Fig. 1

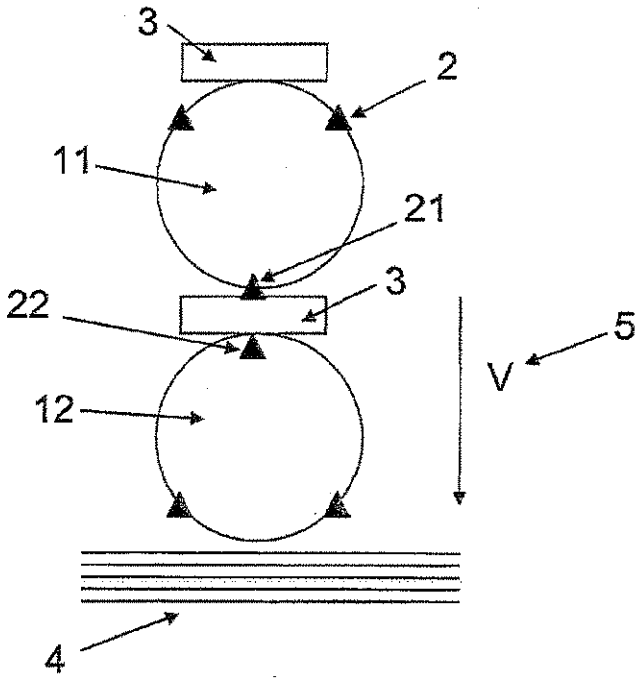
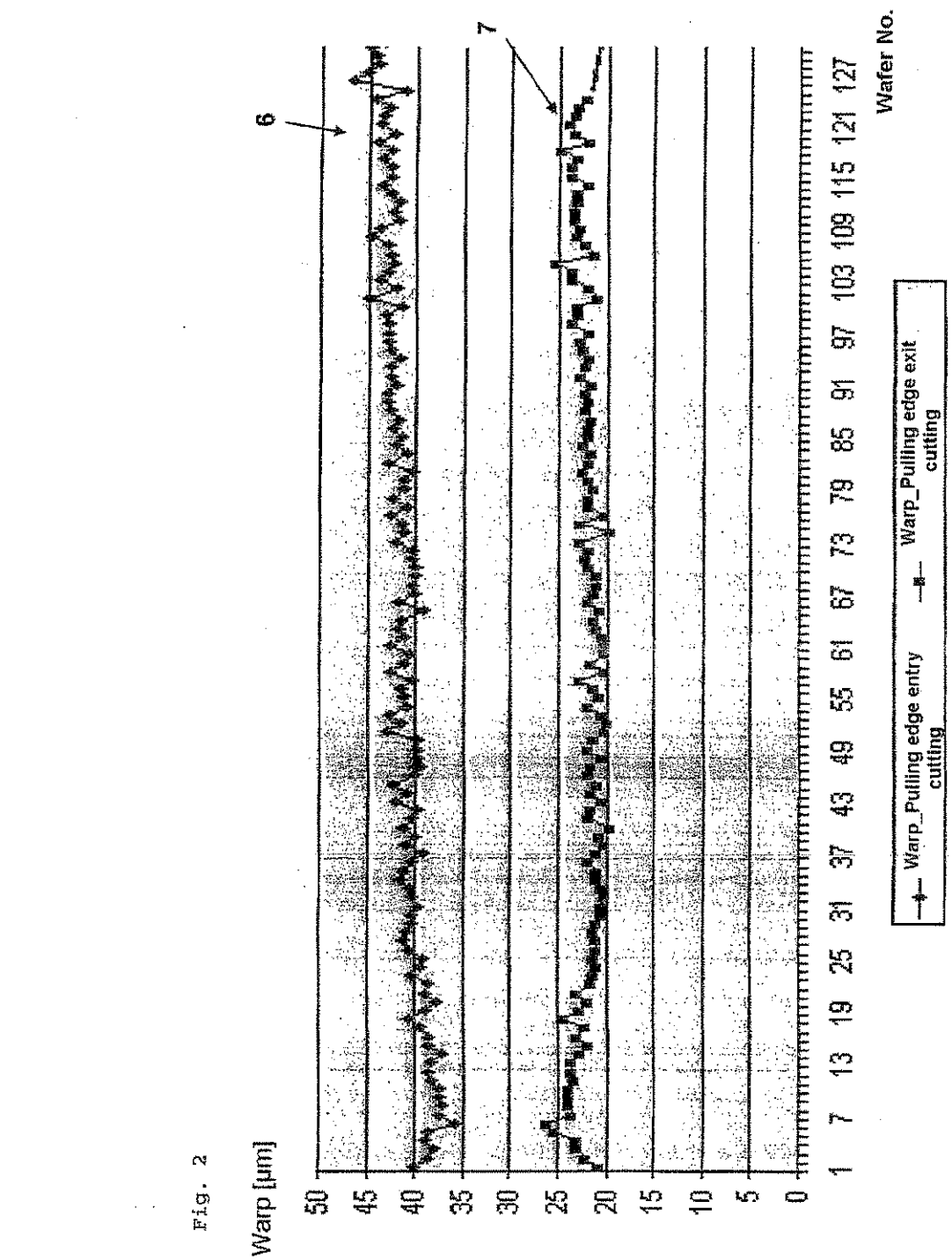


Fig. 2


Warp [µm]
50
45
40
35
30
25
20
15
10
5
0
1 7 13 19 25 31 37 43 49 55 61 67 73 79 85 91 97 103 109 115 121 127
Wafer No.
6
7
Warp_Pulling edge entry cutting
Warp_Pulling edge exit cutting