FIG.1

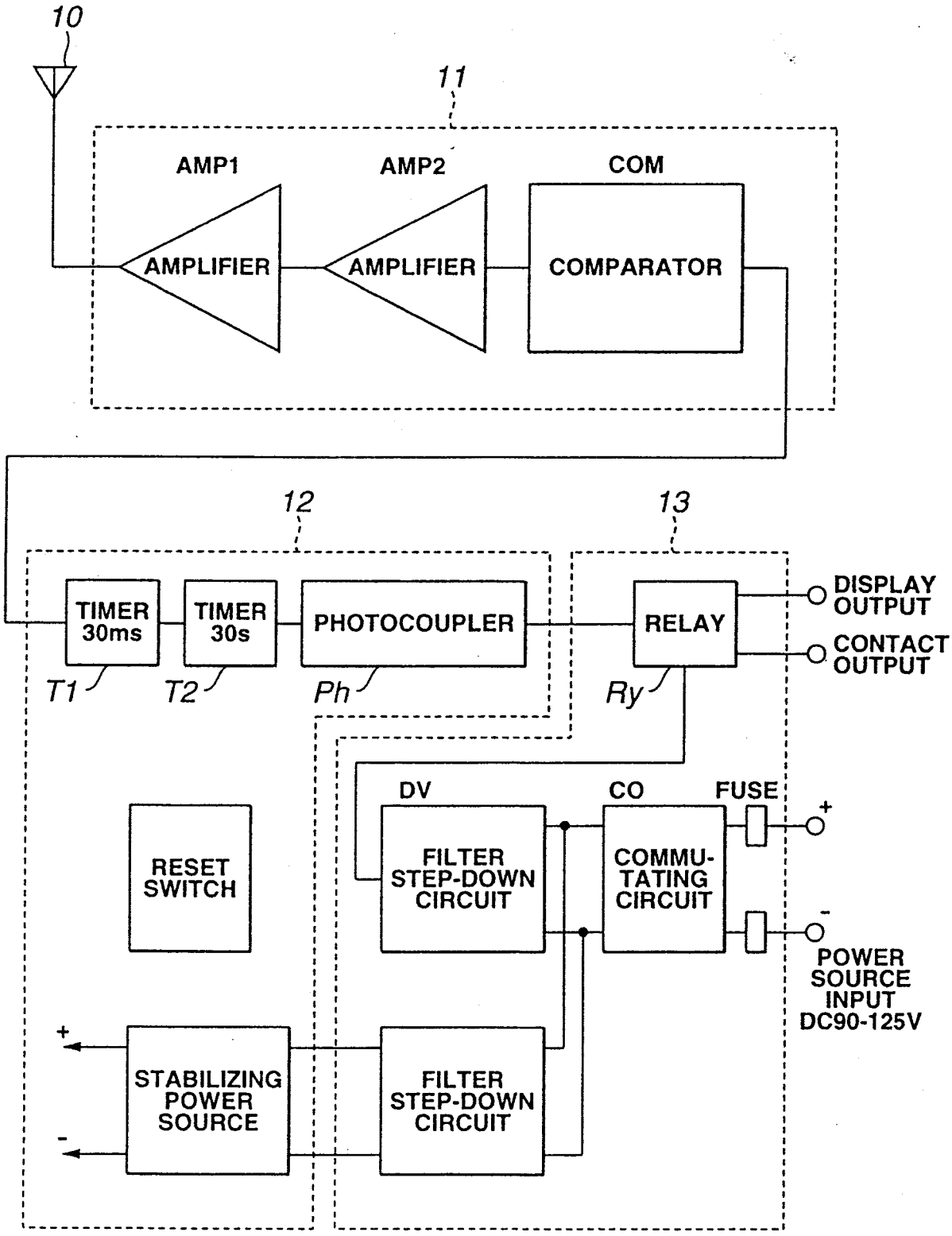

10
11
AMP1
AMP2
COM
AMPLIFIER
AMPLIFIER
COMPARATOR
12
13
TIMER 30ms
TIMER 30s
PHOTOCOUPLER
RELAY
DISPLAY OUTPUT
CONTACT OUTPUT
T1
T2
Ph
Ry
DV
CO
FUSE
RESET SWITCH
FILTER STEP-DOWN CIRCUIT
COMMU-TATING CIRCUIT
+
-
POWER SOURCE INPUT DC90-125V
STABILIZING POWER SOURCE
FILTER STEP-DOWN CIRCUIT

FIG.2

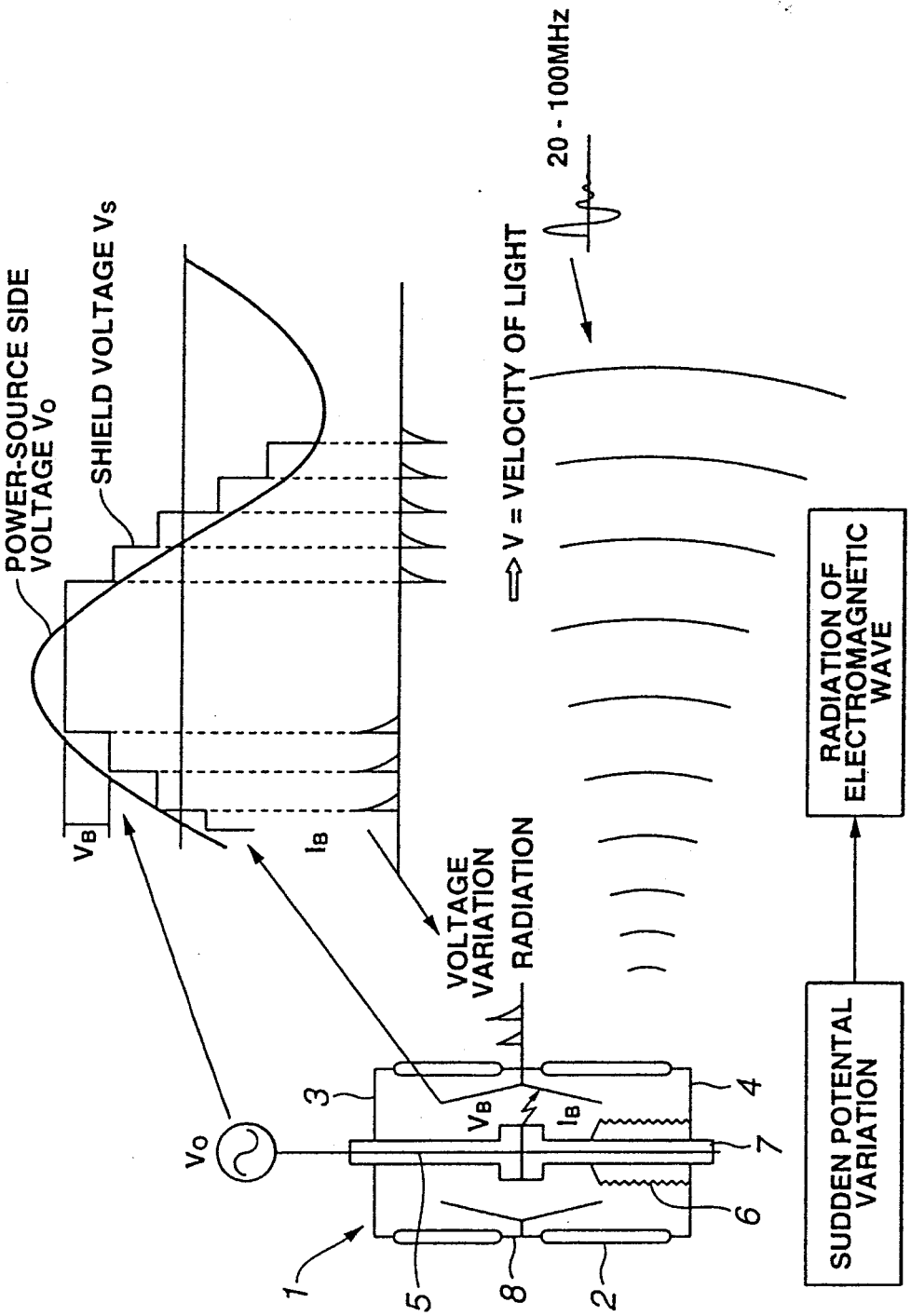

POWER-SOURCE SIDE VOLTAGE Vo
SHIELD VOLTAGE Vs
VB
IB
V = VELOCITY OF LIGHT
20 - 100MHz
VOLTAGE VARIATION
RADIATION
RADIATION OF ELECTROMAGNETIC WAVE
SUDDEN POTENTAL VARIATION
Vo
3
4
7
6
1
5
8
2

FIG.3A

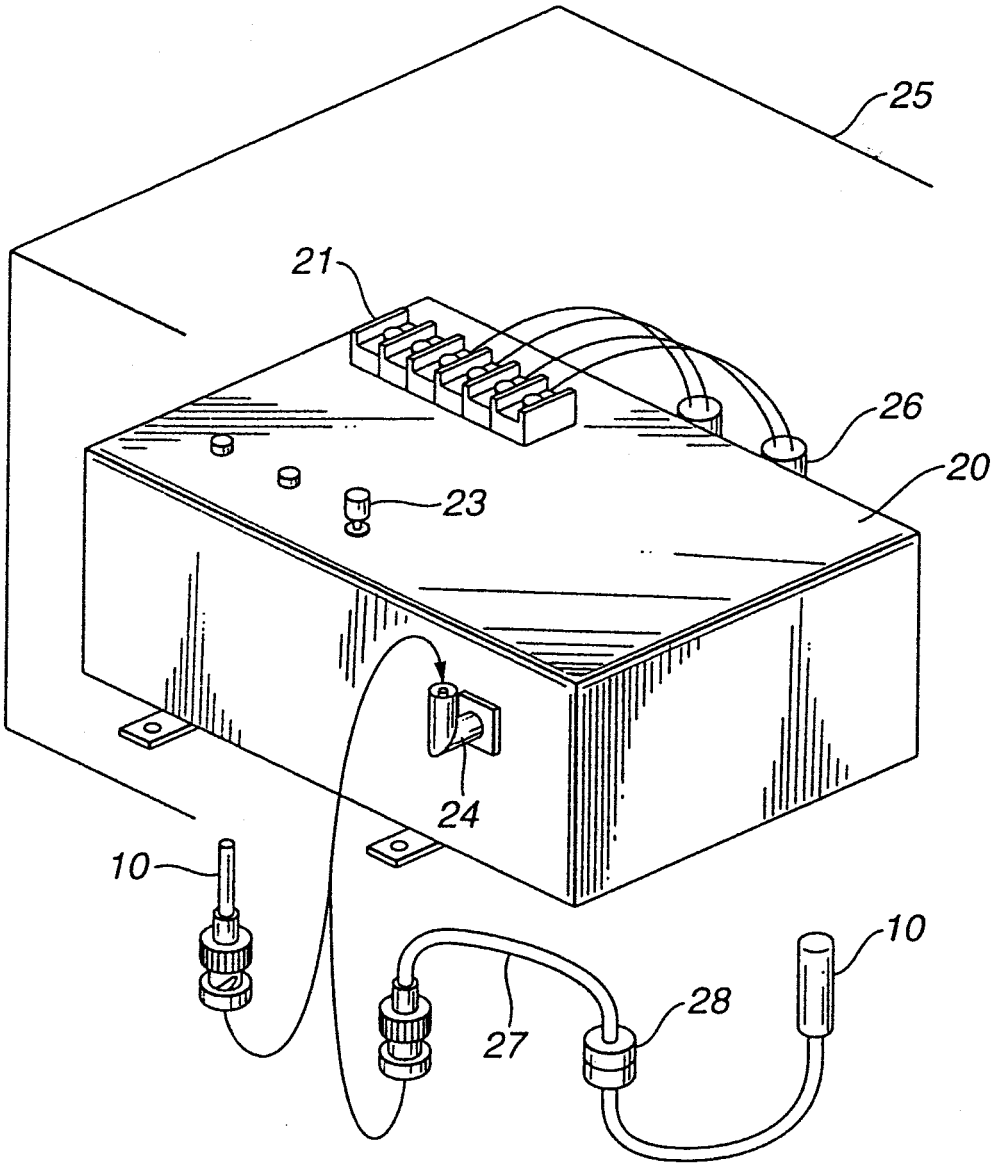


FIG.3B

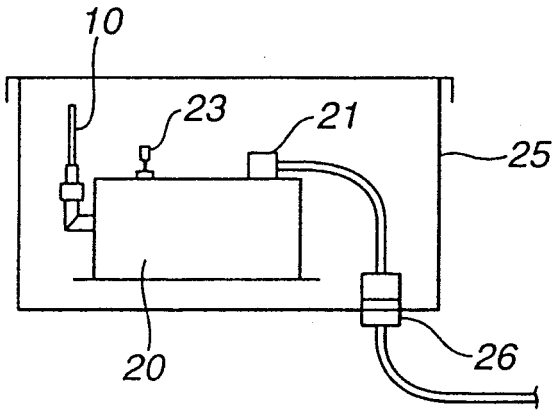


FIG.4A

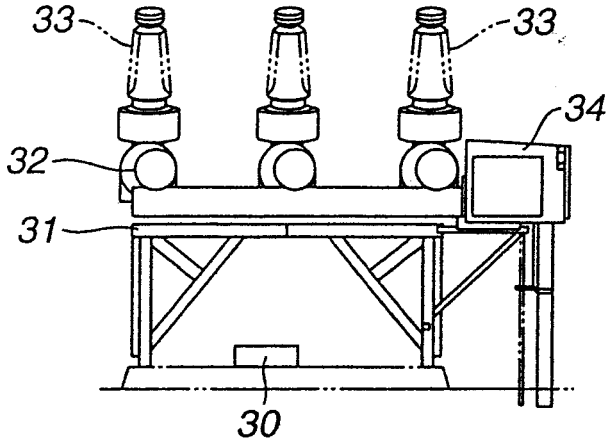


FIG.4B

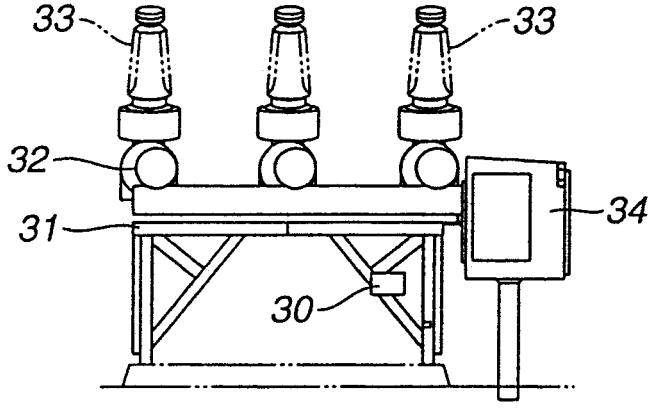


FIG.4C

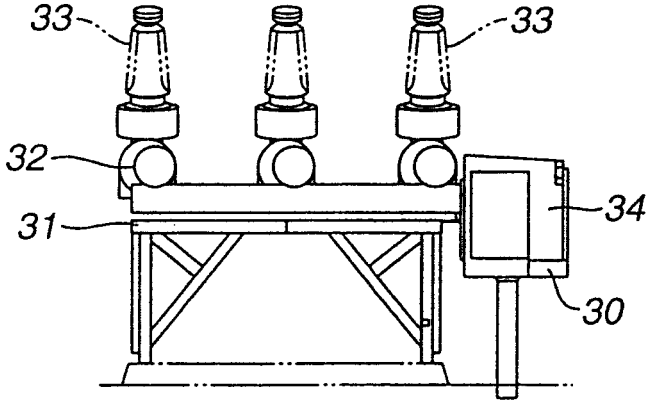


FIG.5

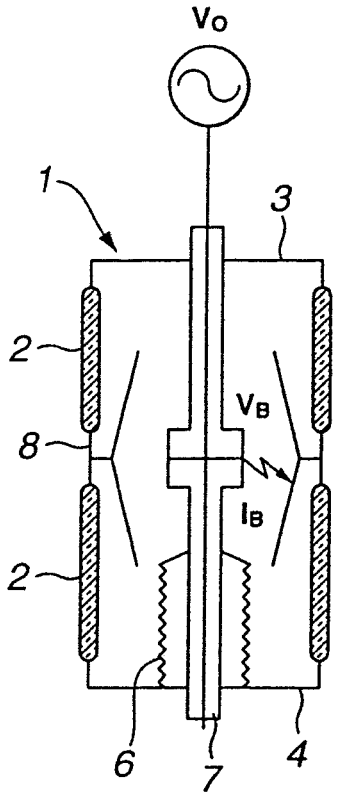
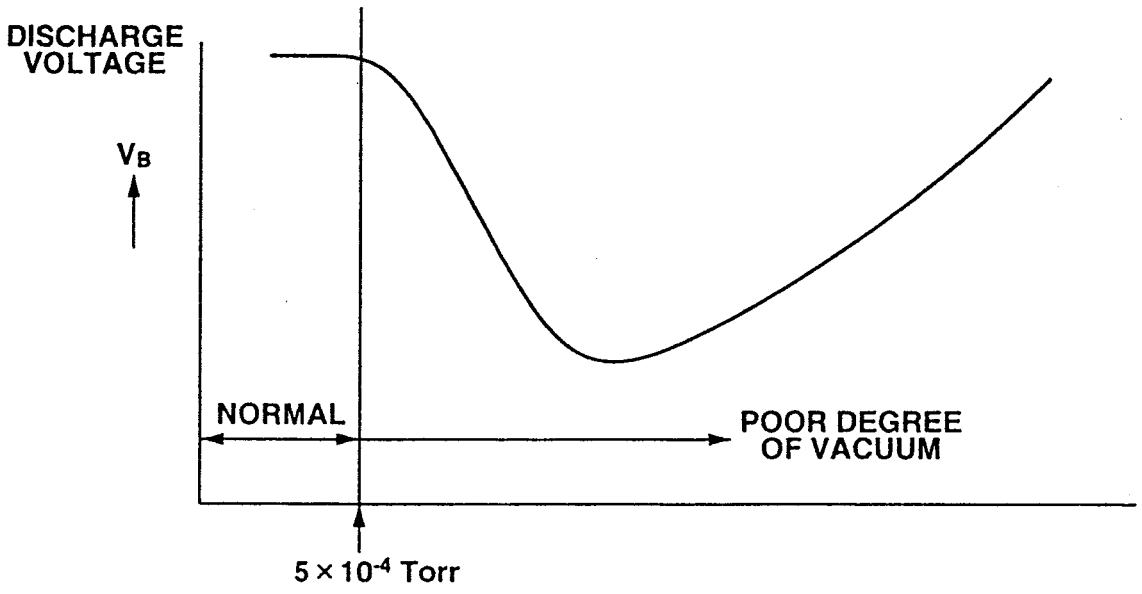

Vo
1
3
2
VB
8
IB
2
6
7
4

FIG.6


DISCHARGE VOLTAGE
VB
NORMAL
POOR DEGREE OF VACUUM
5 × 10-4 Torr