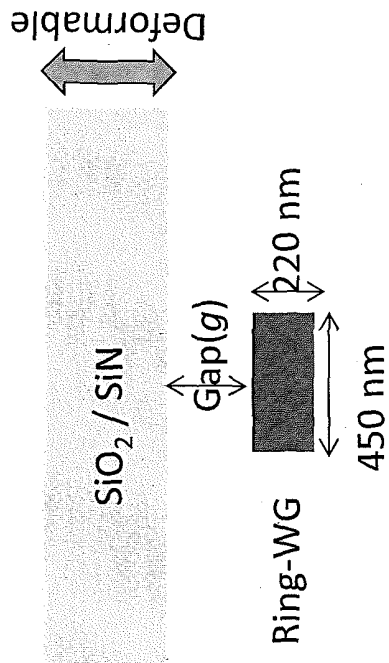


Figure 3(b)

Diaphragm dimension (SiN)	Spring constant	Range	Function: $\Delta\lambda=f(P)$	Sensitivity: $d(\Delta\lambda)/dP$
$500\mu\text{m} \times 500\mu\text{m} \times 10\mu\text{m}$	0.21 kPa/nm	0 – 42 kPa	$A=0.37; C=-0.35; k=11.28$	> 33pm/kPa
$300\mu\text{m} \times 300\mu\text{m} \times 10\mu\text{m}$	1.9 kPa/nm	0 – 380 kPa	$A=0.37; C=-0.35; k=101.02$	> 3.7pm/kPa
$300\mu\text{m} \times 300\mu\text{m} \times 20\mu\text{m}$	13.5 kPa/nm	0 – 2.7 MPa	$A=0.37; C=-0.35; k=720.38$	> 0.5pm/kPa

Table 1

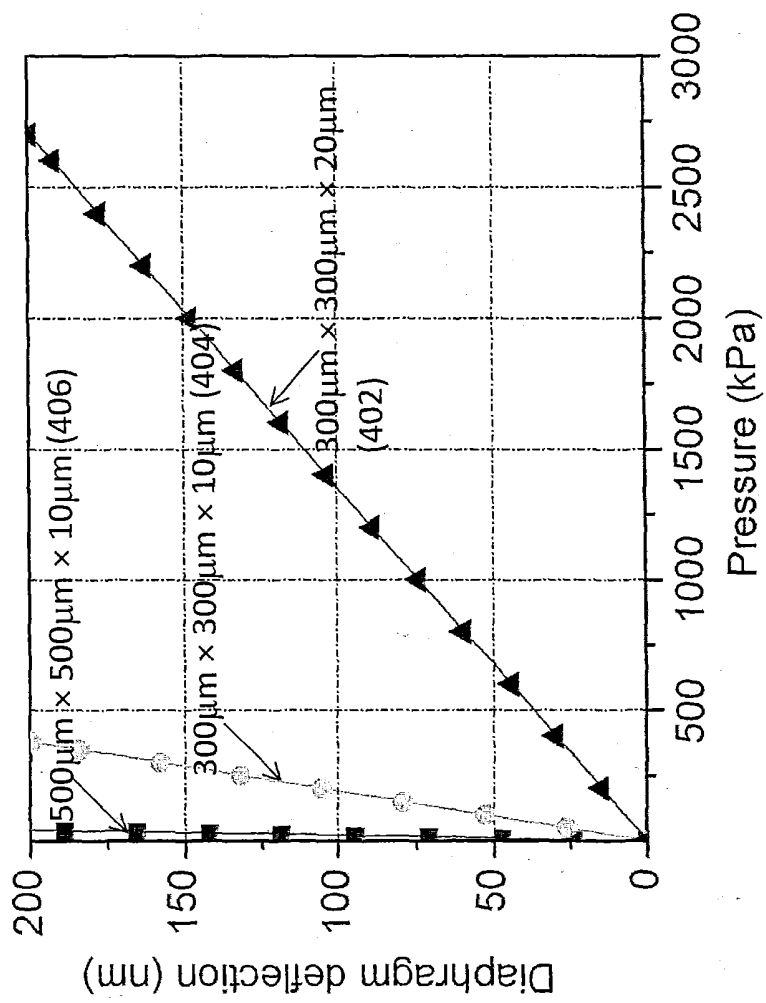


Figure 4(a)

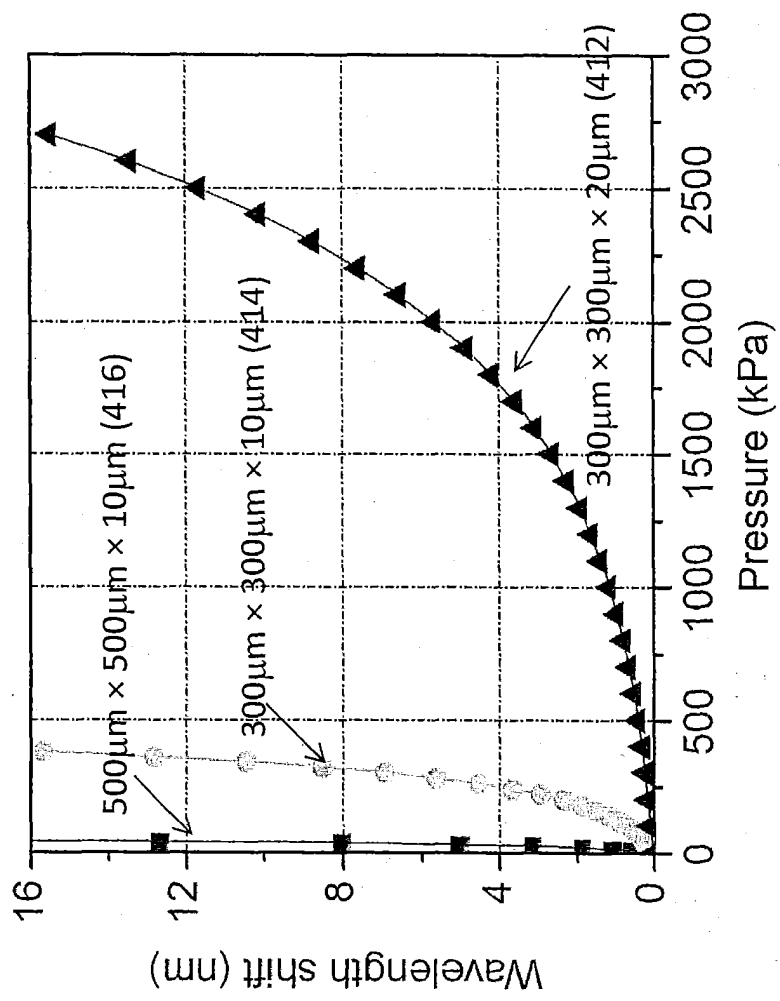


Figure 4(b)

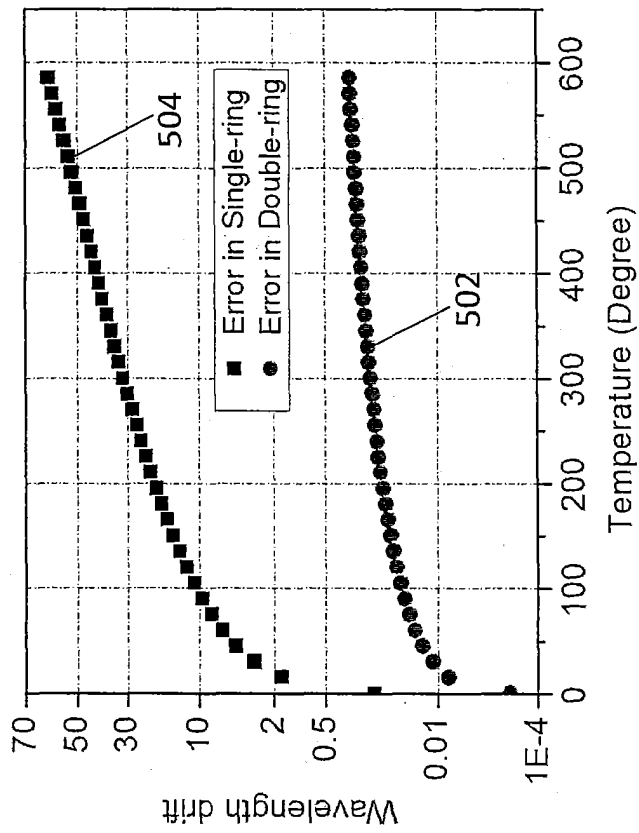


Figure 5

Type	Wavelength drift @ 600 °C	TOE	Sensitivity	Induced error without temperature controller
Single-ring	62.93 nm	104.88 pm/°C	33pm / kPa	< 330%
Double-ring	0.24 nm	0.4 pm/°C	33pm / kPa	< 1.1%

Table 2