FIG. 1

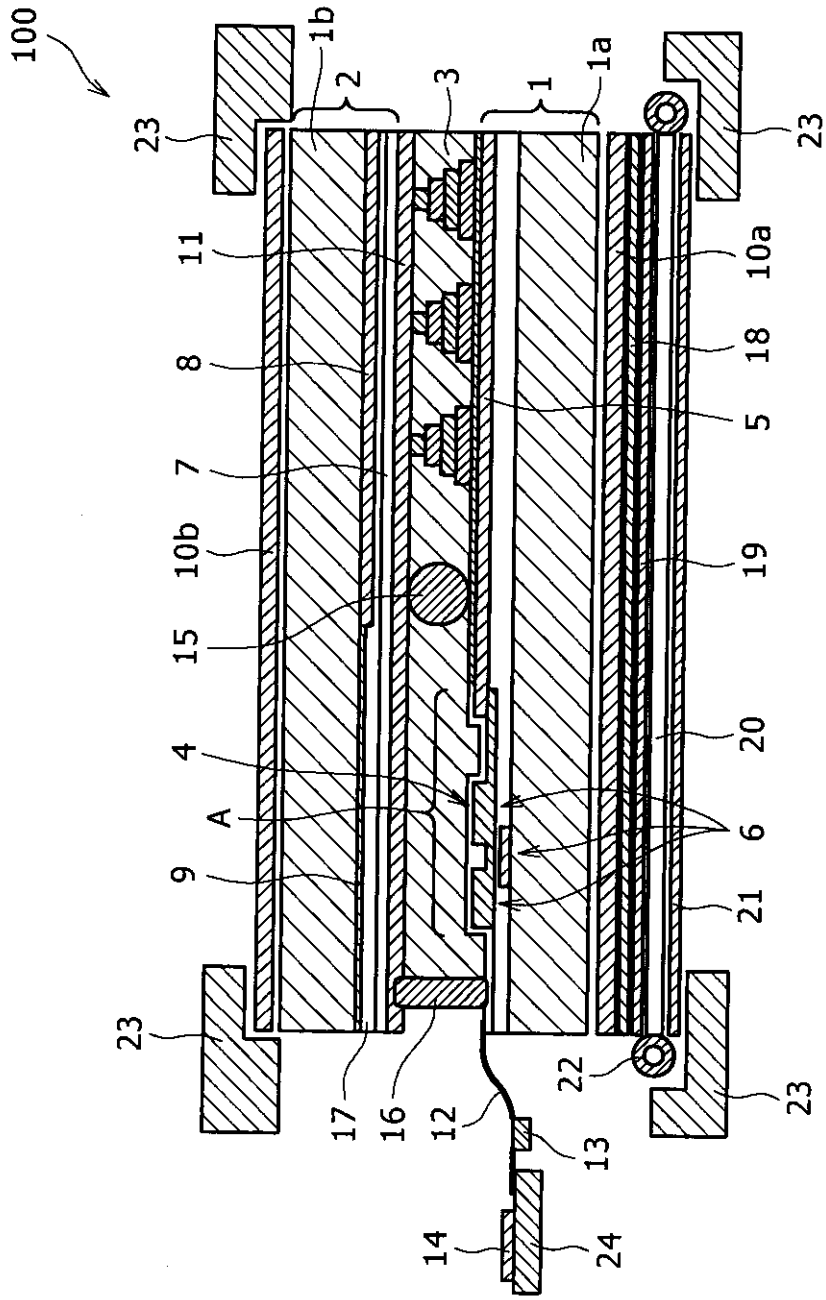

100
1b
2
3
1
1a
23
23
11
10a
8
18
5
7
10b
19
15
4
20
A
6
9
21
23
22
23
17
16
12
13
14
24

FIG. 2

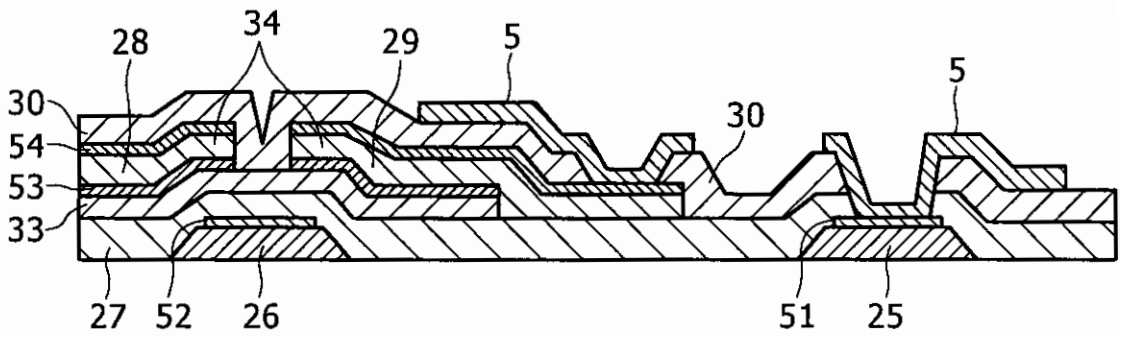

28
34
29
5
5
30
30
54
53
33
27
52
26
51
25

FIG. 3

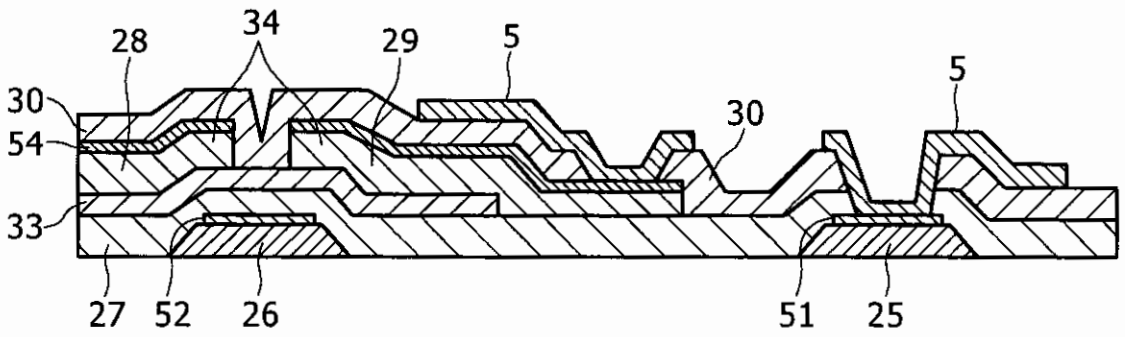

28
34
29
5
5
30
30
54
33
27
52
26
51
25

FIG. 4A

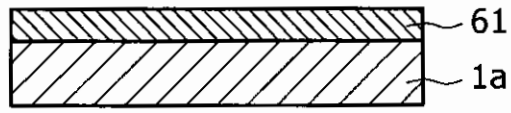


FIG. 4B

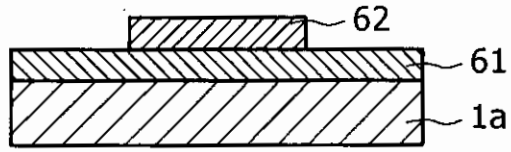


FIG. 4C

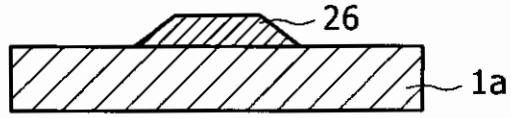


FIG. 4D

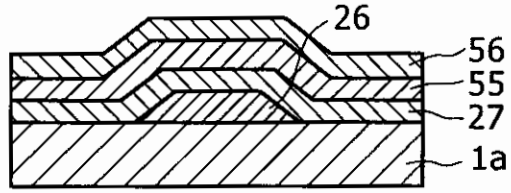


FIG. 4E

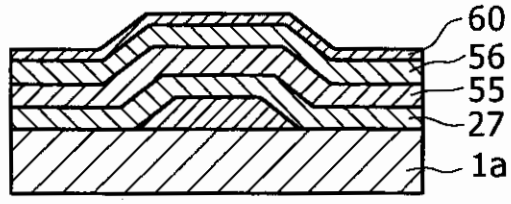


FIG. 4F

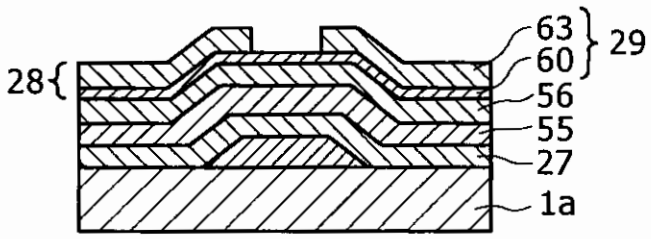


FIG. 4G

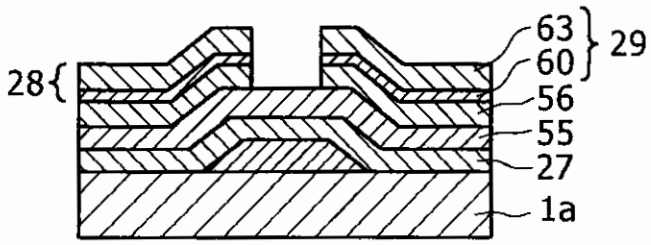


FIG. 5

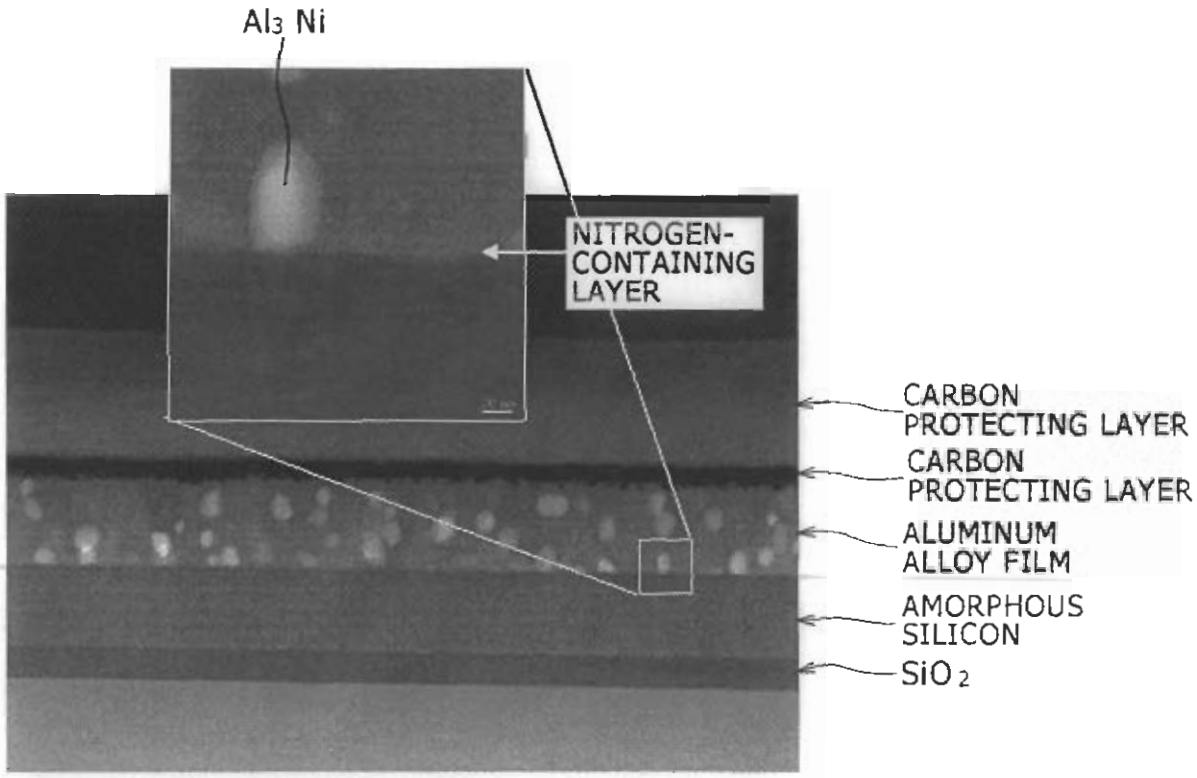

Al_3Ni
NITROGEN-CONTAINING LAYER
CARBON PROTECTING LAYER
CARBON PROTECTING LAYER
ALUMINUM ALLOY FILM
AMORPHOUS SILICON
SiO_2

FIG. 6

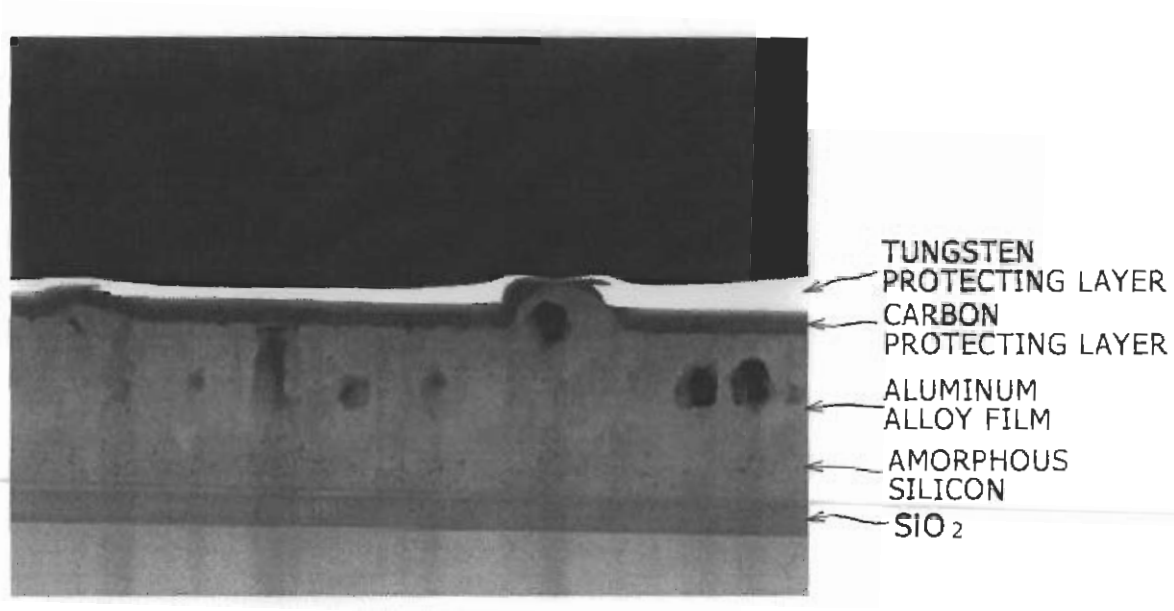

TUNGSTEN
PROTECTING LAYER
CARBON
PROTECTING LAYER
ALUMINUM
ALLOY FILM
AMORPHOUS
SILICON
SiO 2

FIG. 7

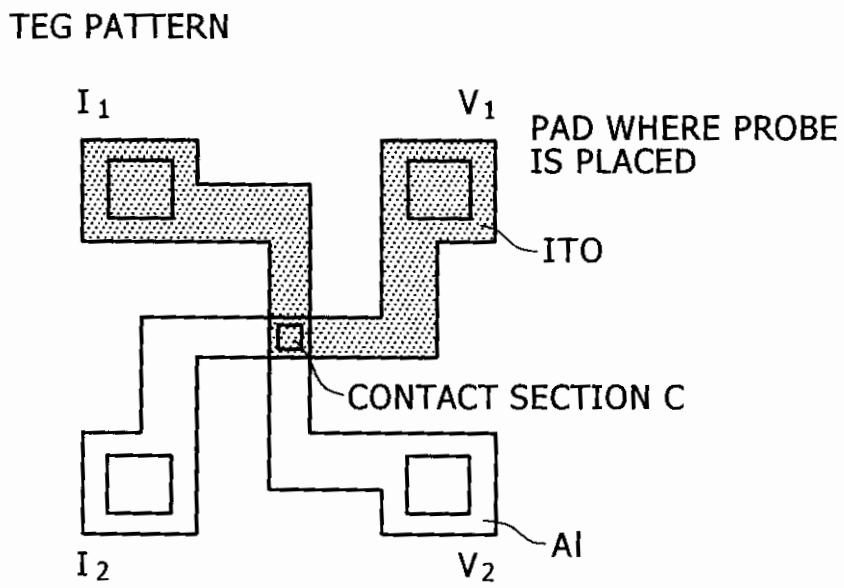

TEG PATTERN
I1
V1
PAD WHERE PROBE IS PLACED
ITO
CONTACT SECTION C
Al
I2
V2

FIG. 8

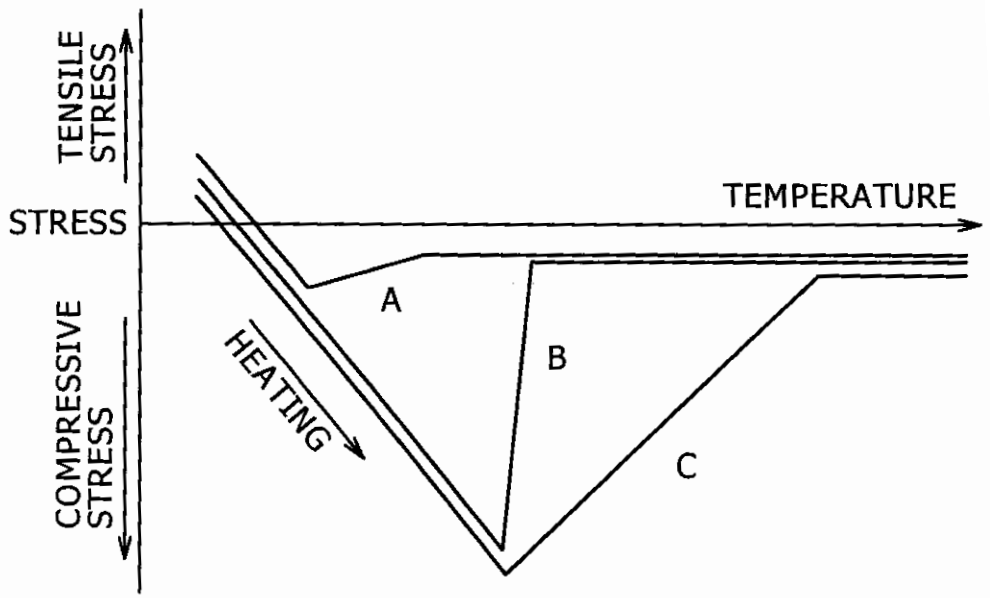

TENSILE STRESS
STRESS
COMPRESSIVE STRESS
TEMPERATURE
A
B
C
HEATING

FIG. 9

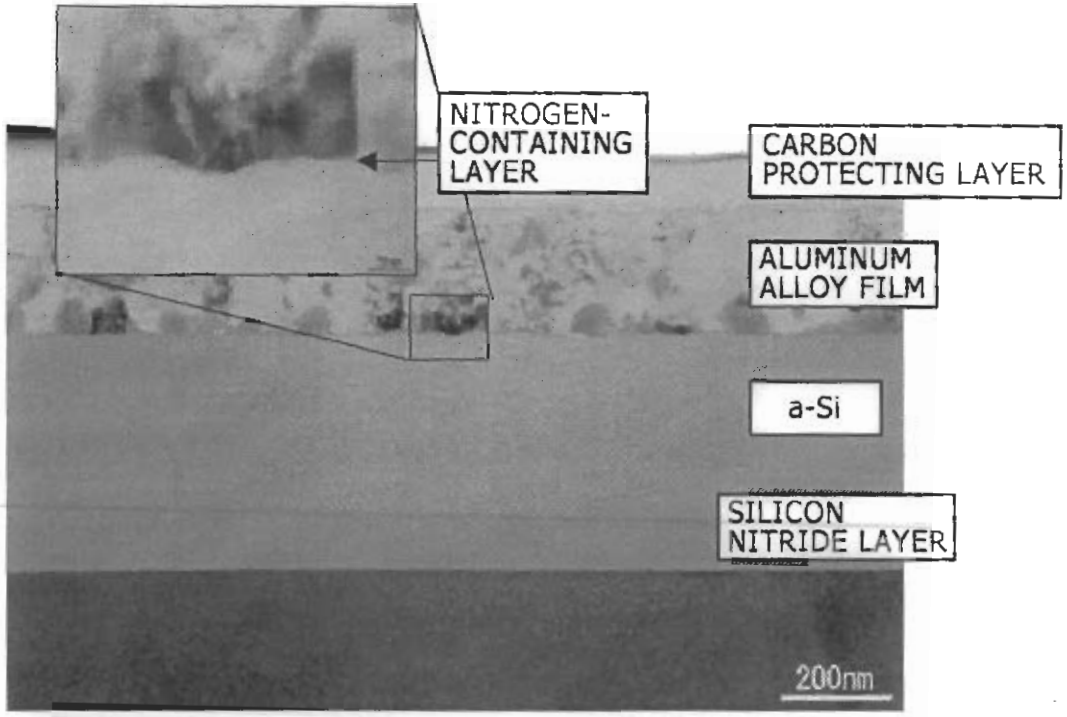
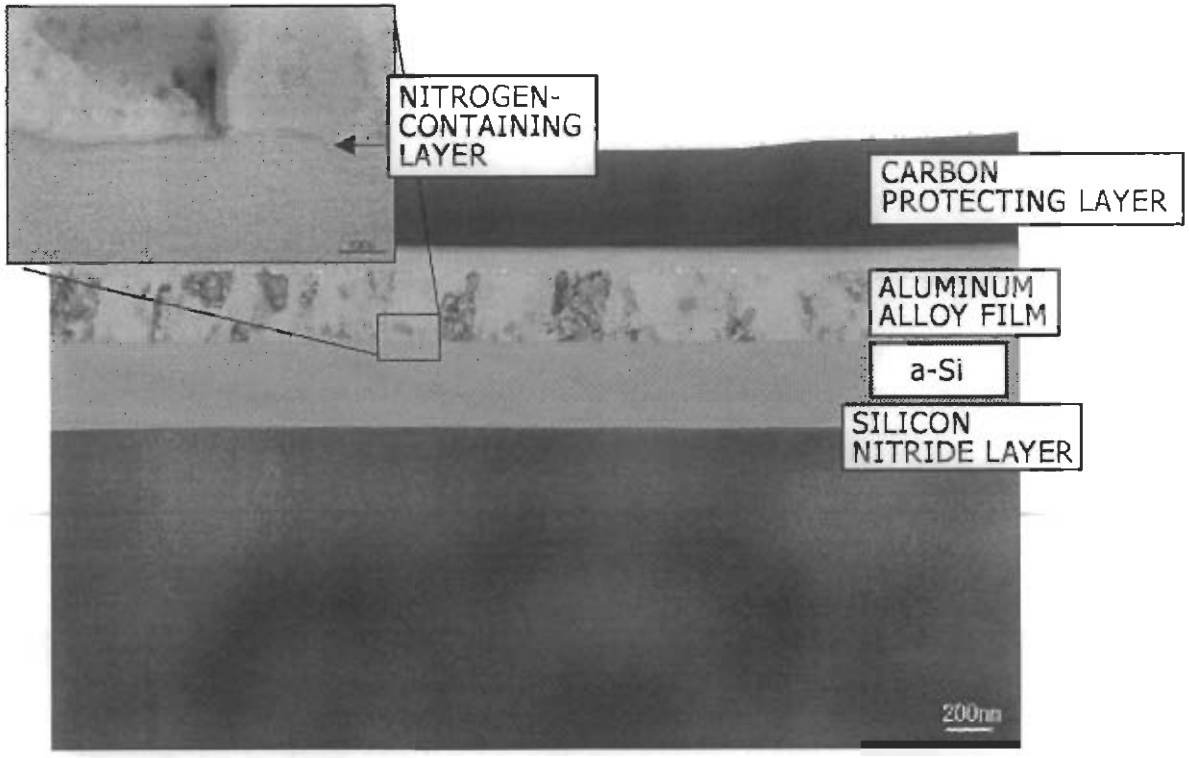

NITROGEN-CONTAINING LAYER
CARBON PROTECTING LAYER
ALUMINUM ALLOY FILM
a-Si
SILICON NITRIDE LAYER
200nm

FIG. 10


NITROGEN-CONTAINING LAYER
CARBON PROTECTING LAYER
ALUMINUM ALLOY FILM
a-Si
SILICON NITRIDE LAYER
200nm