

FIG.1

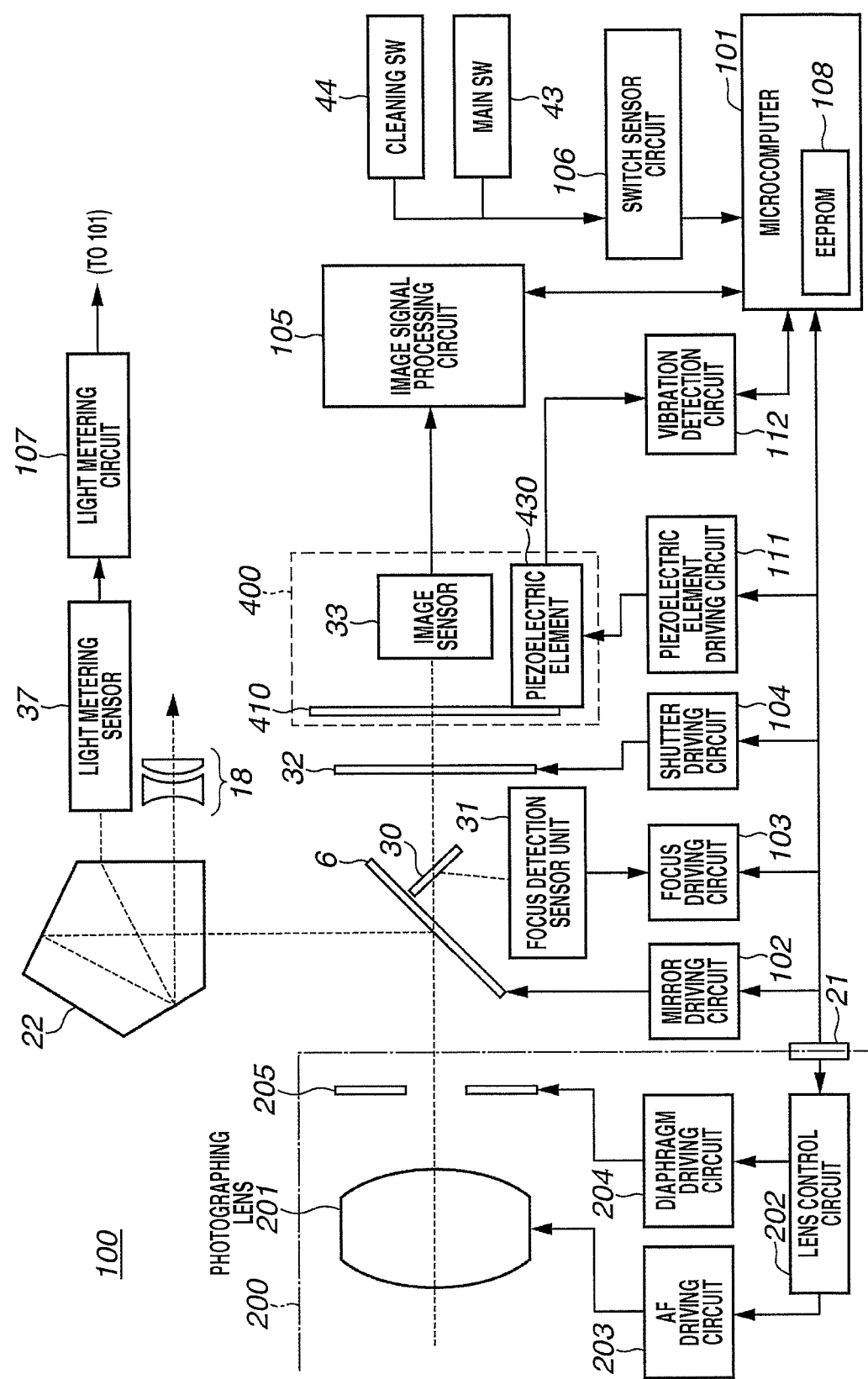


FIG. 2

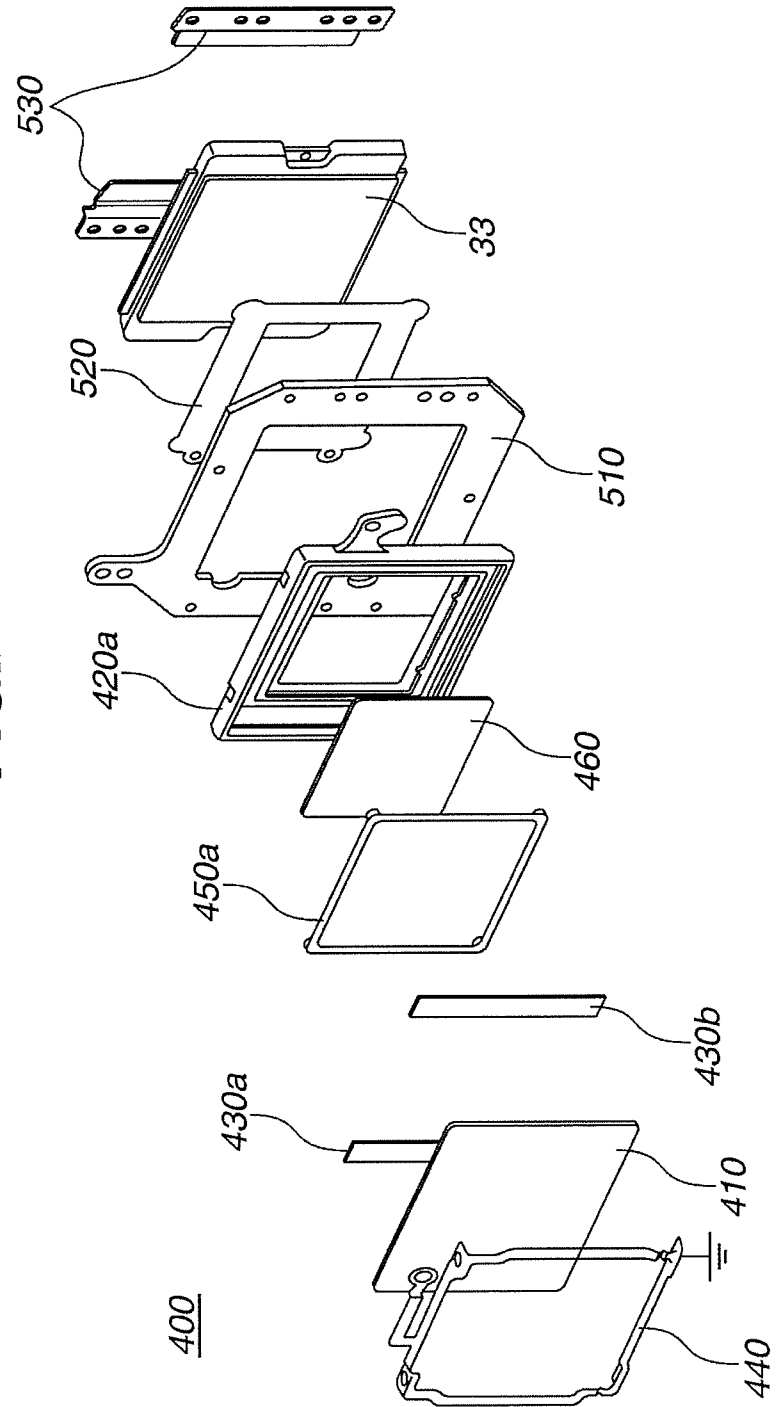


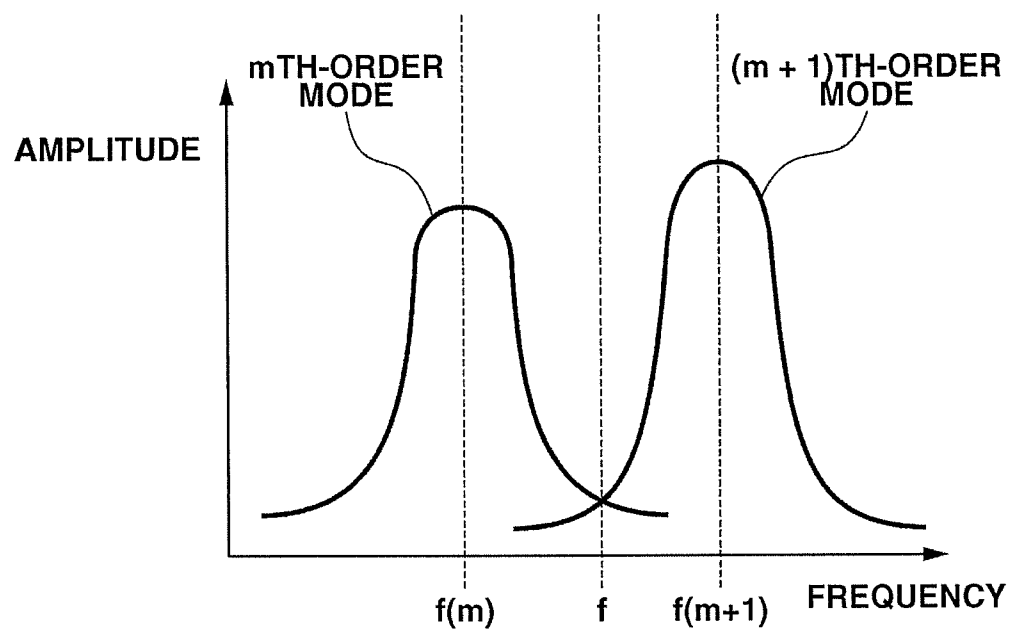
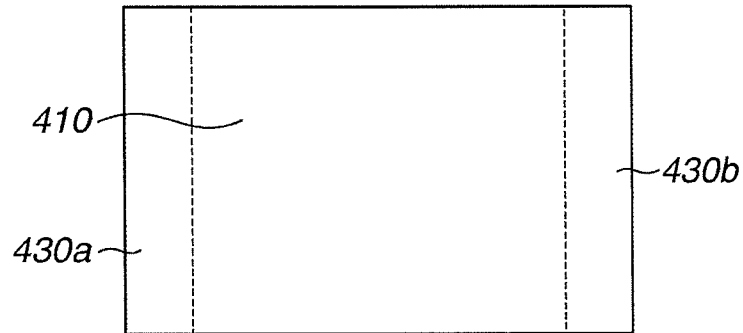
FIG.3

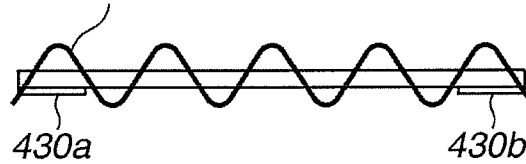
FIG.4A

· WHEN m IS AN ODD NUMBER ($m = 9$)

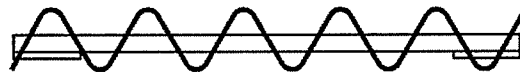


VIBRATION FORM OF
OPTICAL LOW-PASS FILTER 410

m TH-ORDER
MODE



$(m + 1)$ TH-ORDER
MODE

**FIG.4B**

		APPLIED VOLTAGE OF PIEZOELECTRIC ELEMENT 430a		APPLIED VOLTAGE OF PIEZOELECTRIC ELEMENT 430b	
		REAL COMPONENT	IMAGINARY COMPONENT	REAL COMPONENT	IMAGINARY COMPONENT
(1)	m TH-ORDER MODE	1	0	1	0
(2)	$(m + 1)$ TH-ORDER MODE	A	0	-A	0
(3)	WHEN TIME PHASE OF $(m + 1)$ TH-ORDER VIBRATION MODE IS SHIFTED BY 90°	0	A	0	-A
(4)	COMBINATION OF (1) AND (3)	1	A	1	-A

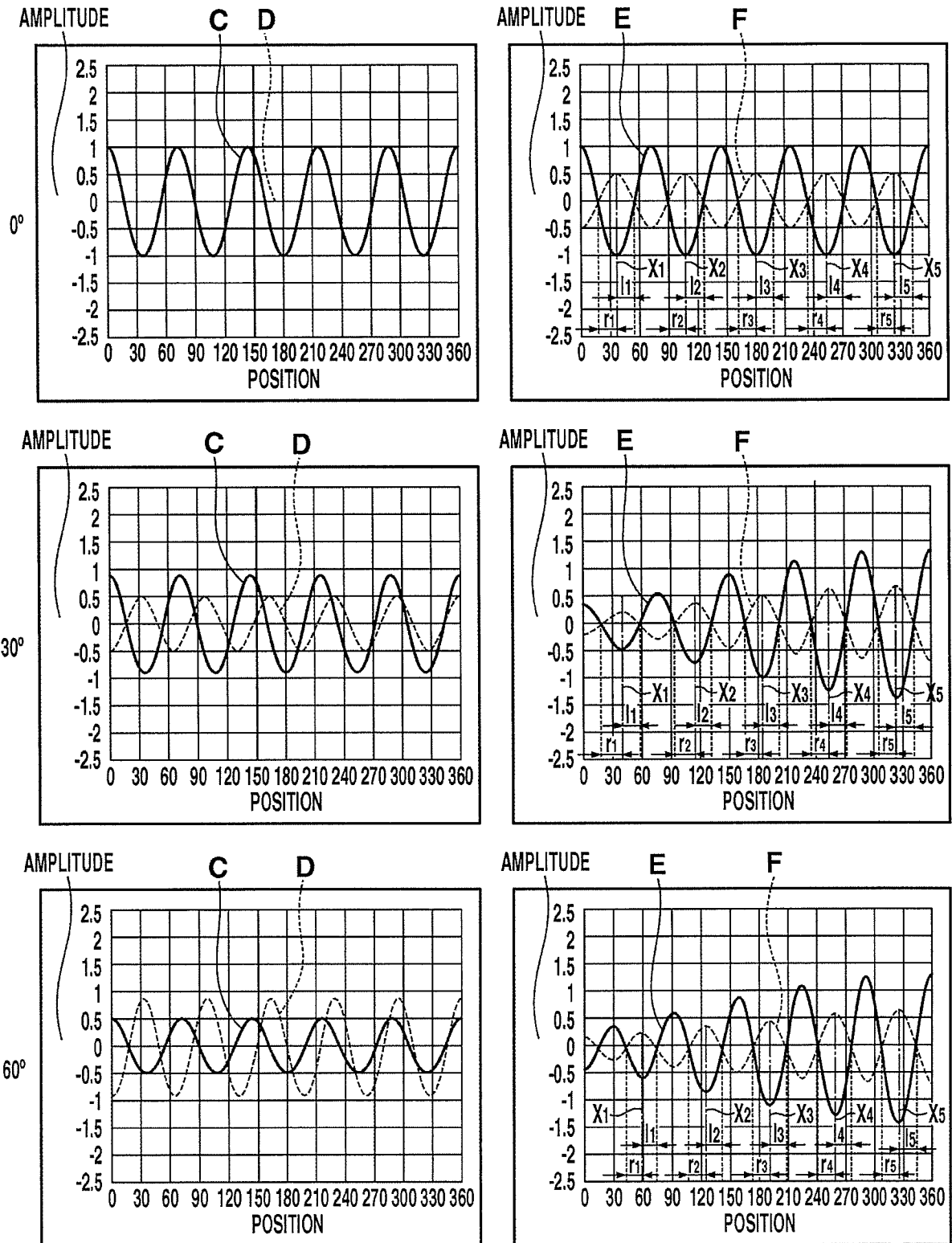
FIG.5

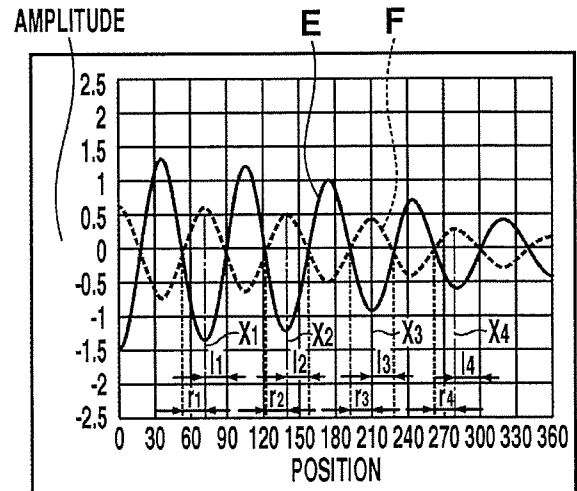
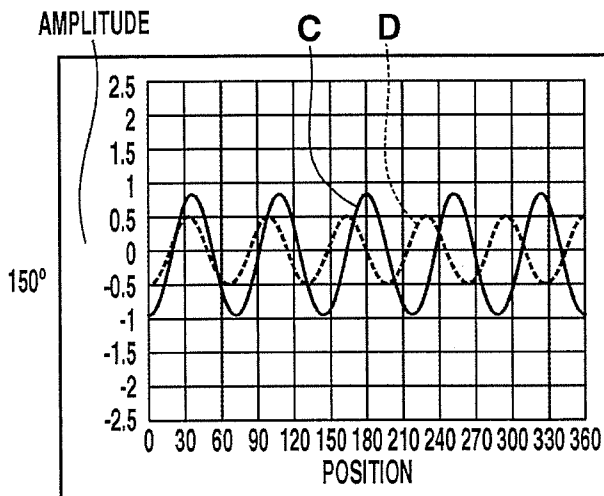
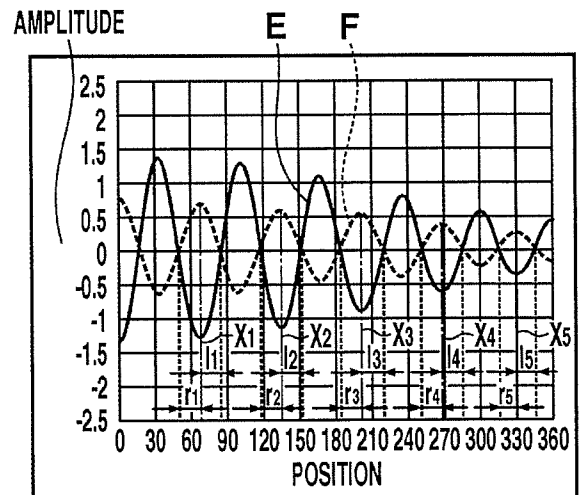
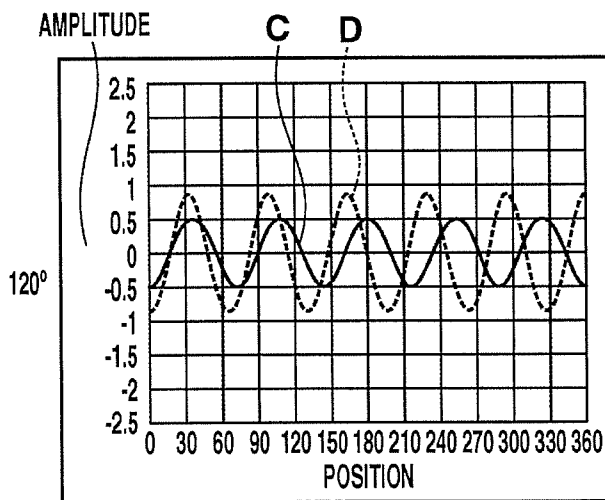
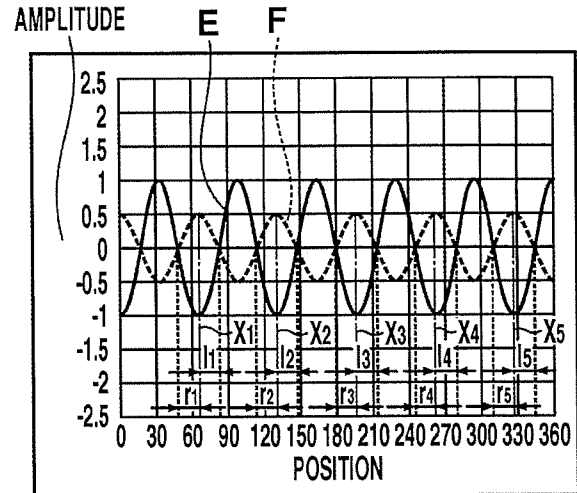
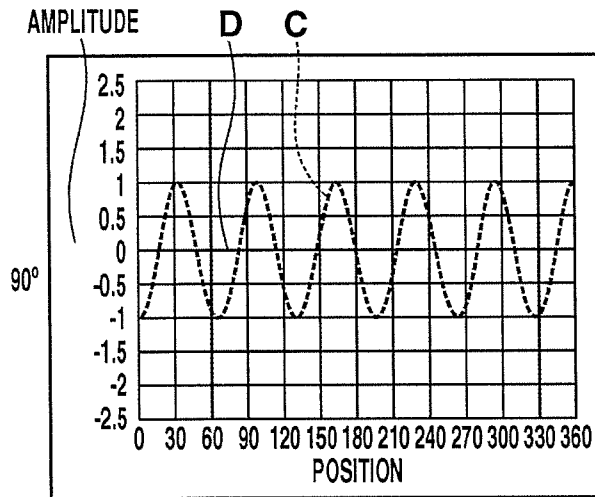
FIG.6

FIG.7

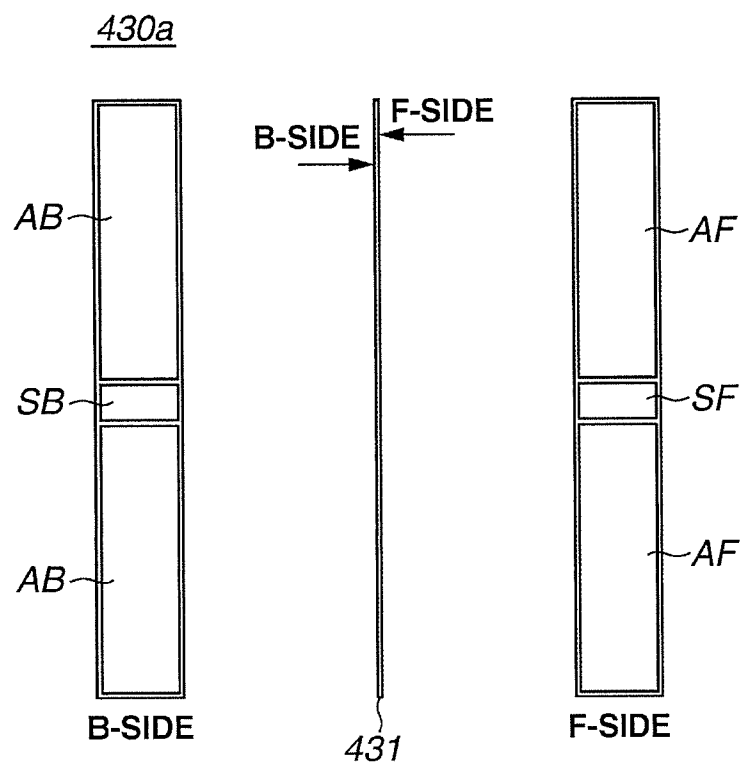


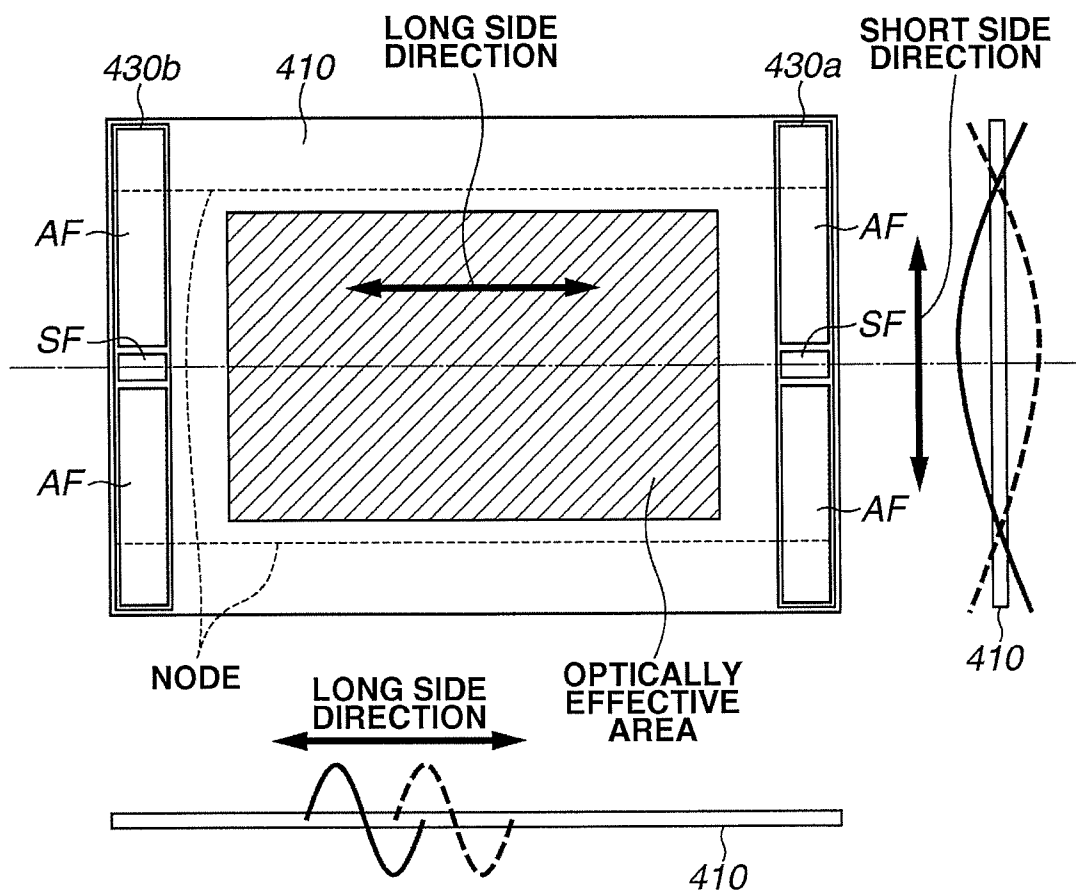
FIG.8

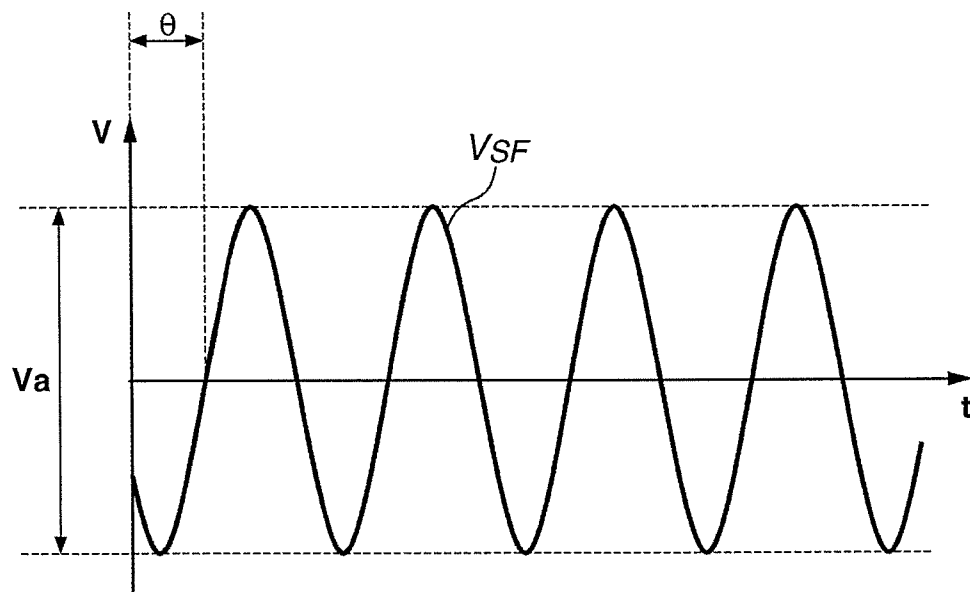
FIG.9

FIG.10A

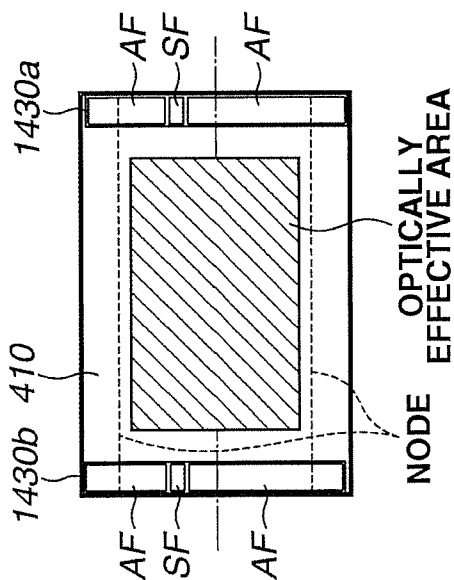


FIG.10B

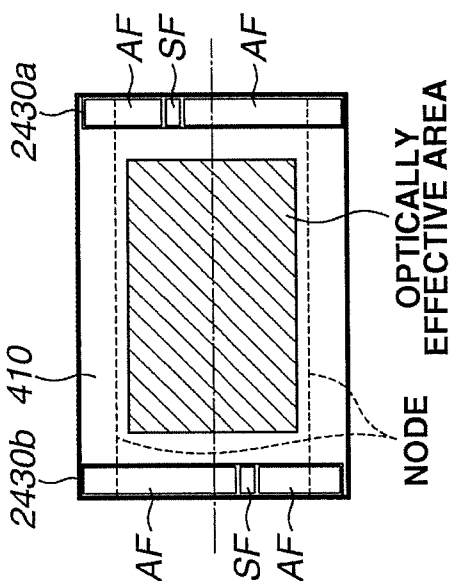


FIG.10C

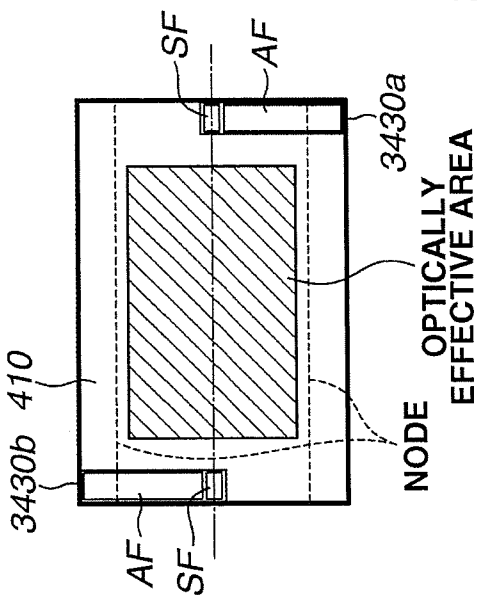


FIG.10D

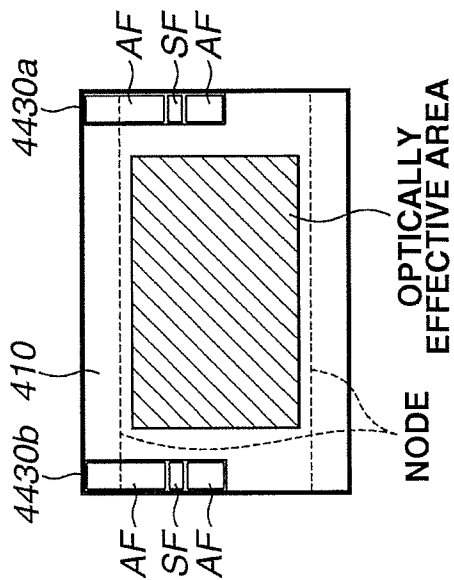


FIG.10E

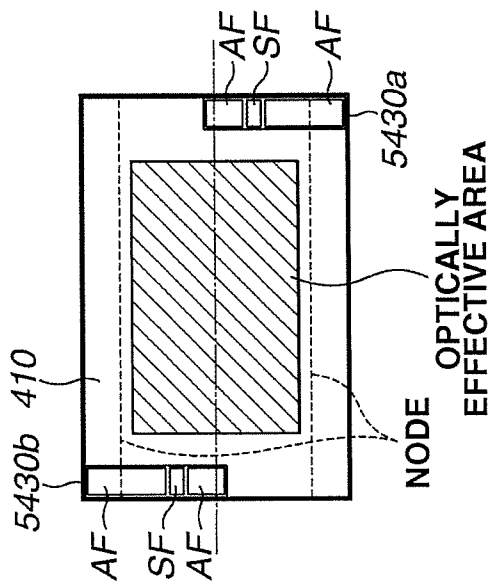


FIG.11A

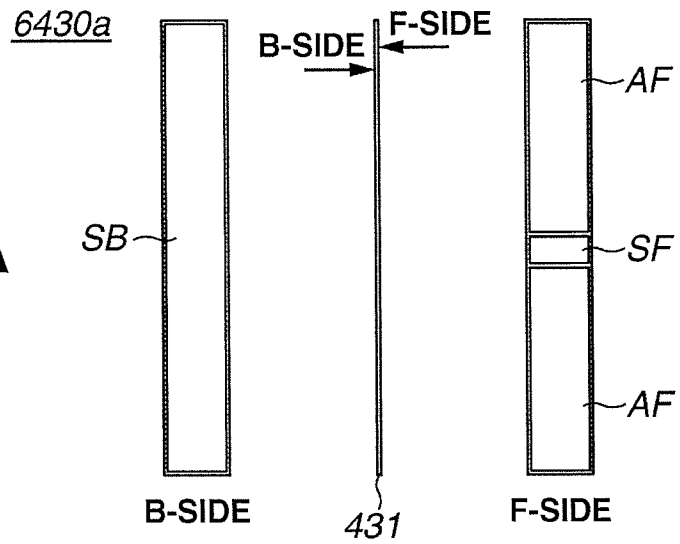


FIG.11B

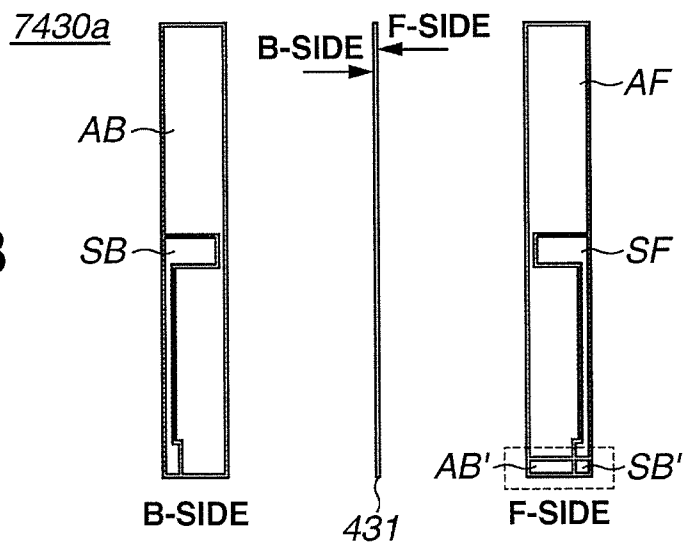


FIG.11C

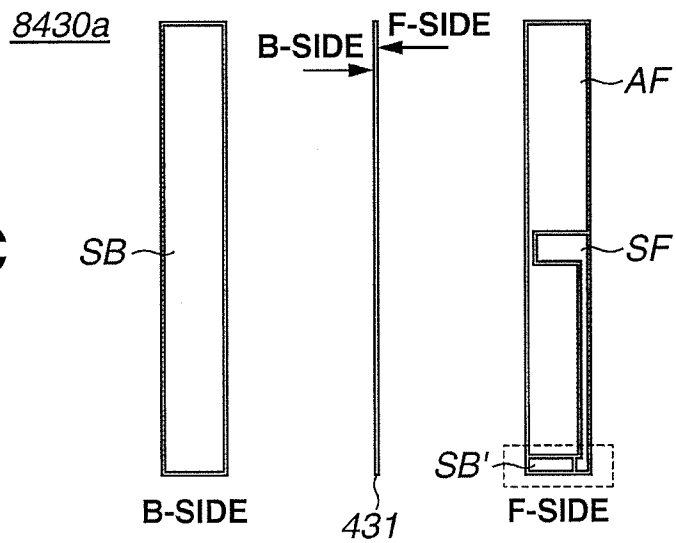


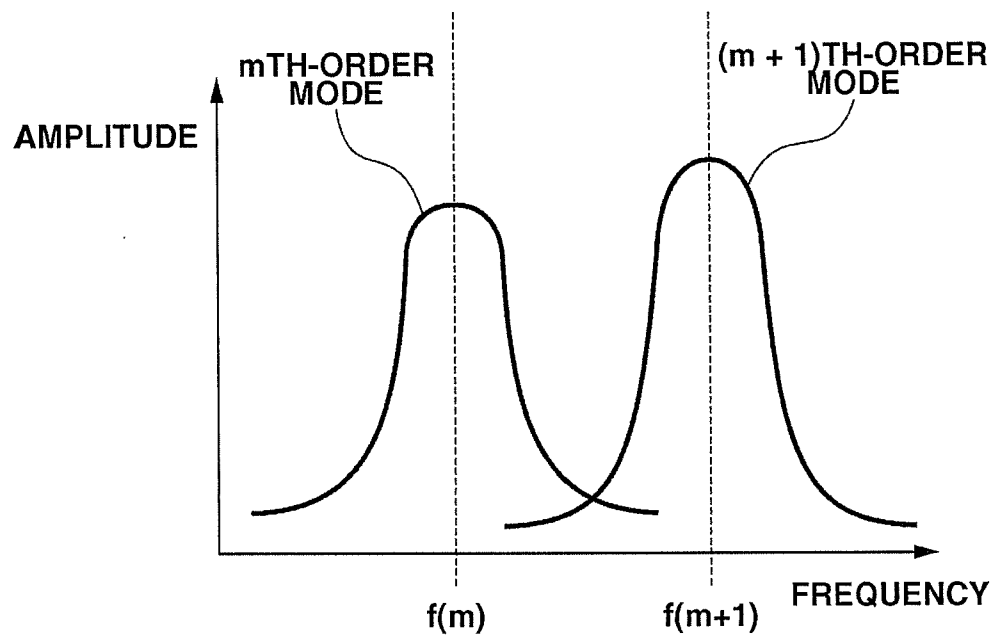
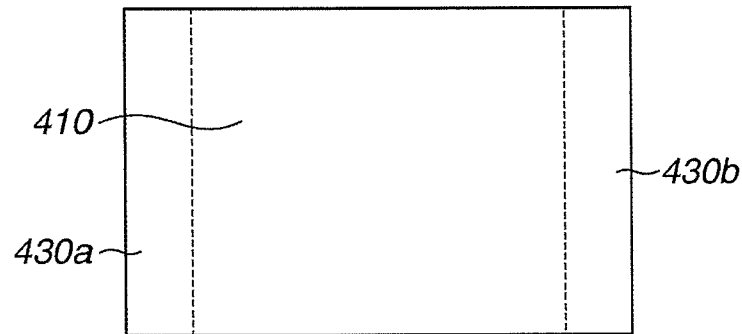
FIG.12

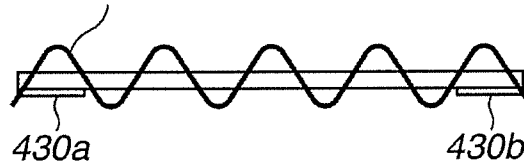
FIG.13A

• WHEN m IS AN ODD NUMBER ($m = 9$)



VIBRATION FORM OF
OPTICAL LOW-PASS FILTER 410

m TH-ORDER
MODE



$(m + 1)$ TH-ORDER
MODE

**FIG.13B**

		APPLIED VOLTAGE OF PIEZOELECTRIC ELEMENT 430a		APPLIED VOLTAGE OF PIEZOELECTRIC ELEMENT 430b	
		REAL COMPONENT	IMAGINARY COMPONENT	REAL COMPONENT	IMAGINARY COMPONENT
(1)	m TH-ORDER MODE	1	0	1	0
(2)	$(m + 1)$ TH-ORDER MODE	A	0	-A	0

FIG.14

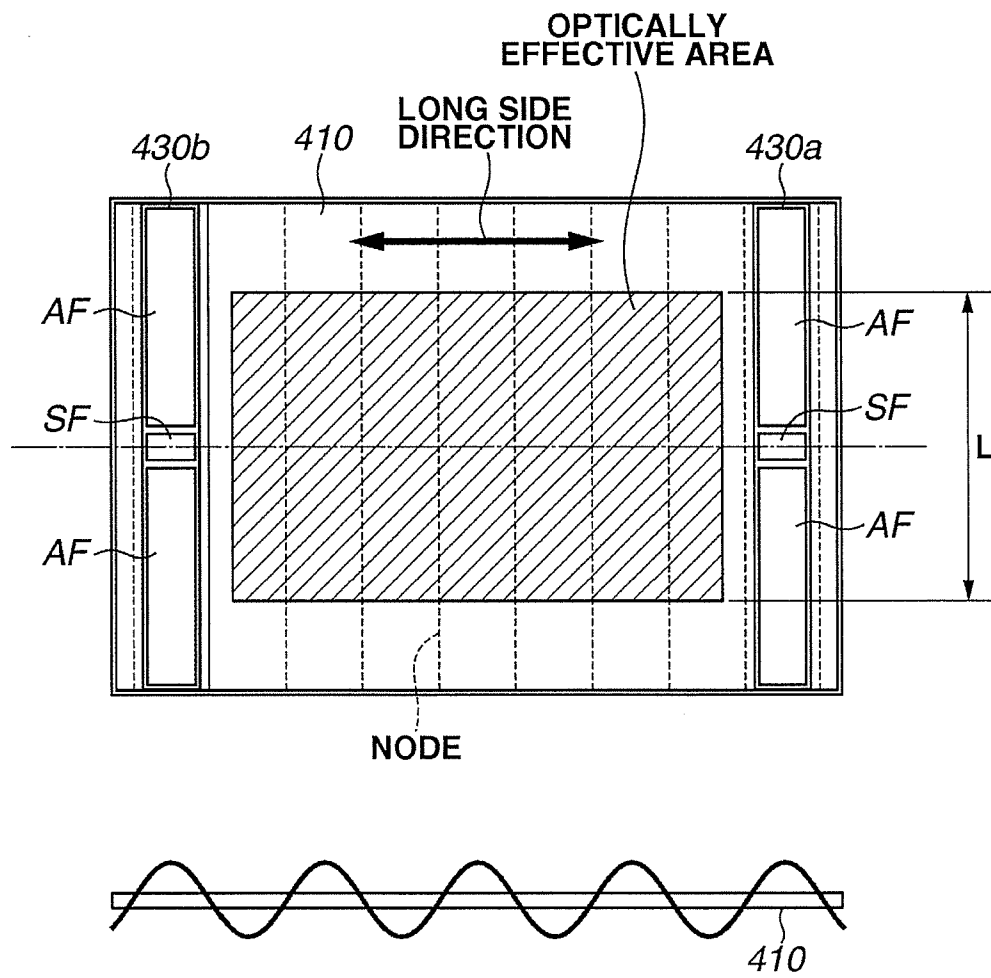


FIG.15