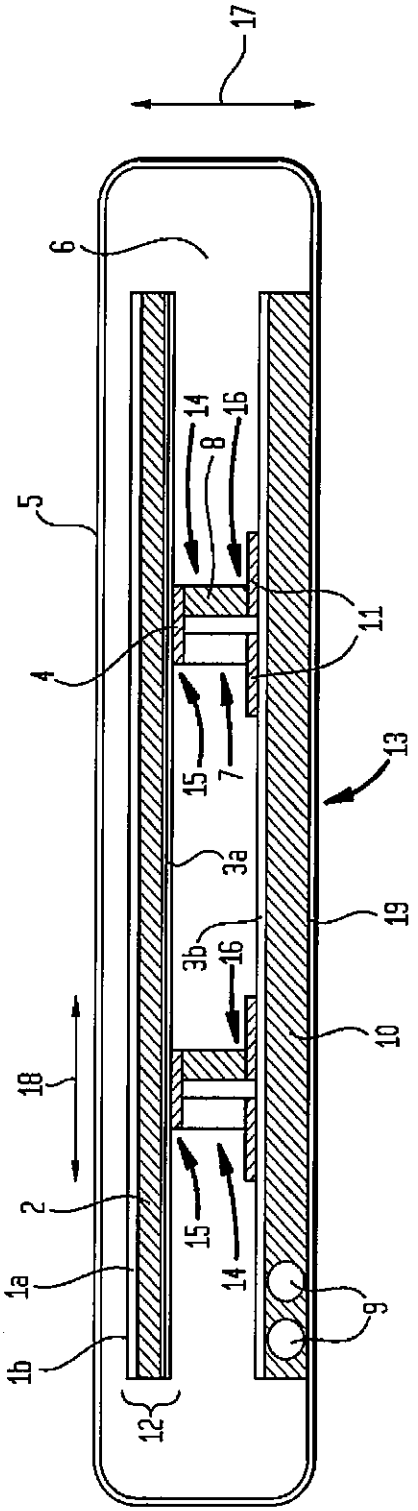


FIG. 1

FIG. 2

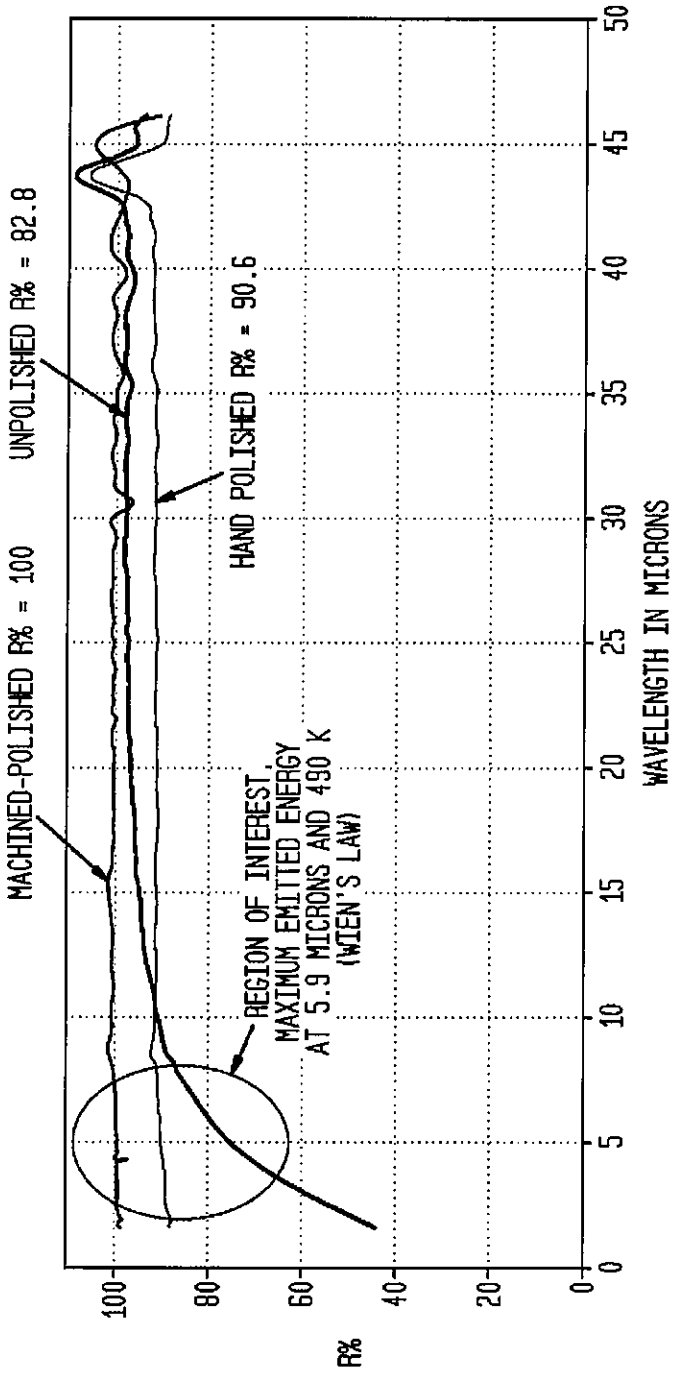
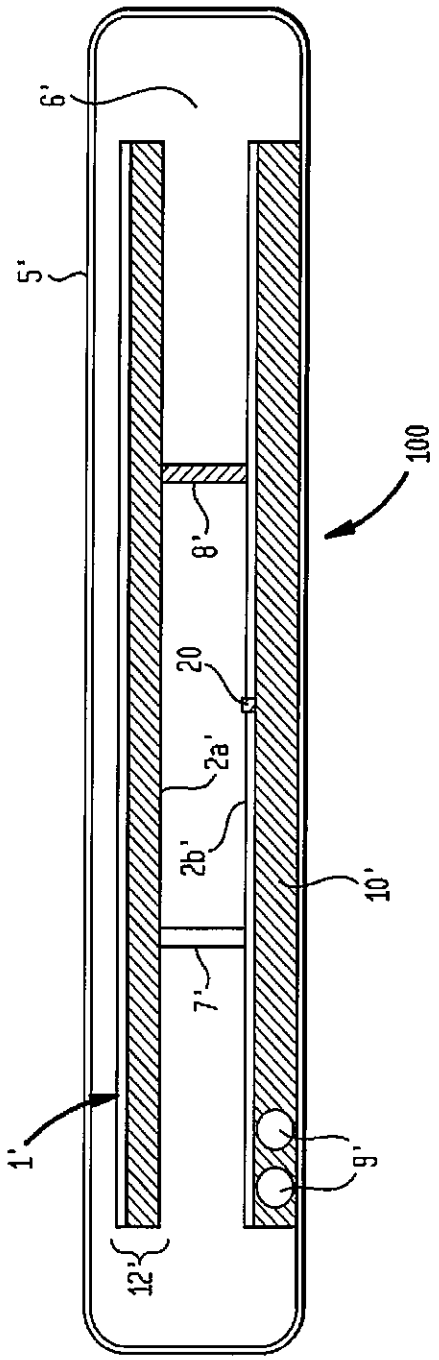

MACHINED-POLISHED R% = 100
UNPOLISHED R% = 82.8
HAND POLISHED R% = 90.6
REGION OF INTEREST,
MAXIMUM EMITTED ENERGY
AT 5.9 MICRONS AND 490 K
(WIEN'S LAW)
R%
WAVELENGTH IN MICRONS
0
20
40
60
80
100
0
5
10
15
20
25
30
35
40
45
50

FIG. 3



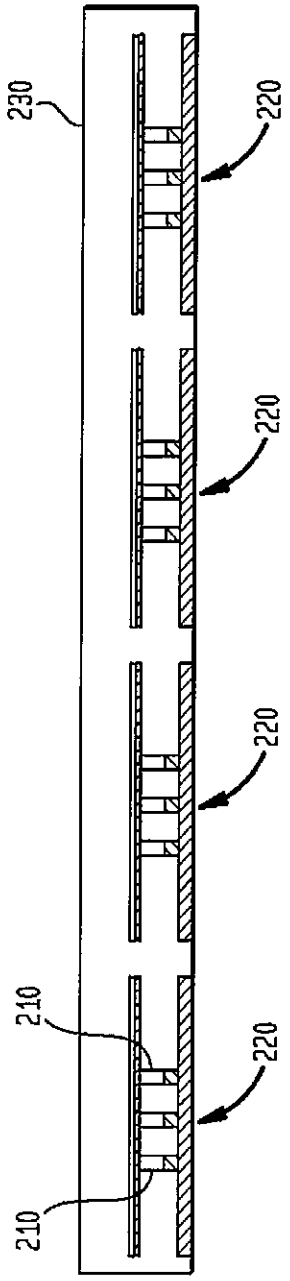


FIG. 4

FIG. 5A

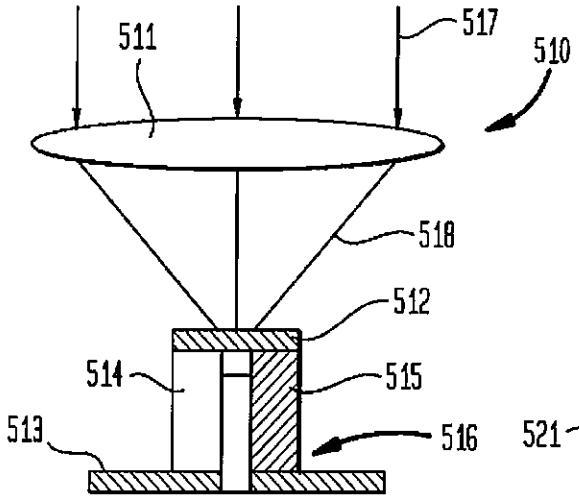


FIG. 5B

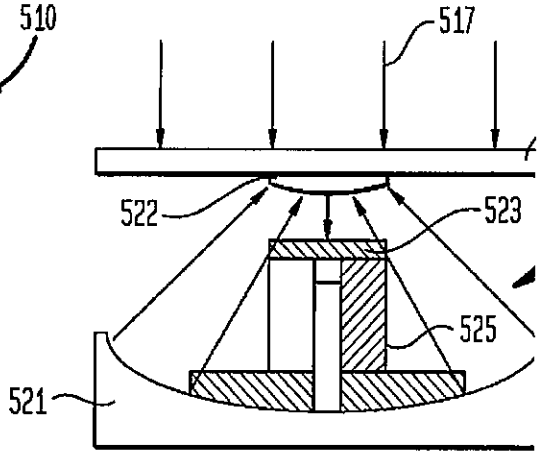


FIG. 5C

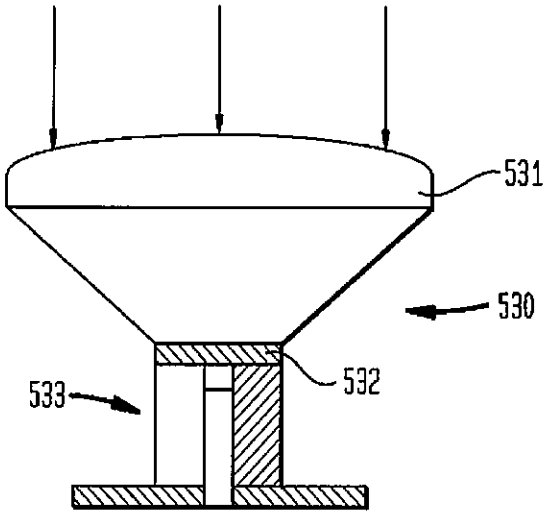


FIG. 6A

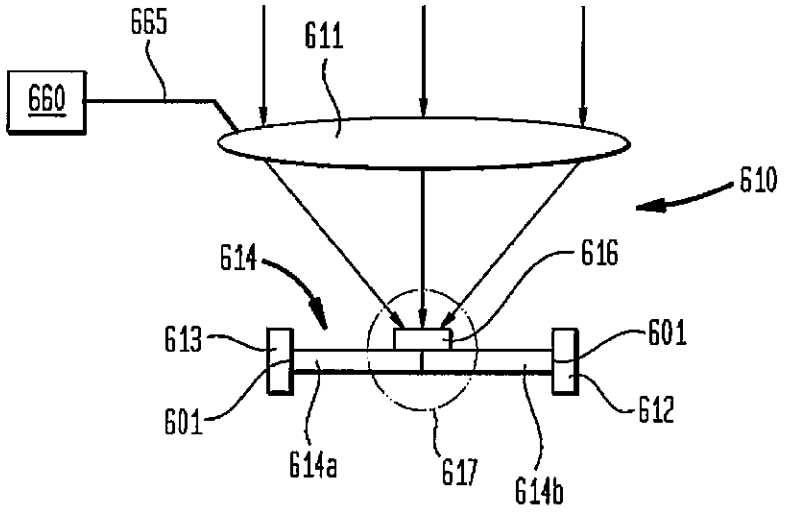

665
611
660
610
614
616
613
601
601
612
614a
617
614b

FIG. 6B

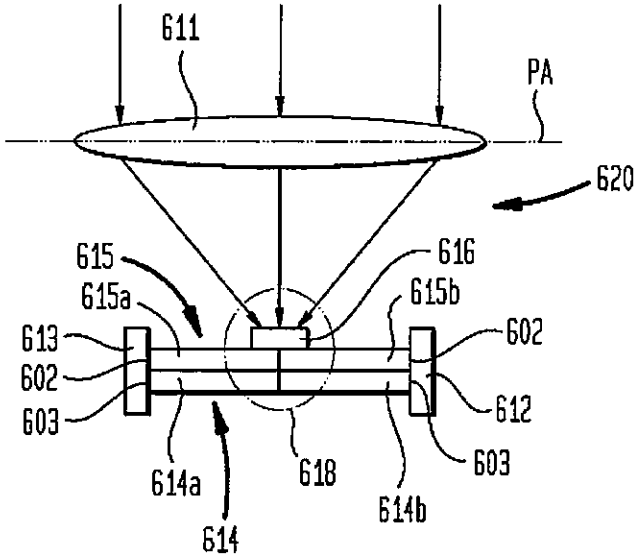

611
PA
620
615
616
615a
615b
613
602
602
603
612
614a
618
603
614b
614

FIG. 6C

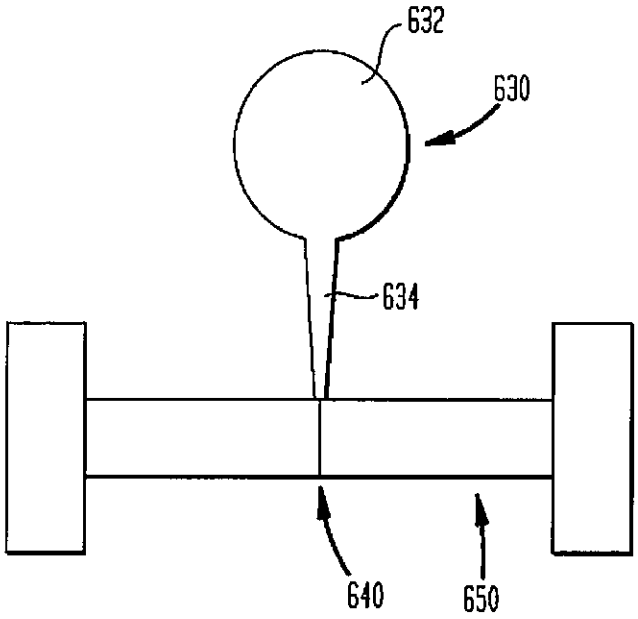


FIG. 7

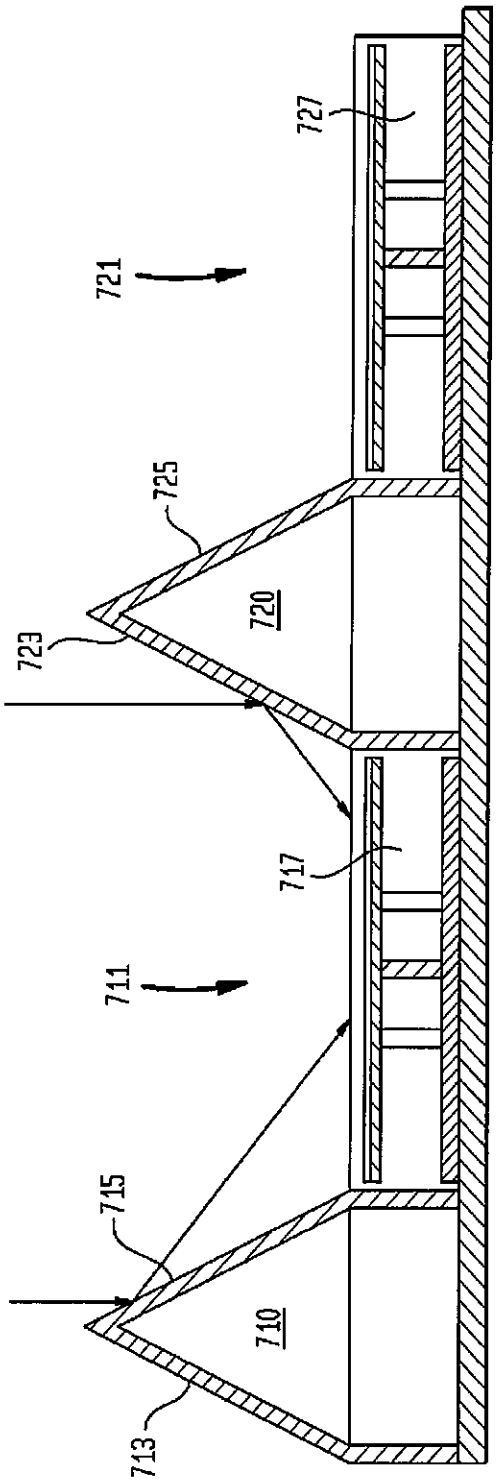


FIG. 8A

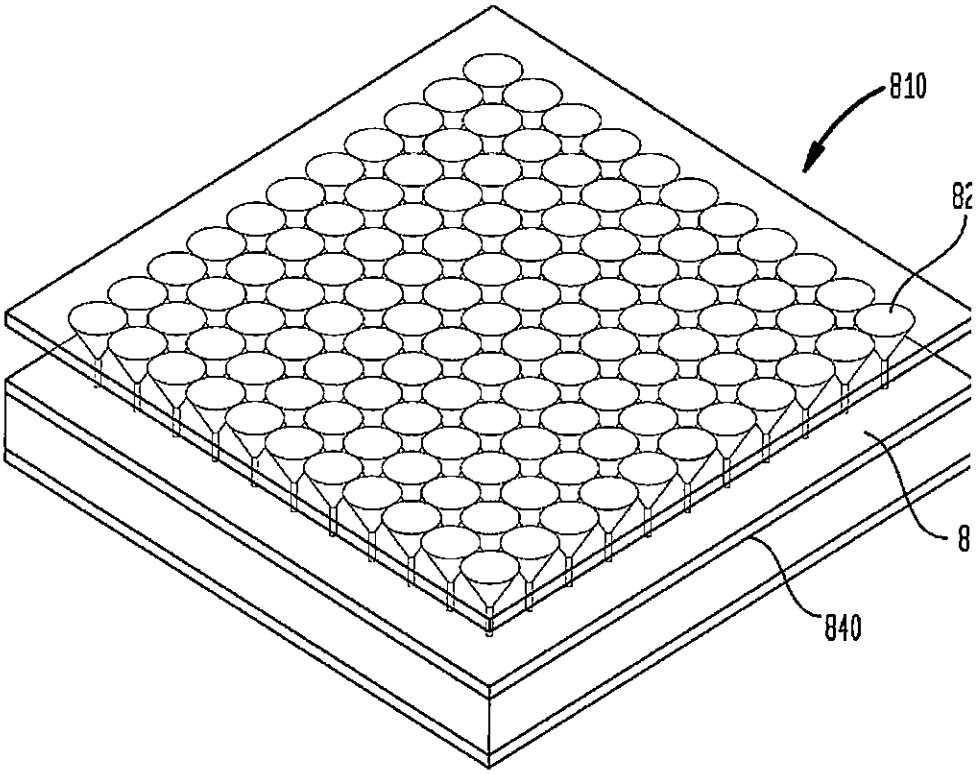


FIG. 8B

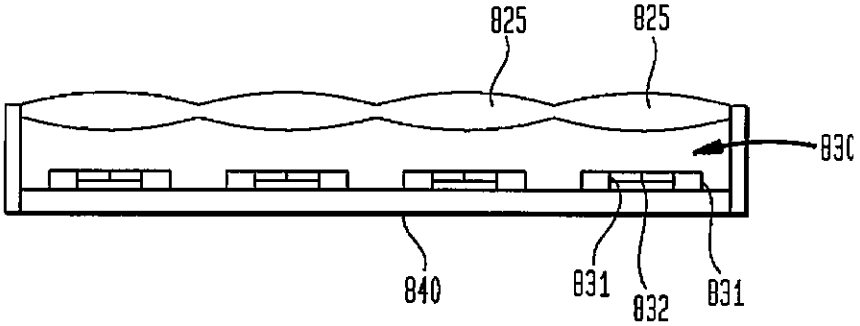


FIG. 9

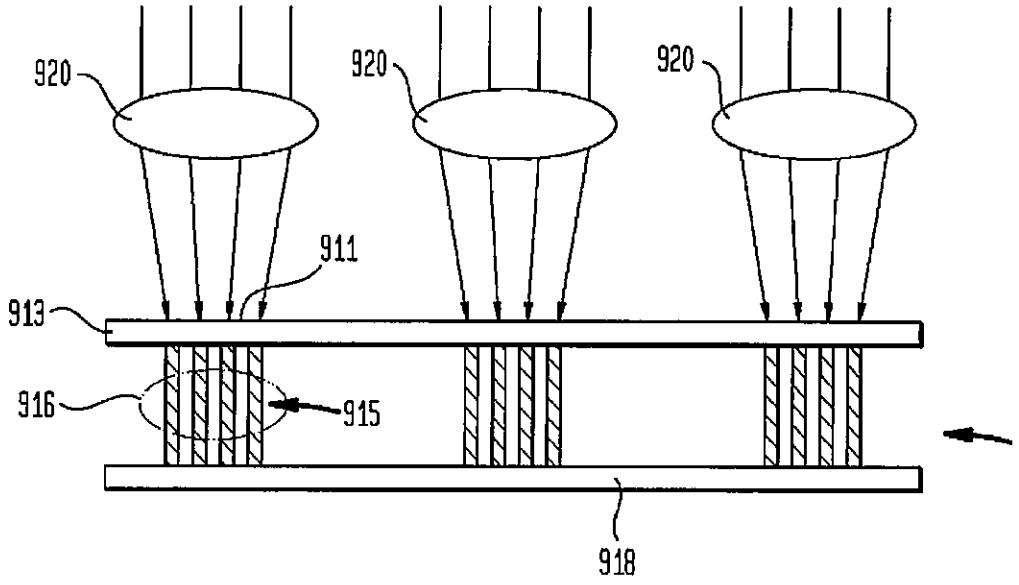


FIG. 10A

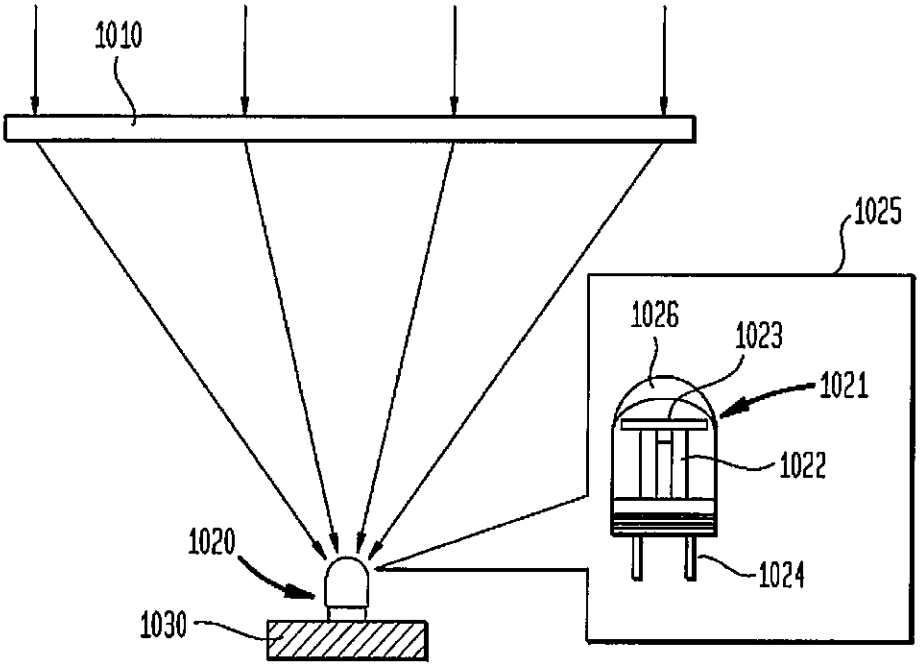


FIG. 10B

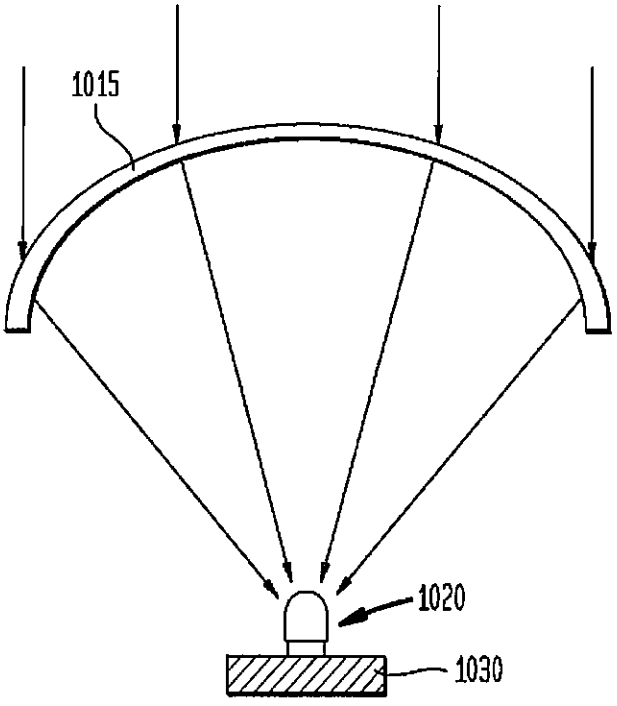


FIG. 10C

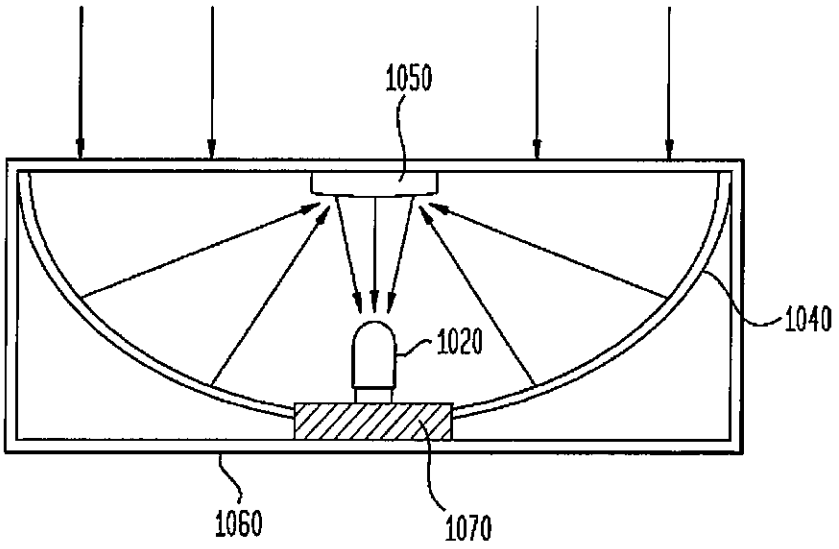


FIG. 11

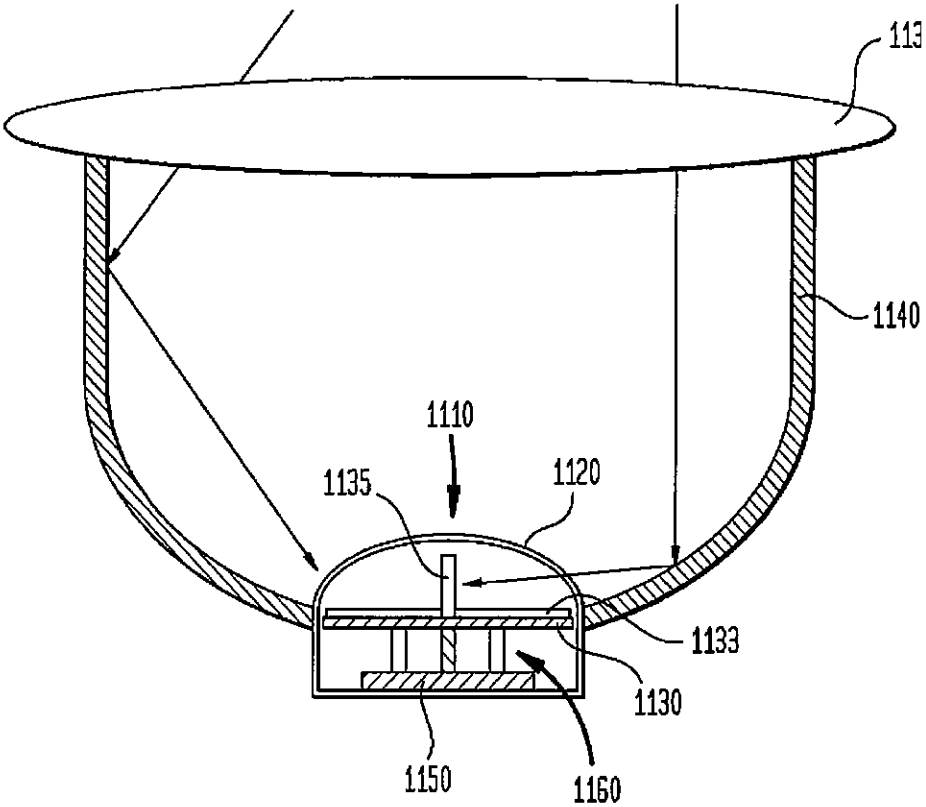


FIG. 12A

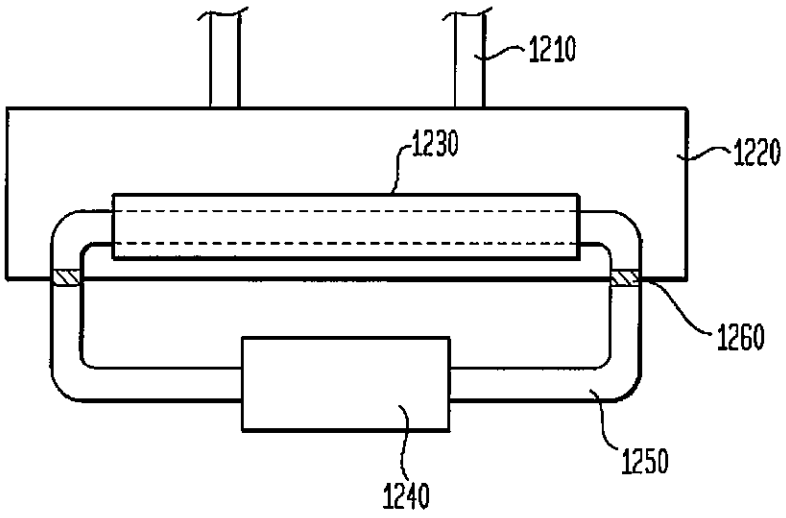


FIG. 12B

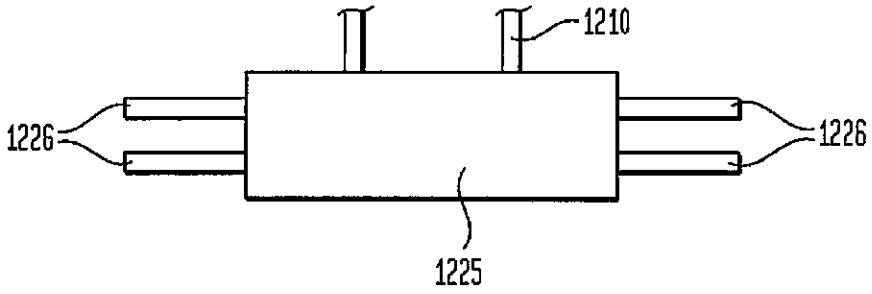


FIG. 13A

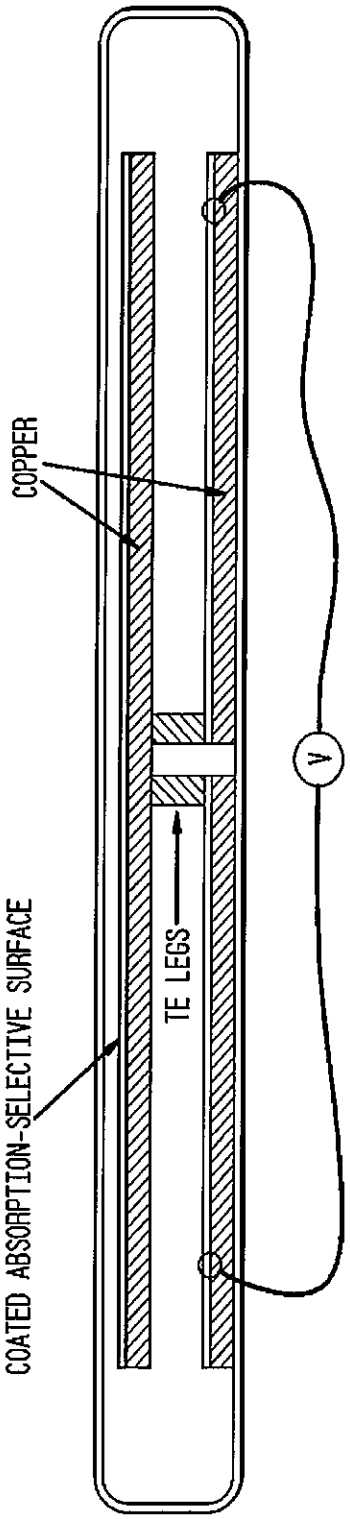


FIG. 13B

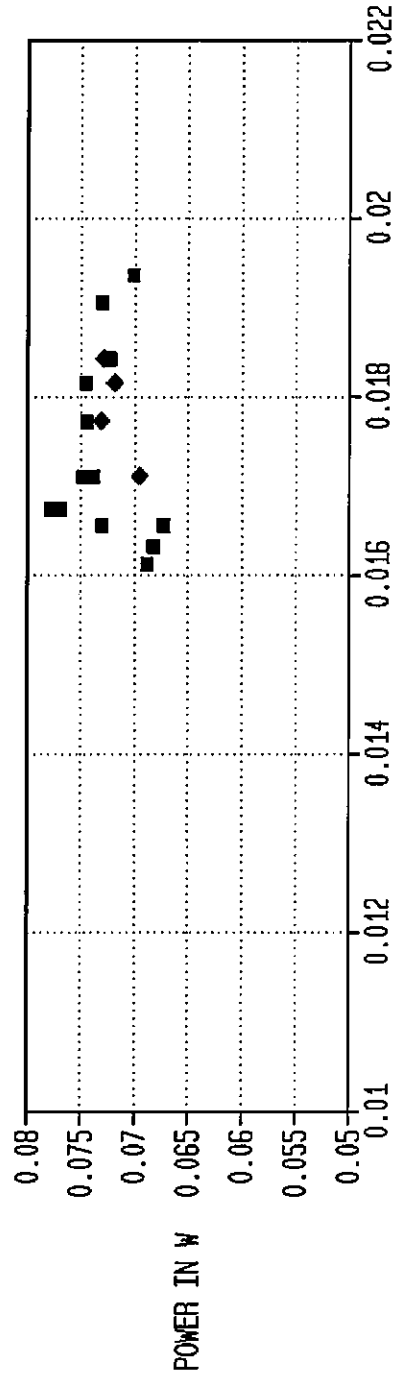
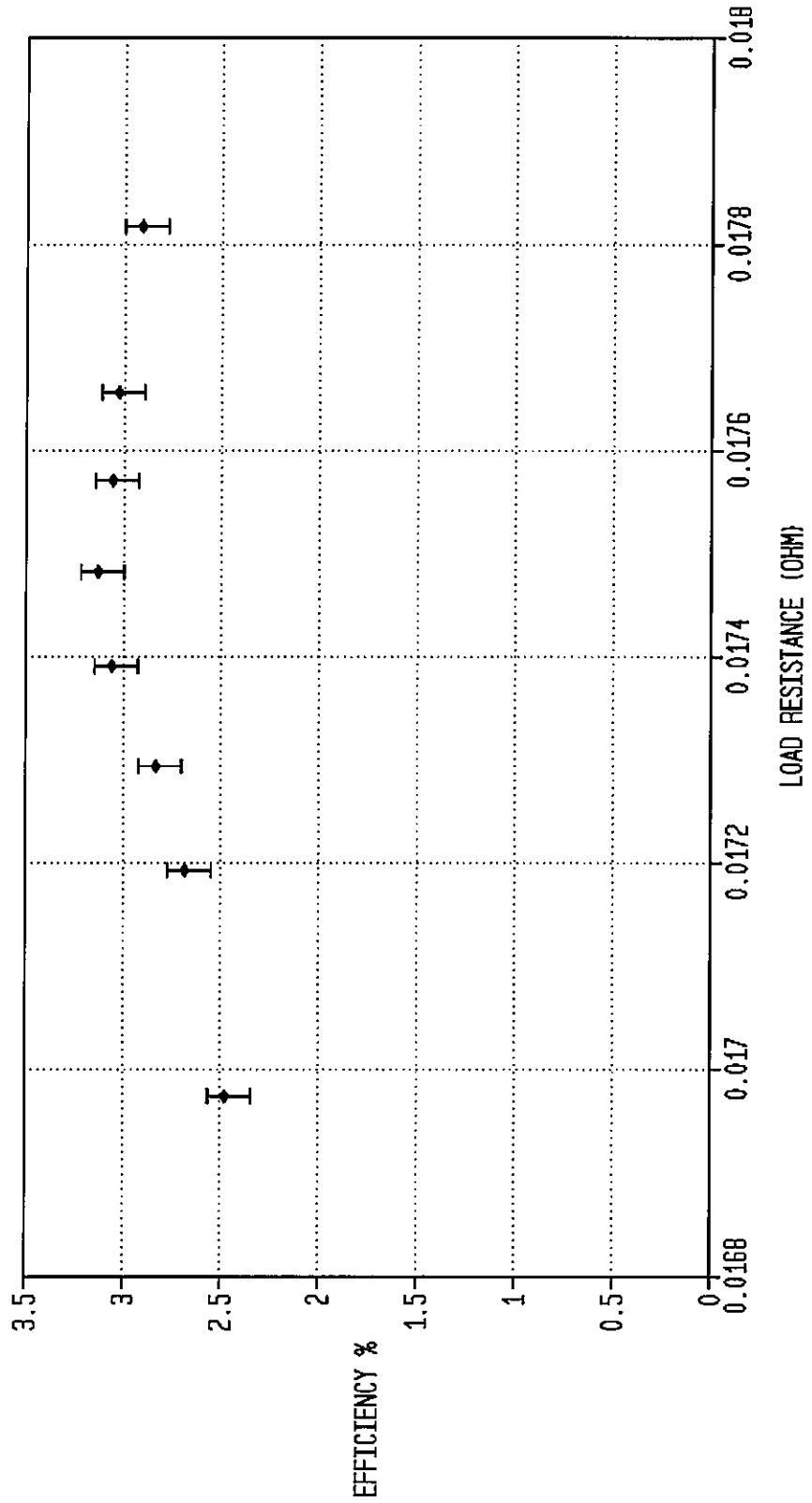

POWER VS LOAD
POWER IN W
0.08
0.075
0.07
0.065
0.06
0.055
0.05
0.01
0.012
0.014
0.016
0.018
0.02
0.022
LOAD RESISTANCE IN OHM

FIG. 13C


3.5
3
2.5
2
1.5
1
0.5
0
EFFICIENCY %
0.0168
0.017
0.0172
0.0174
0.0176
0.0178
0.018
LOAD RESISTANCE (OHM)