FIG. 1

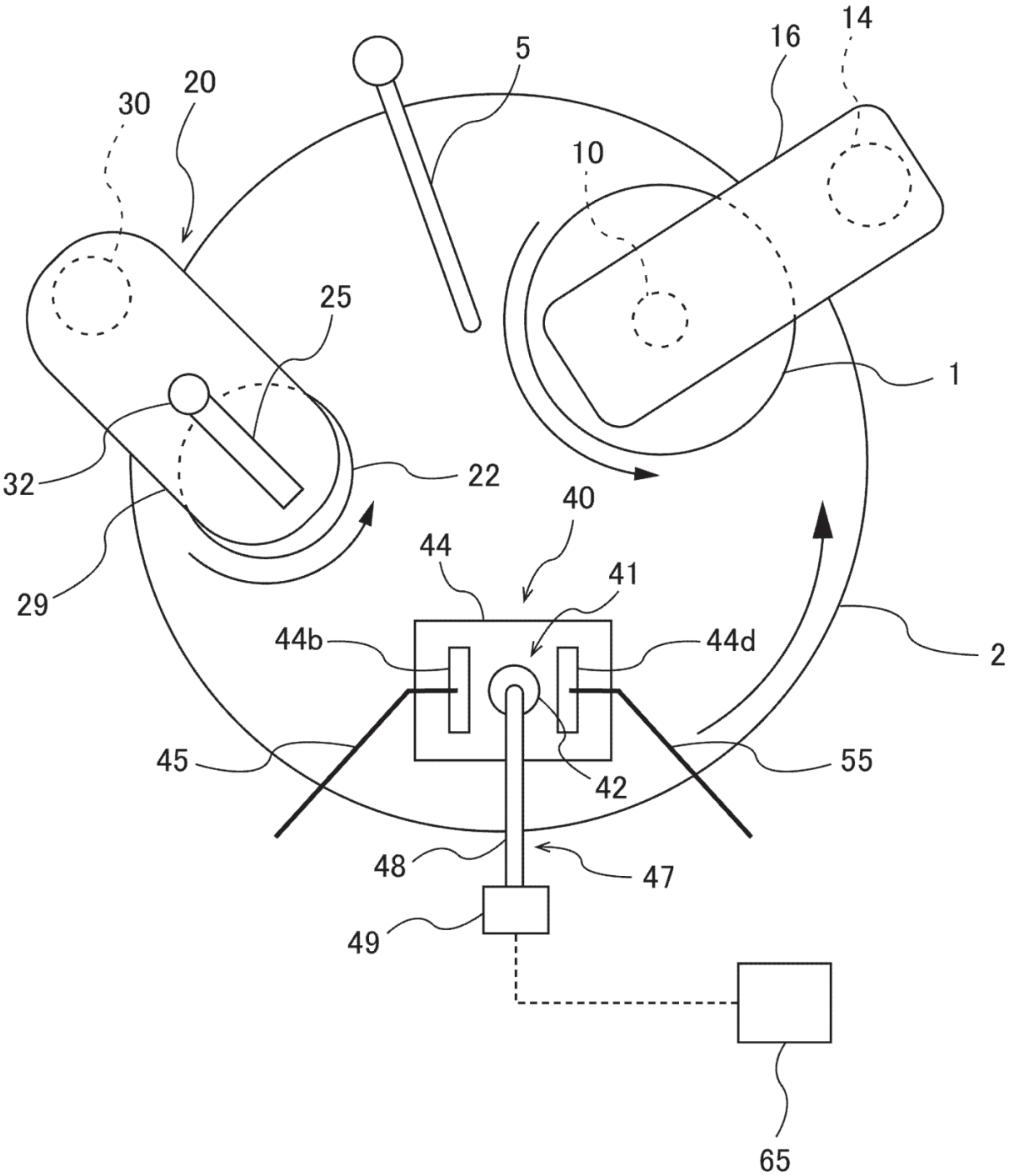


FIG. 2

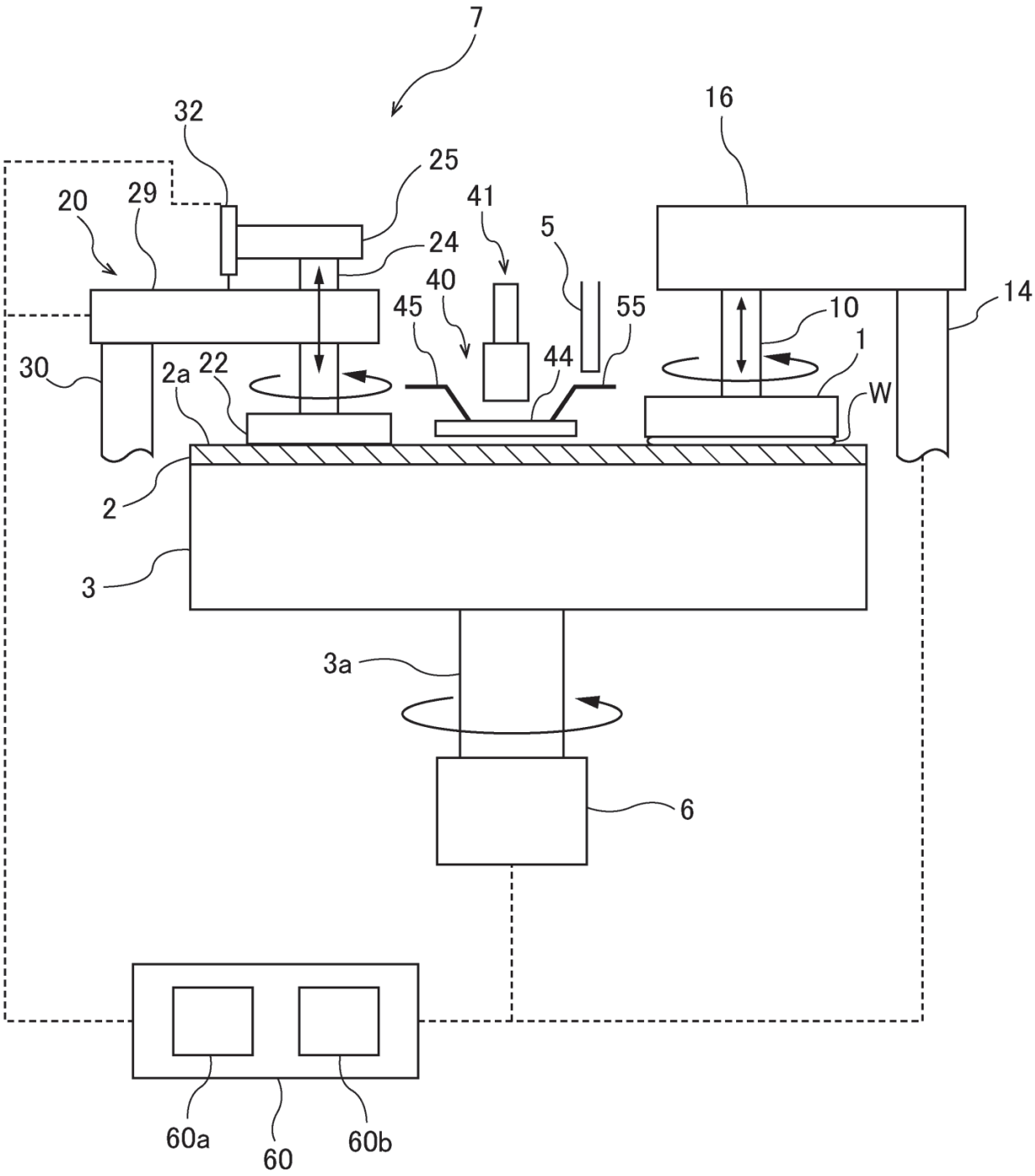


FIG. 3A

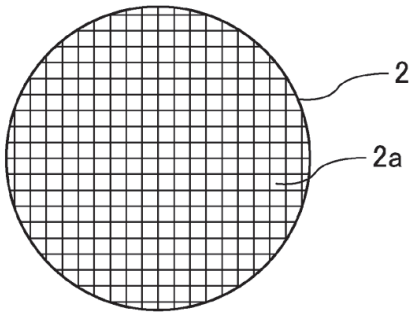


FIG. 3B

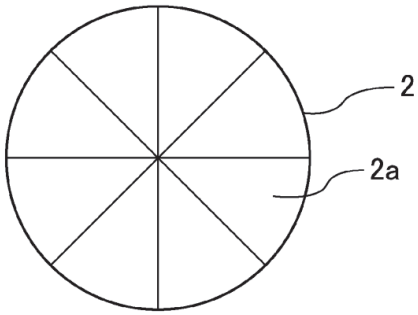


FIG. 3C

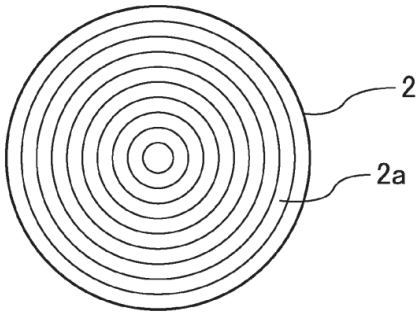


FIG. 3D

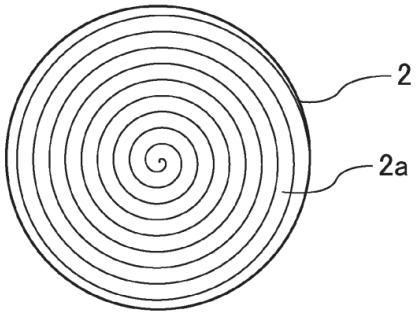


FIG. 4

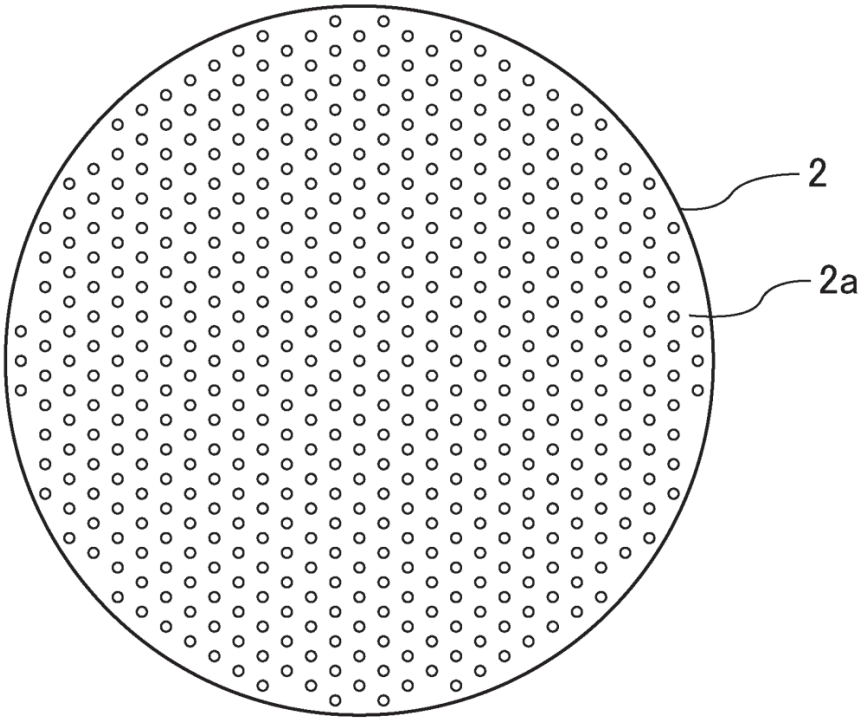


FIG. 5

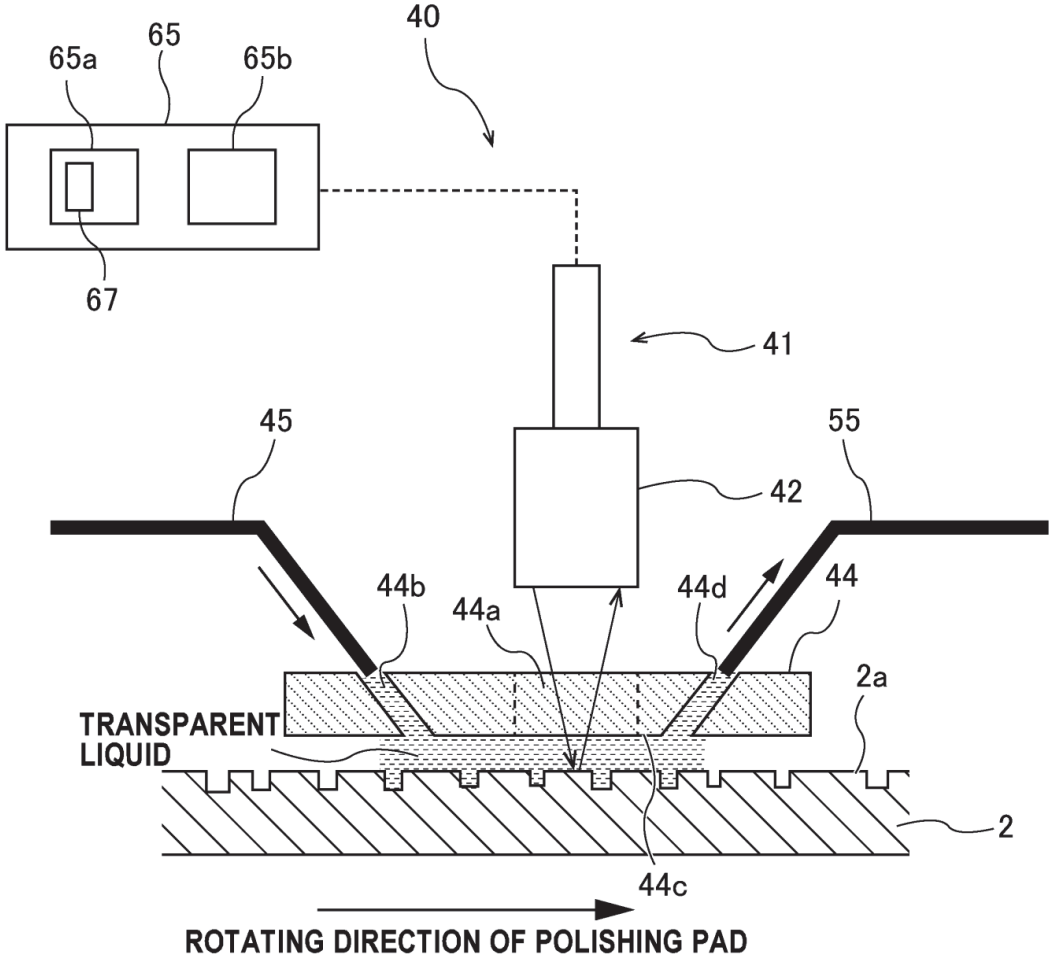

40
65
65a
65b
67
41
45
55
42
44b
44a
44d
44
2a
TRANSPARENT
LIQUID
2
44c
ROTATING DIRECTION OF POLISHING PAD

FIG. 6

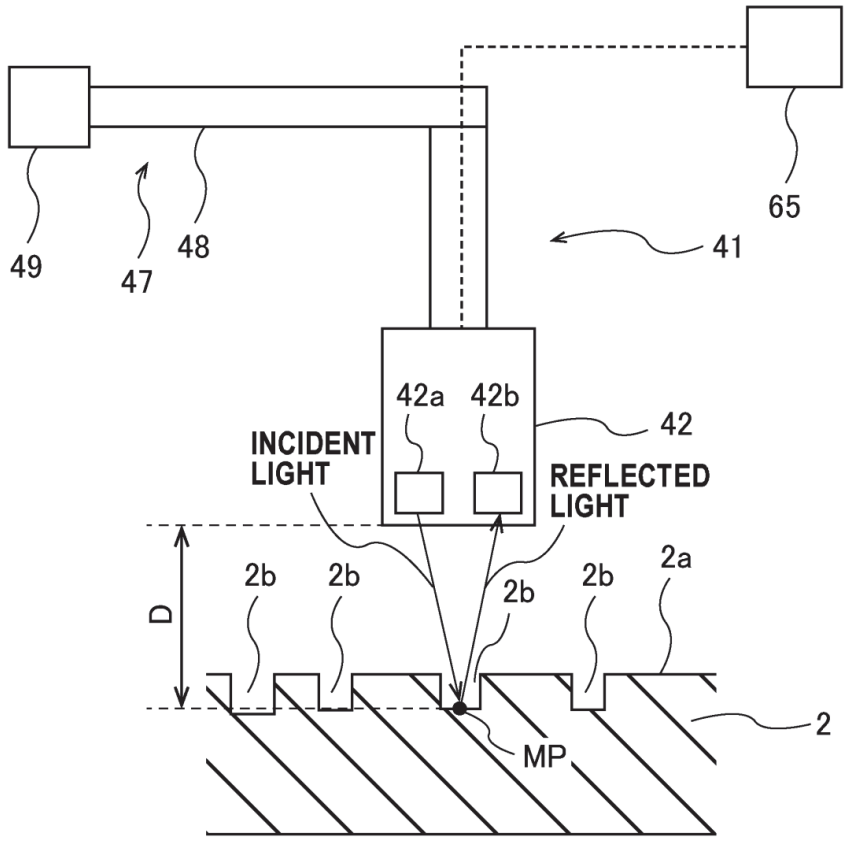

65
49
47
48
41
42a
42b
42
INCIDENT LIGHT
REFLECTED LIGHT
D
2b
2b
2b
2b
2a
2
MP

FIG. 7

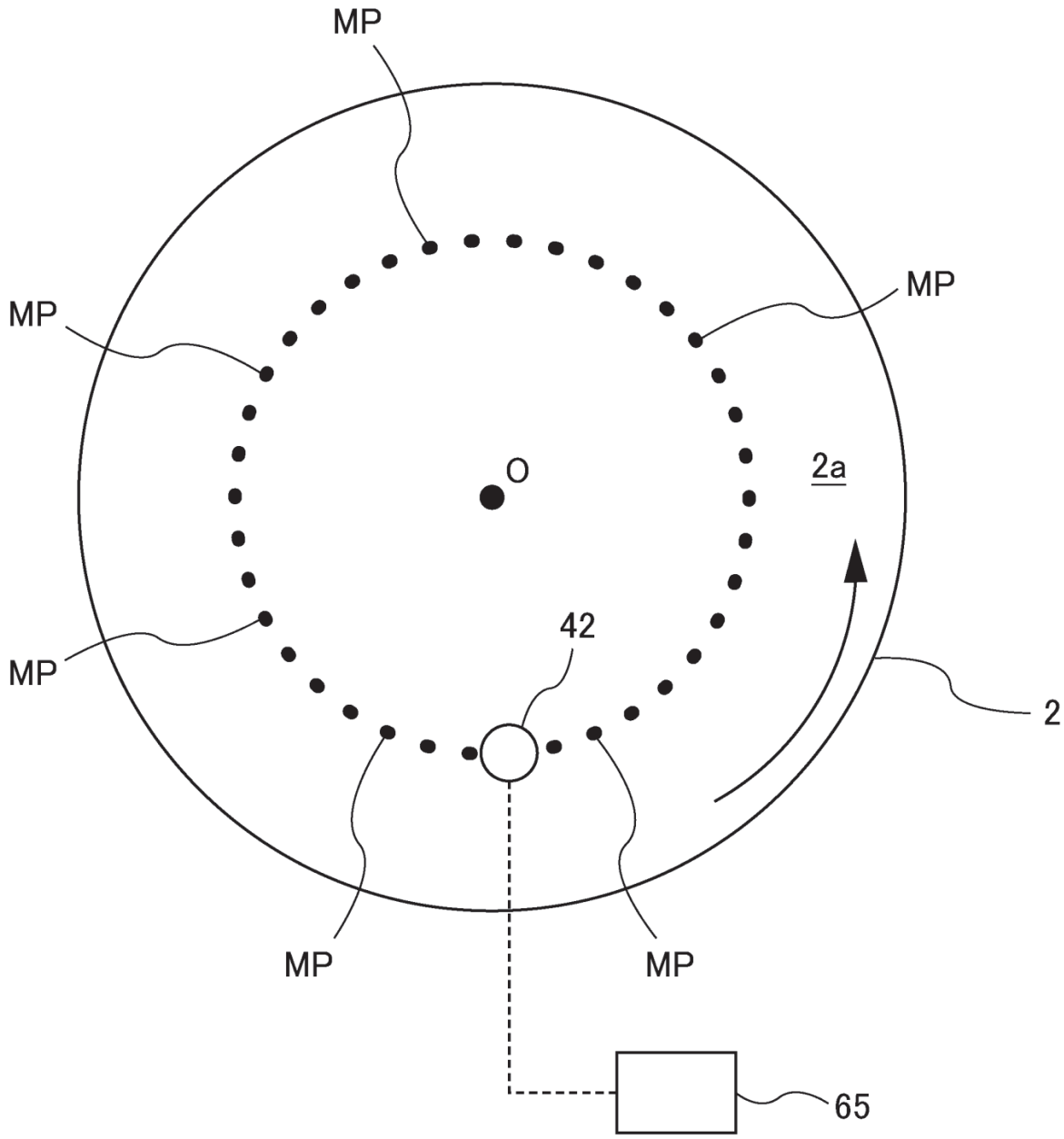


FIG. 8

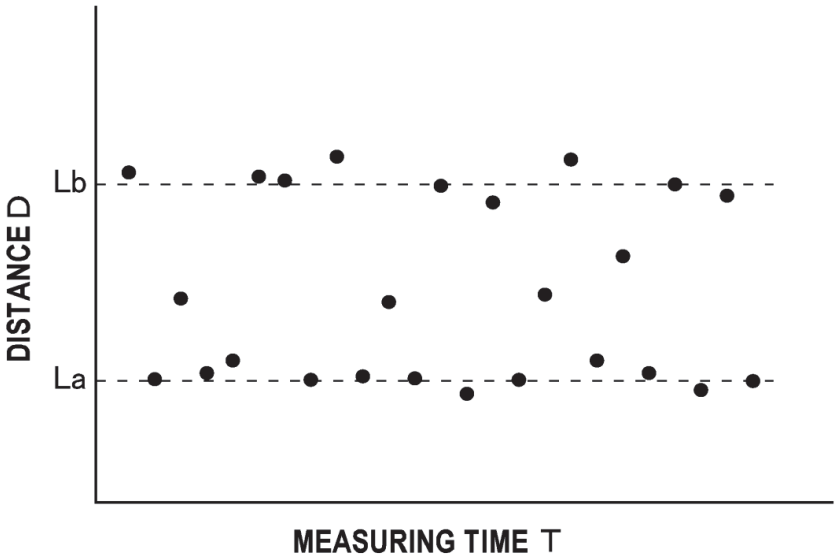


FIG. 9A

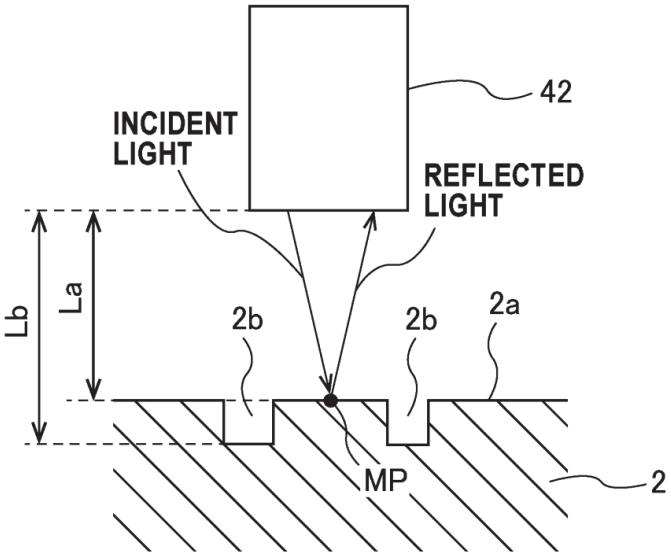

42
INCIDENT LIGHT
REFLECTED LIGHT
Lb
La
2b
2b
2a
MP
2

FIG. 9B

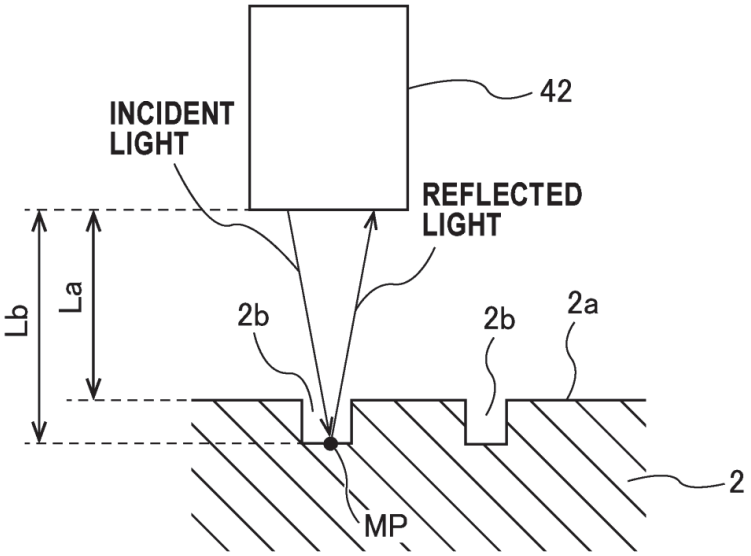

42
INCIDENT LIGHT
REFLECTED LIGHT
Lb
La
2b
2b
2a
MP
2

FIG. 10A

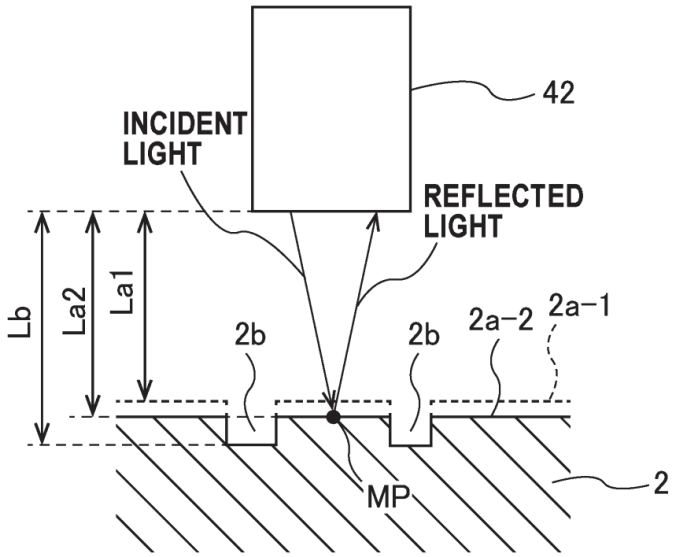


FIG. 10B

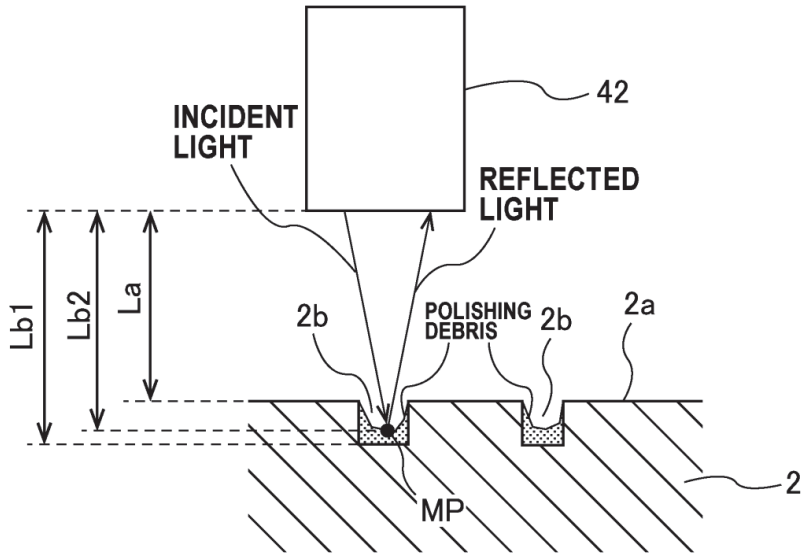


FIG. 11

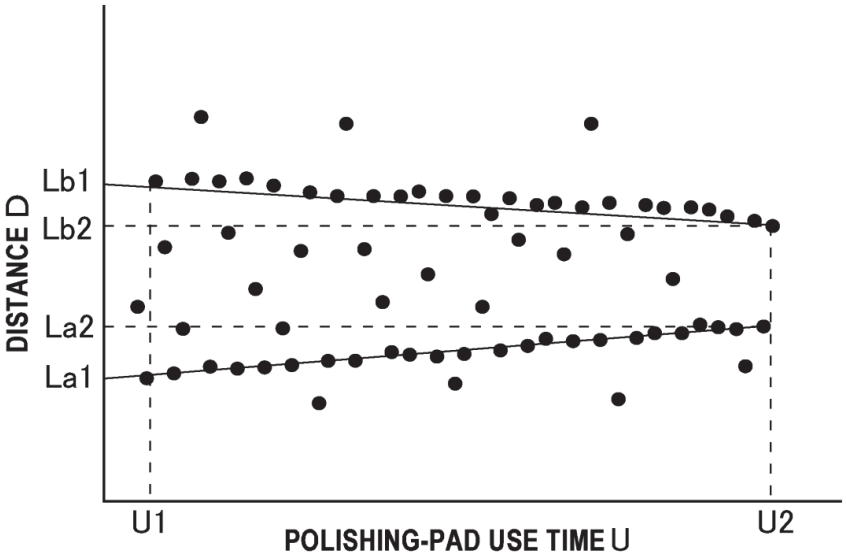

Lb1
Lb2
La2
La1
DISTANCE D
U1
U2
POLISHING-PAD USE TIME U

FIG. 12

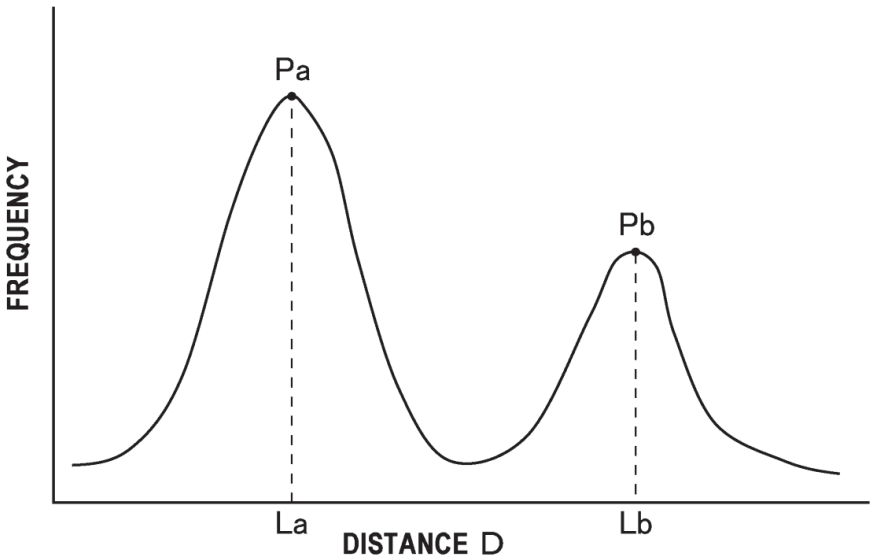

Pa
Pb
FREQUENCY
La
Lb
DISTANCE D

FIG. 13

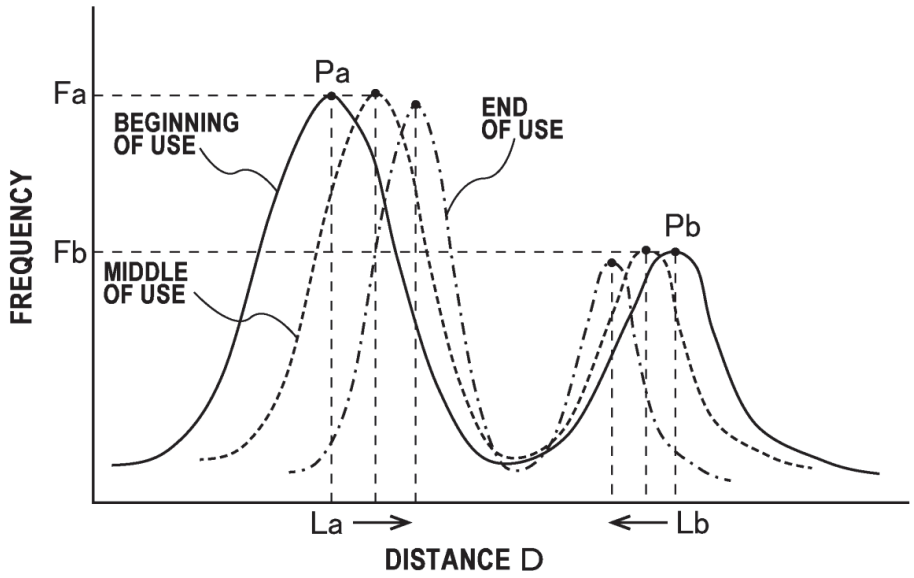

Pa
Fa
BEGINNING OF USE
END OF USE
Pb
Fb
MIDDLE OF USE
FREQUENCY
La
Lb
DISTANCE D

FIG. 14

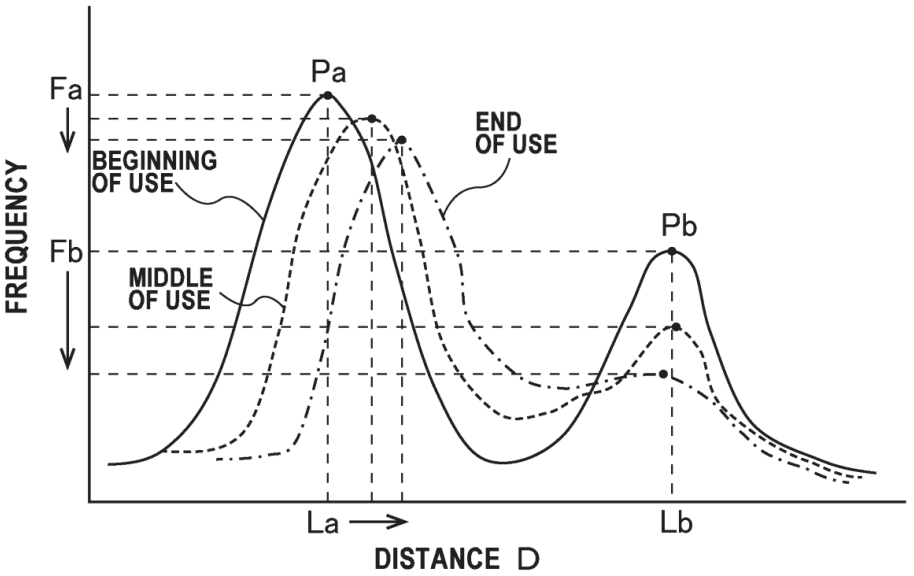

Pa
Fa
END OF USE
BEGINNING OF USE
Pb
Fb
MIDDLE OF USE
FREQUENCY
La
Lb
DISTANCE D

FIG. 15

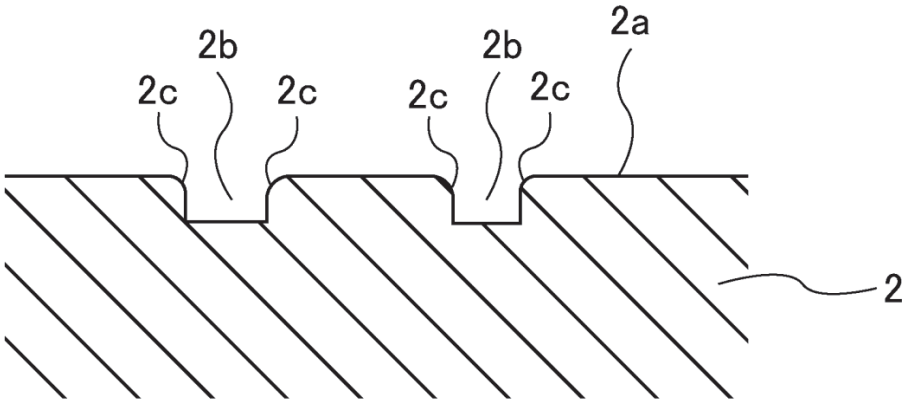

2b
2c
2c
2c
2b
2c
2a
2

FIG. 16

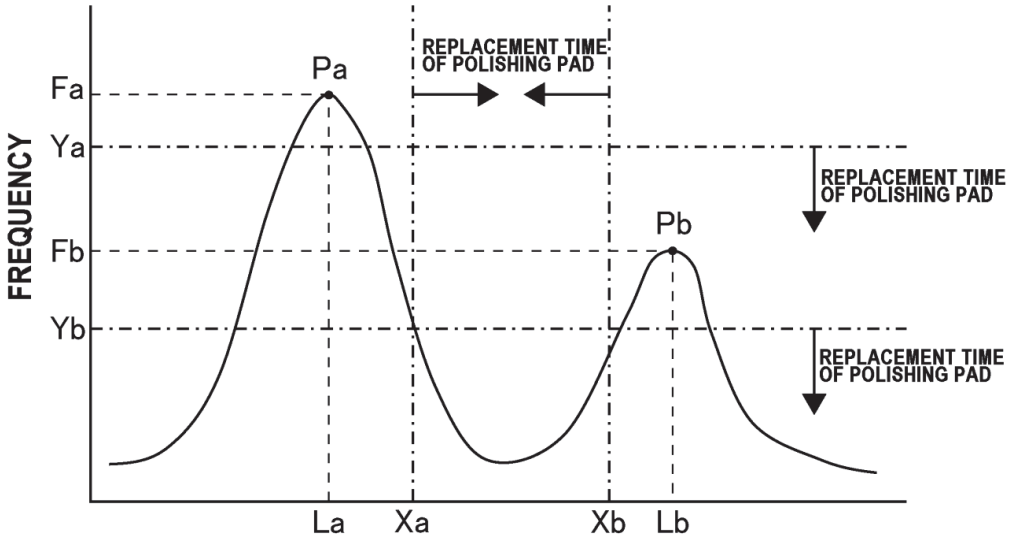

FREQUENCY
Fa
Ya
Fb
Yb
Pa
Pb
REPLACEMENT TIME OF POLISHING PAD
REPLACEMENT TIME OF POLISHING PAD
REPLACEMENT TIME OF POLISHING PAD
La
Xa
Xb
Lb

FIG. 17A

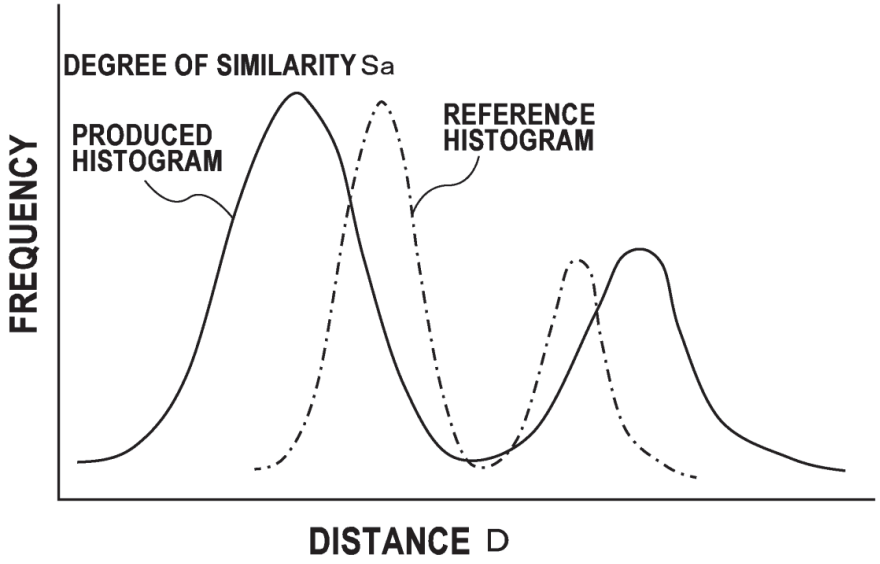


FIG. 17B

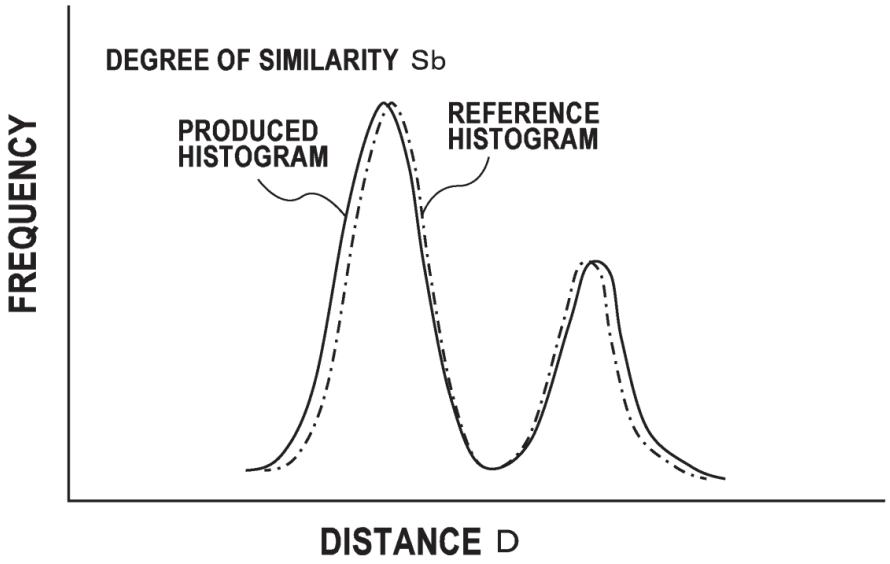


FIG. 18A

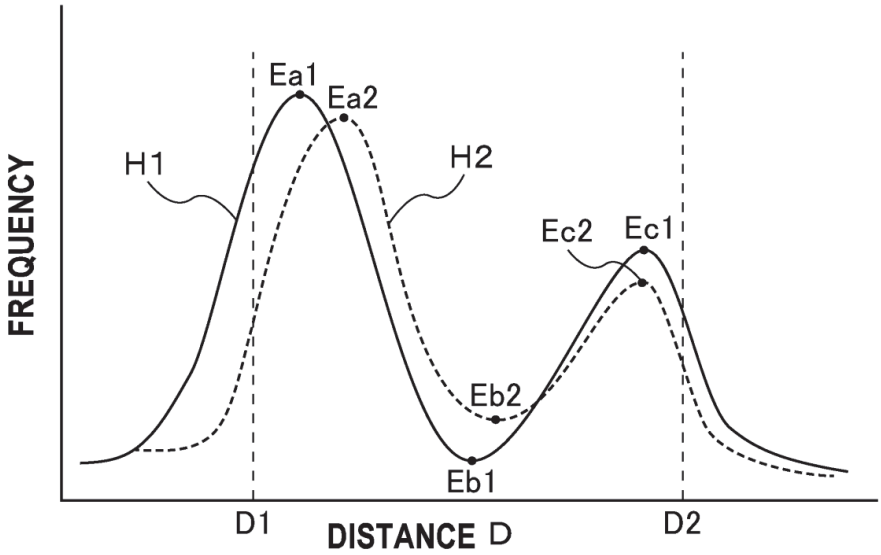


FIG. 18B

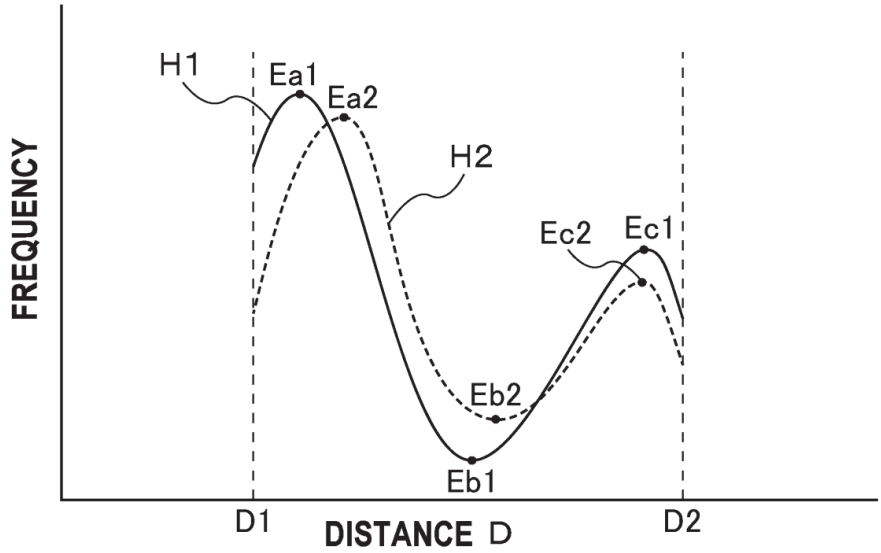


FIG. 19A

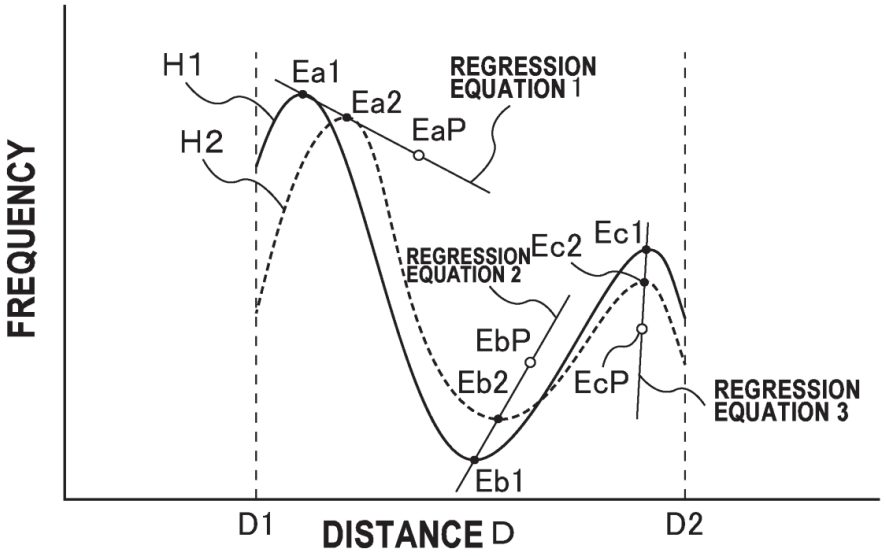


FIG. 19B

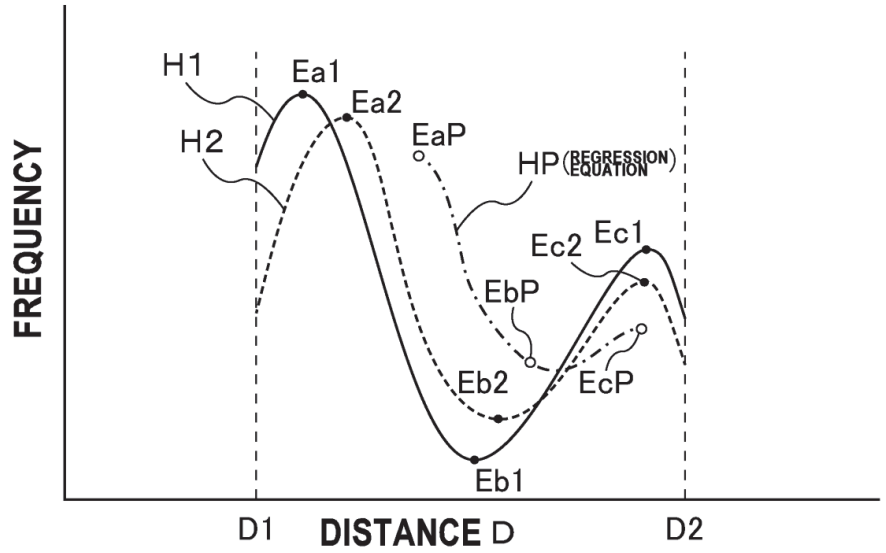


FIG. 20

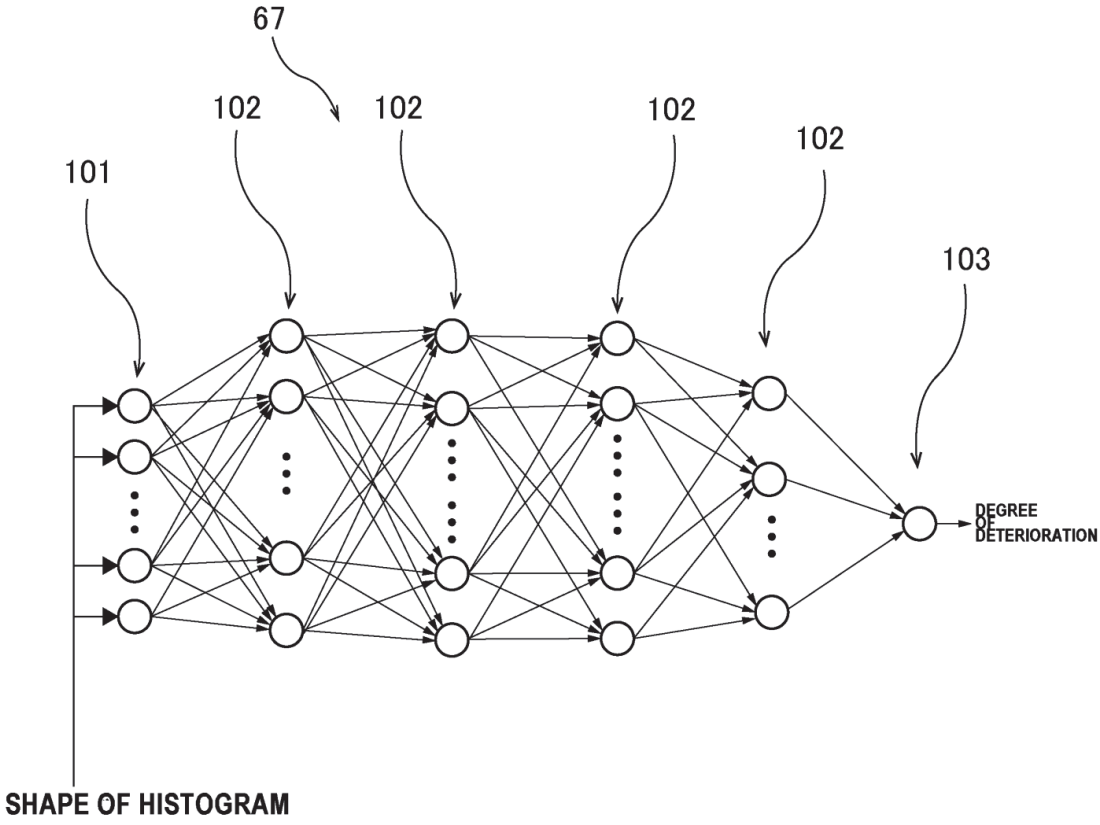

67
101
102
102
102
102
103
DEGREE OF DETERIORATION
SHAPE OF HISTOGRAM

FIG. 21

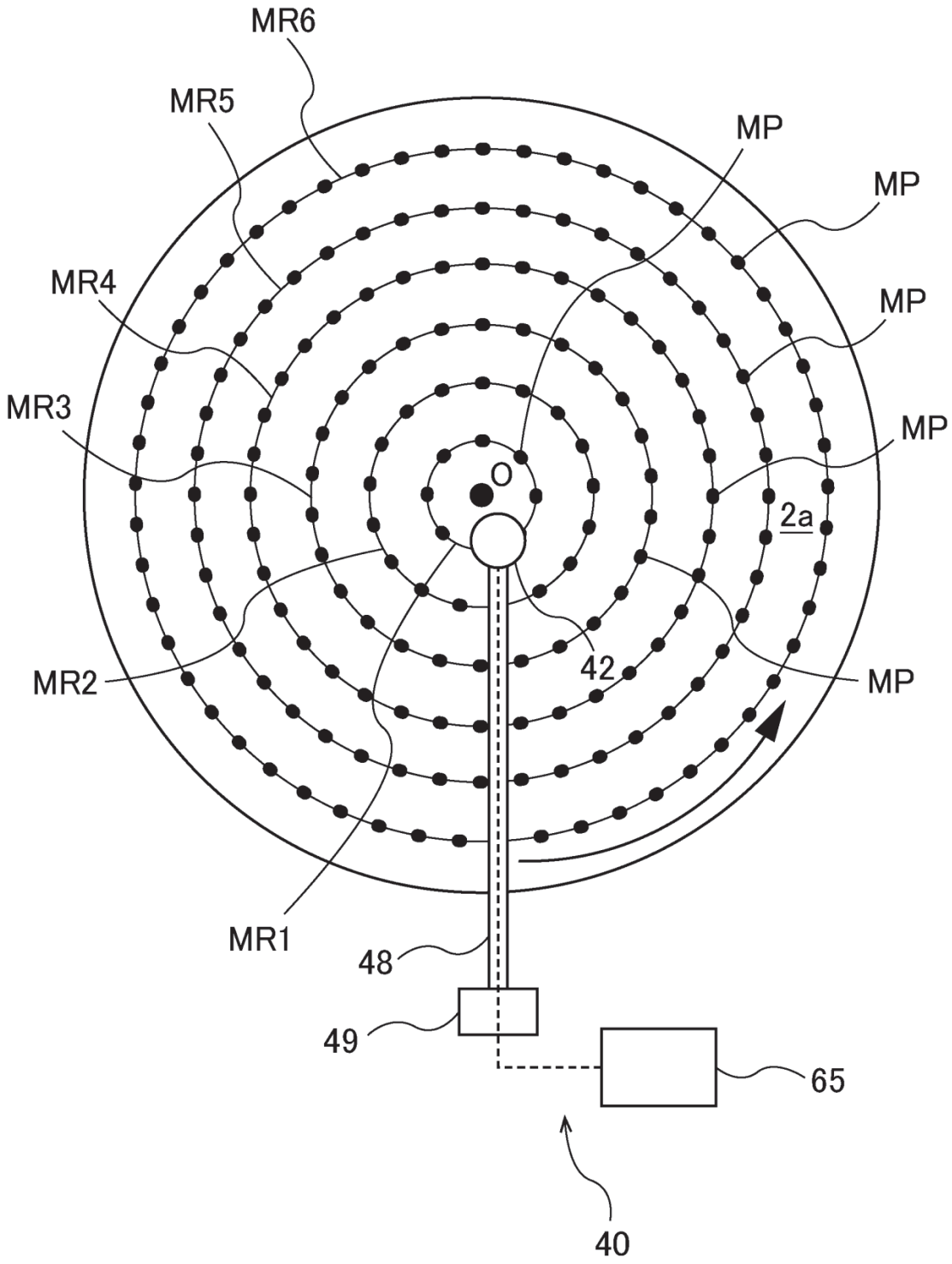


FIG. 22

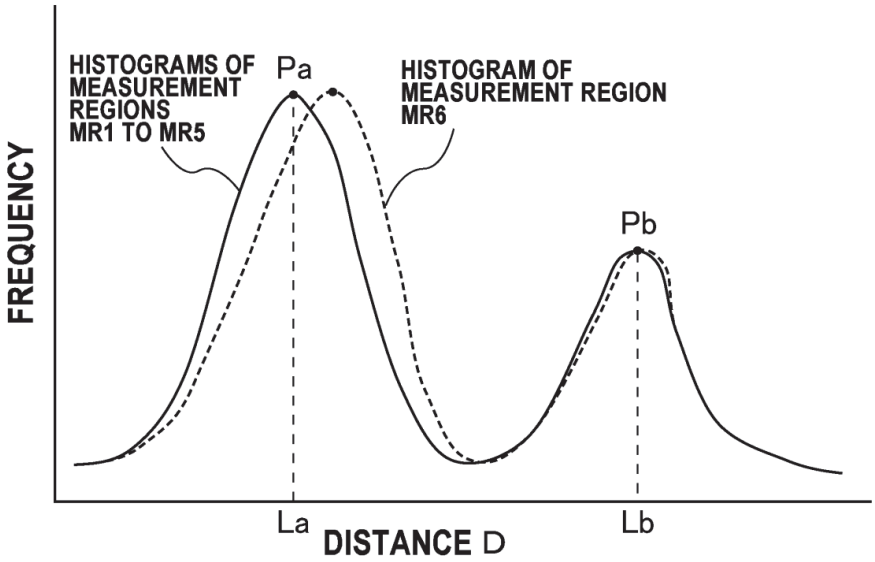

HISTOGRAMS OF MEASUREMENT REGIONS MR1 TO MR5
Pa
HISTOGRAM OF MEASUREMENT REGION MR6
Pb
FREQUENCY
La
DISTANCE D
Lb

FIG. 23

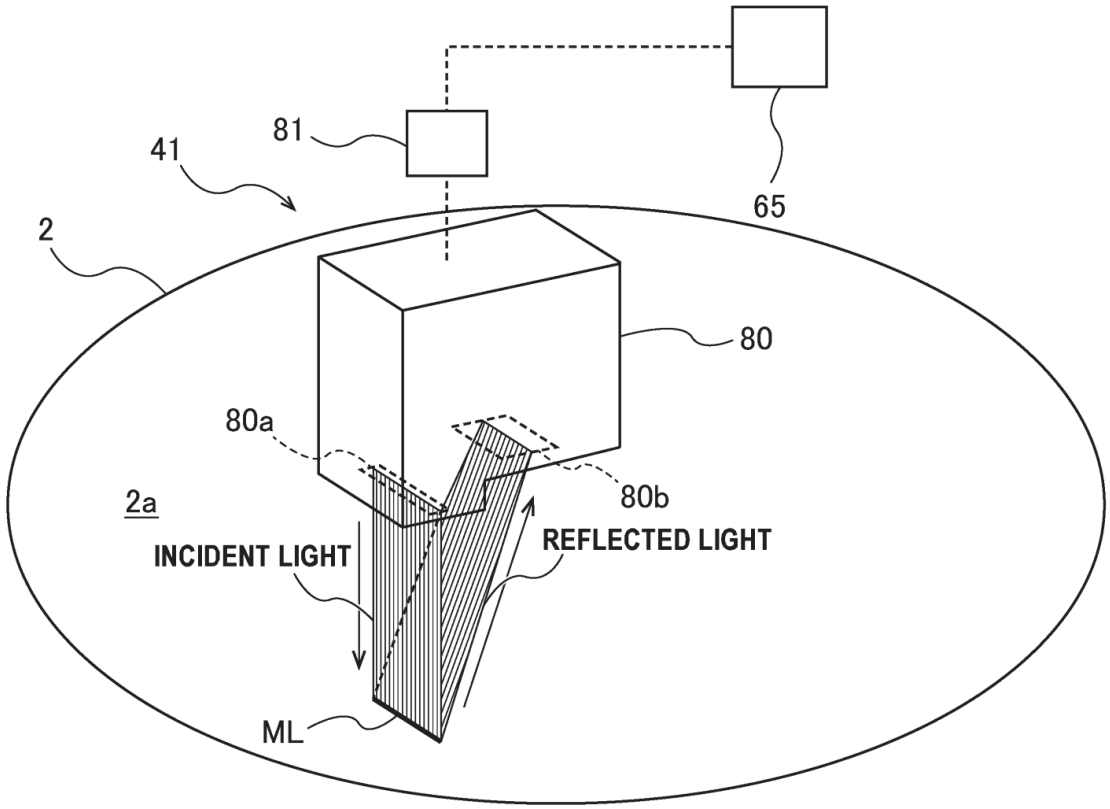


FIG. 24A

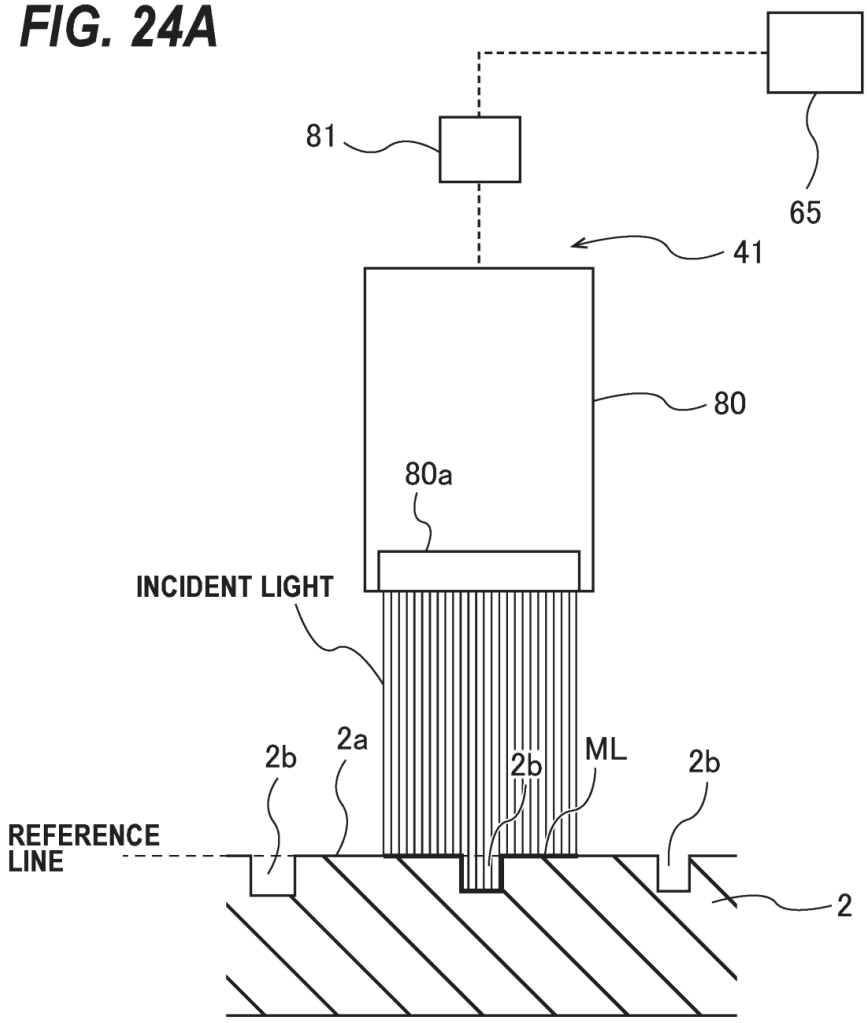


FIG. 24B

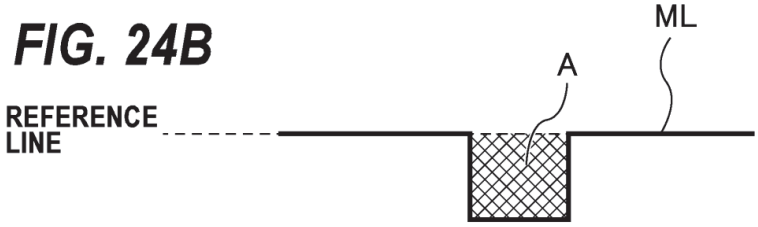


FIG. 25

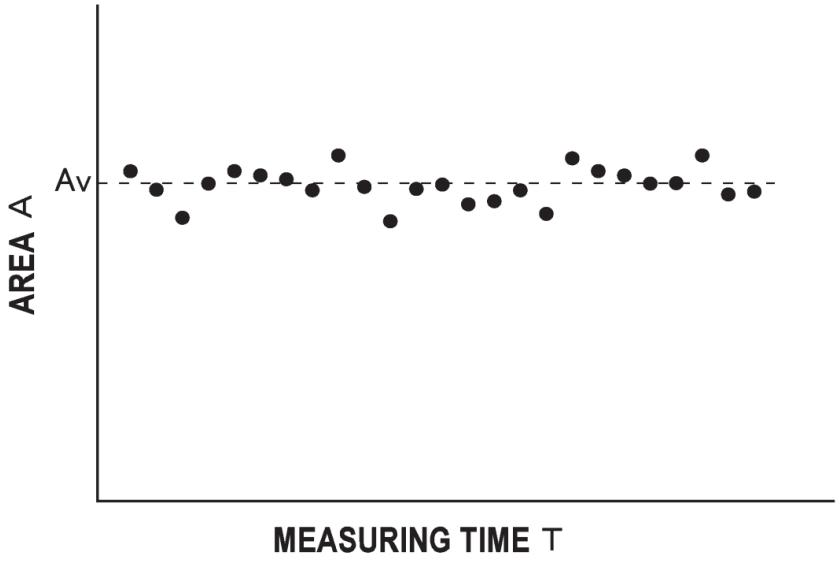


FIG. 26

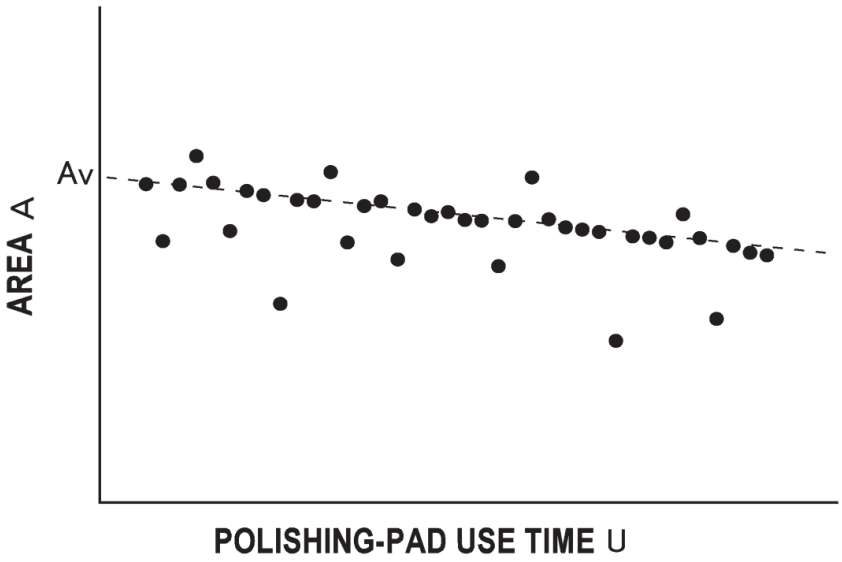
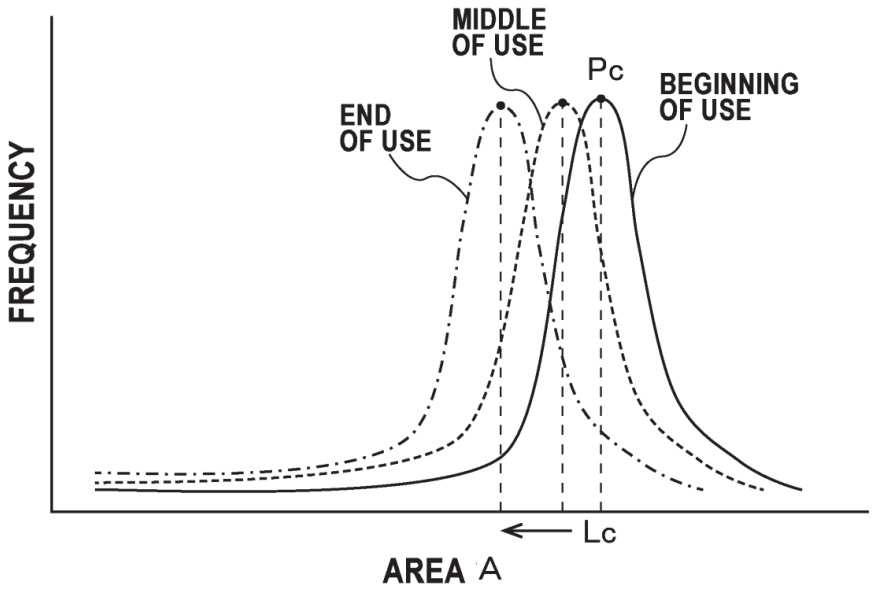


FIG. 27


MIDDLE
OF USE
Pc
BEGINNING
OF USE
END
OF USE
FREQUENCY
Lc
AREA A