

FIG. 1

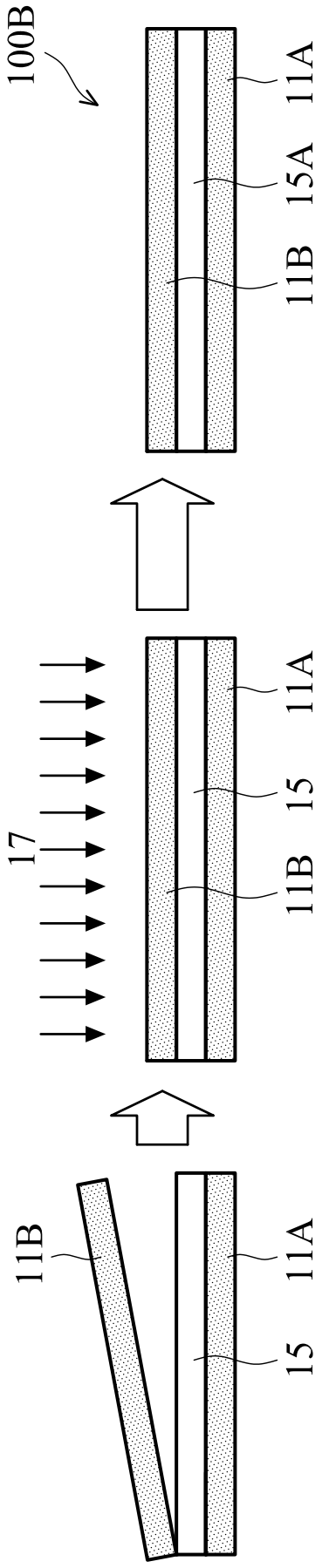


FIG. 2

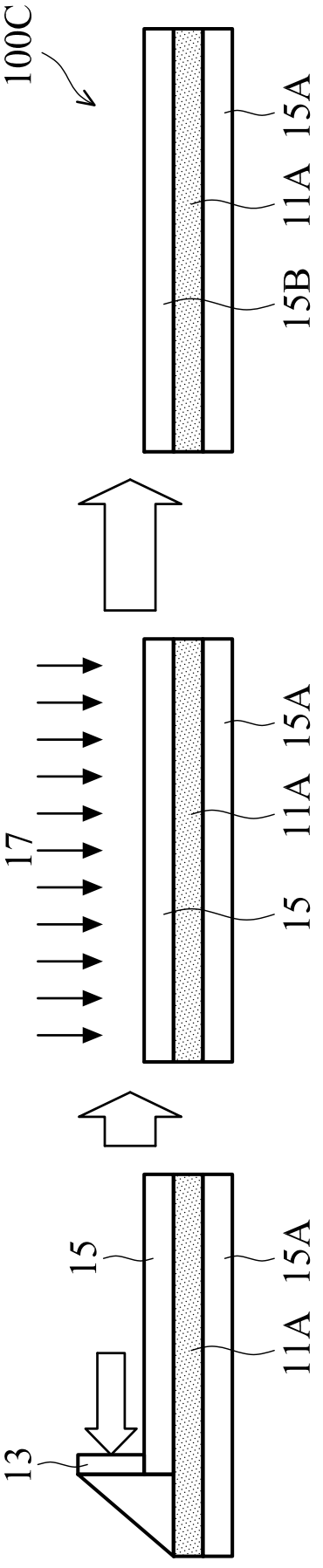


FIG. 3

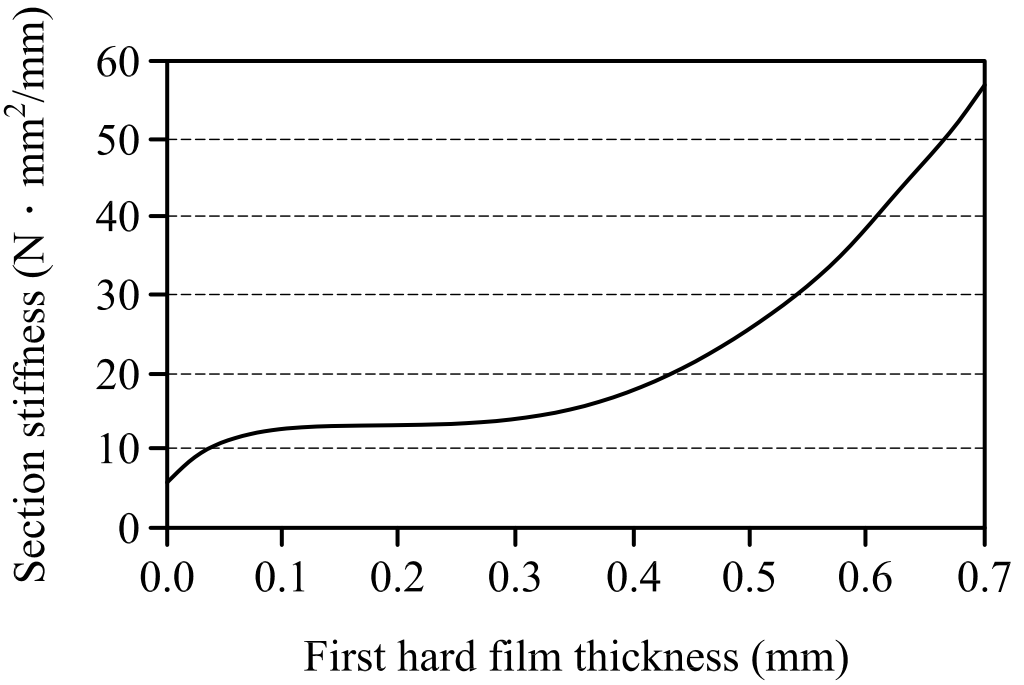

Section stiffness (N · mm²/mm)
60
50
40
30
20
10
0
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
First hard film thickness (mm)

FIG. 4

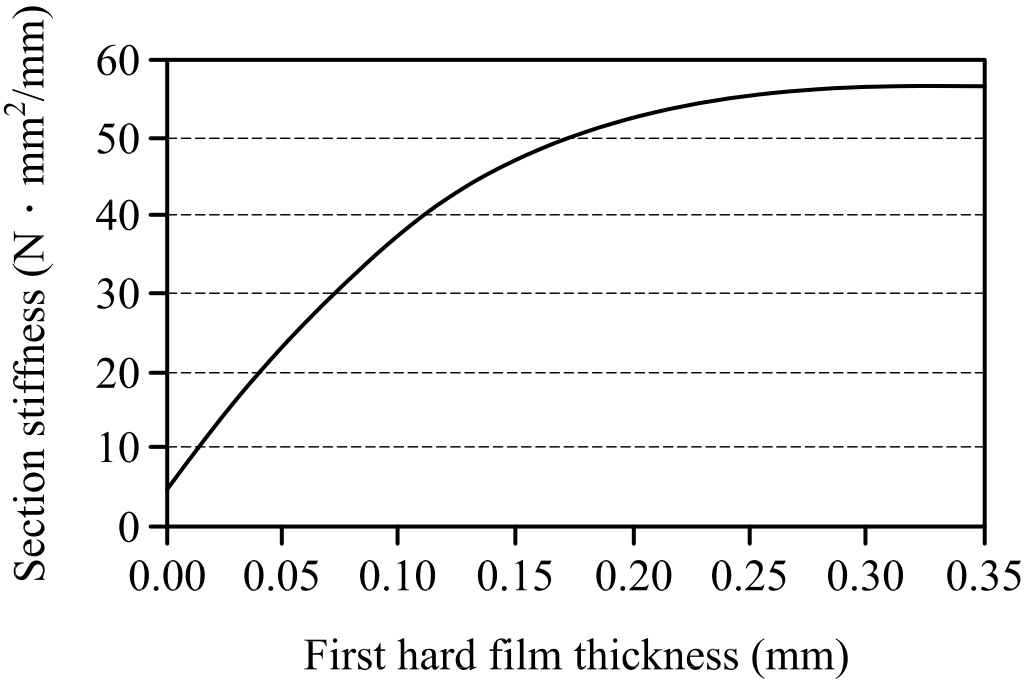

Section stiffness (N · mm²/mm)
60
50
40
30
20
10
0
0.00
0.05
0.10
0.15
0.20
0.25
0.30
0.35
First hard film thickness (mm)

FIG. 5

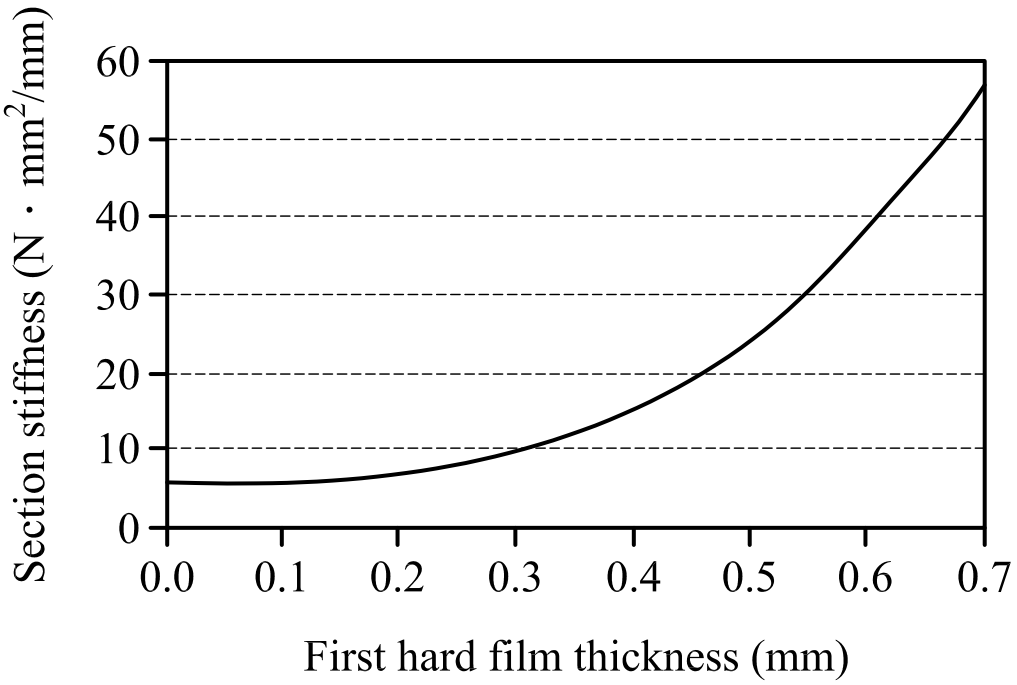

Section stiffness (N · mm²/mm)
60
50
40
30
20
10
0
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
First hard film thickness (mm)

FIG. 6



FIG. 7

FIG. 8