FIG.1

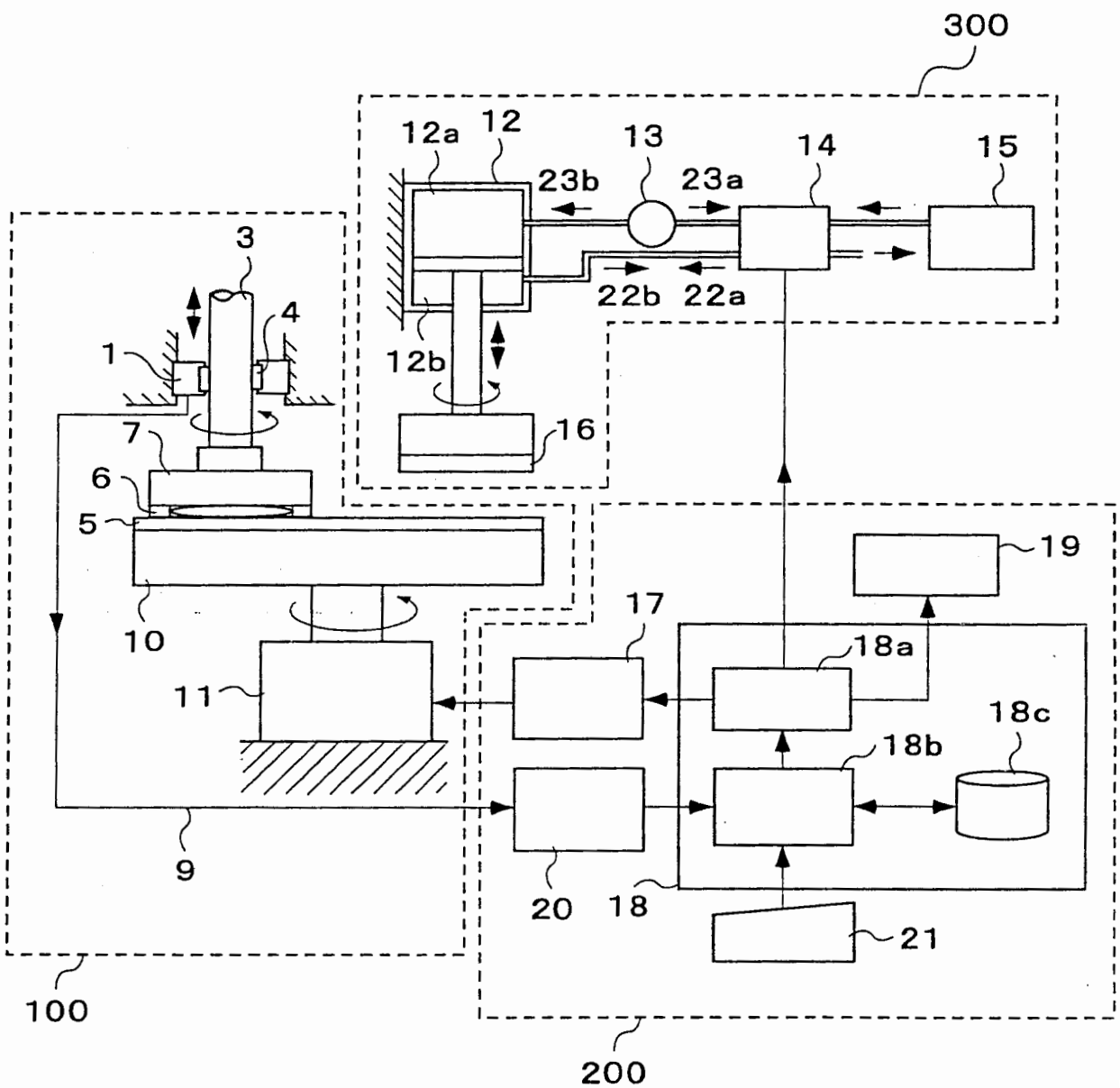

300
12a
12
13
14
15
23b
23a
22b
22a
12b
16
3
4
1
7
6
5
10
11
17
19
18a
18c
18b
9
20
18
21
100
200

FIG.2

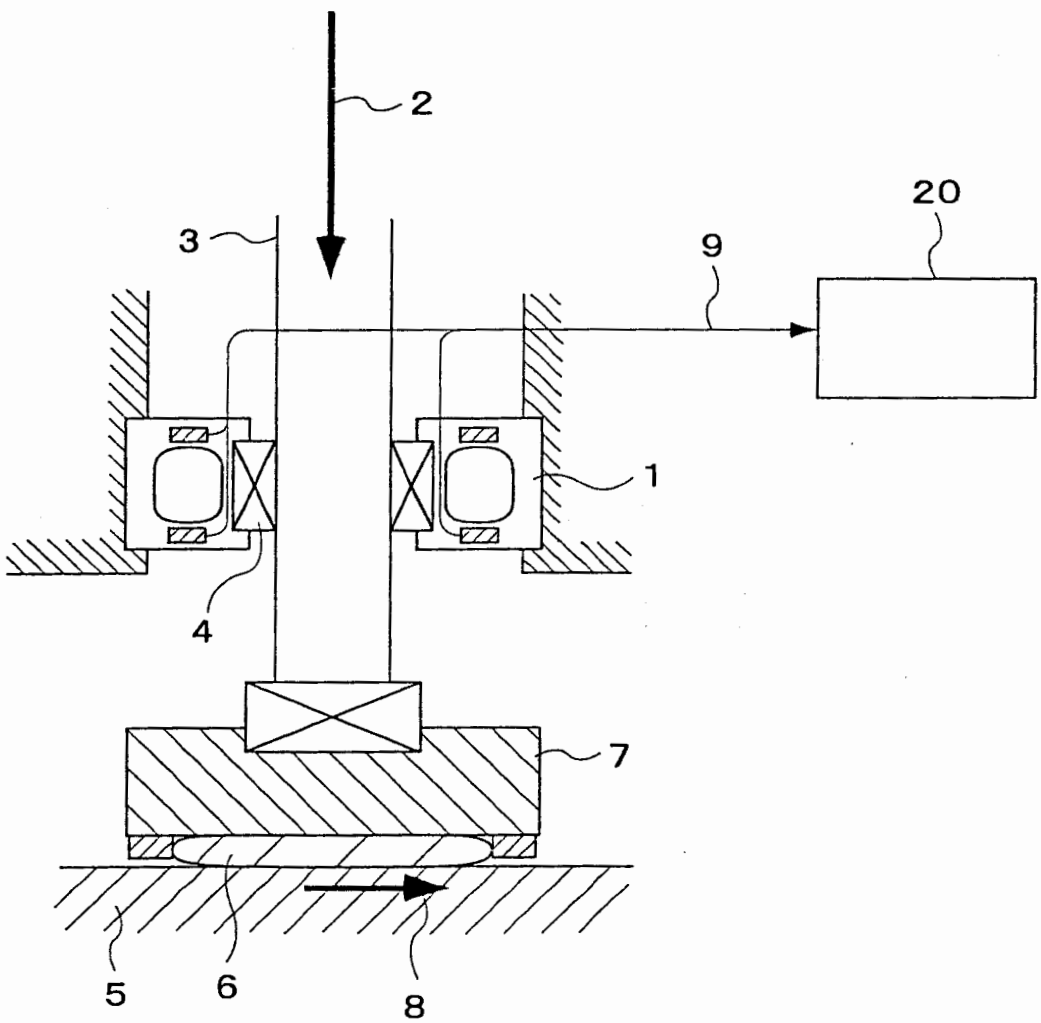


FIG.3

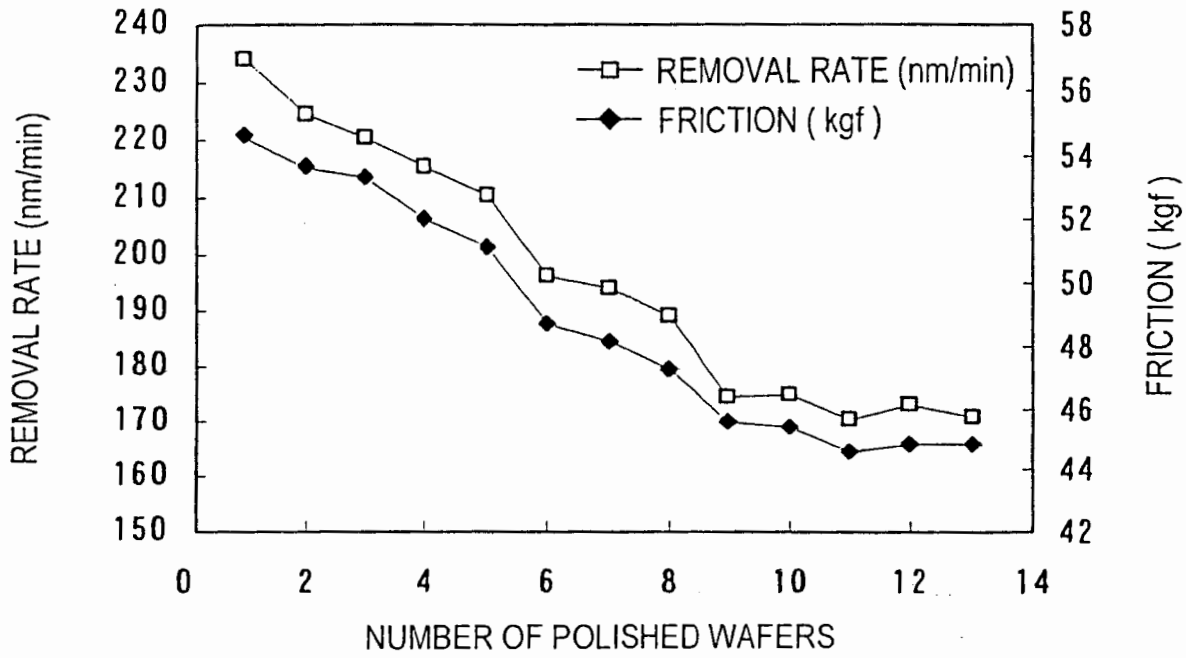

REMOVAL RATE (nm/min)
FRICTION (kgf)
240
230
220
210
200
190
180
170
160
150
58
56
54
52
50
48
46
44
42
0
2
4
6
8
10
12
14
NUMBER OF POLISHED WAFERS

FIG.4

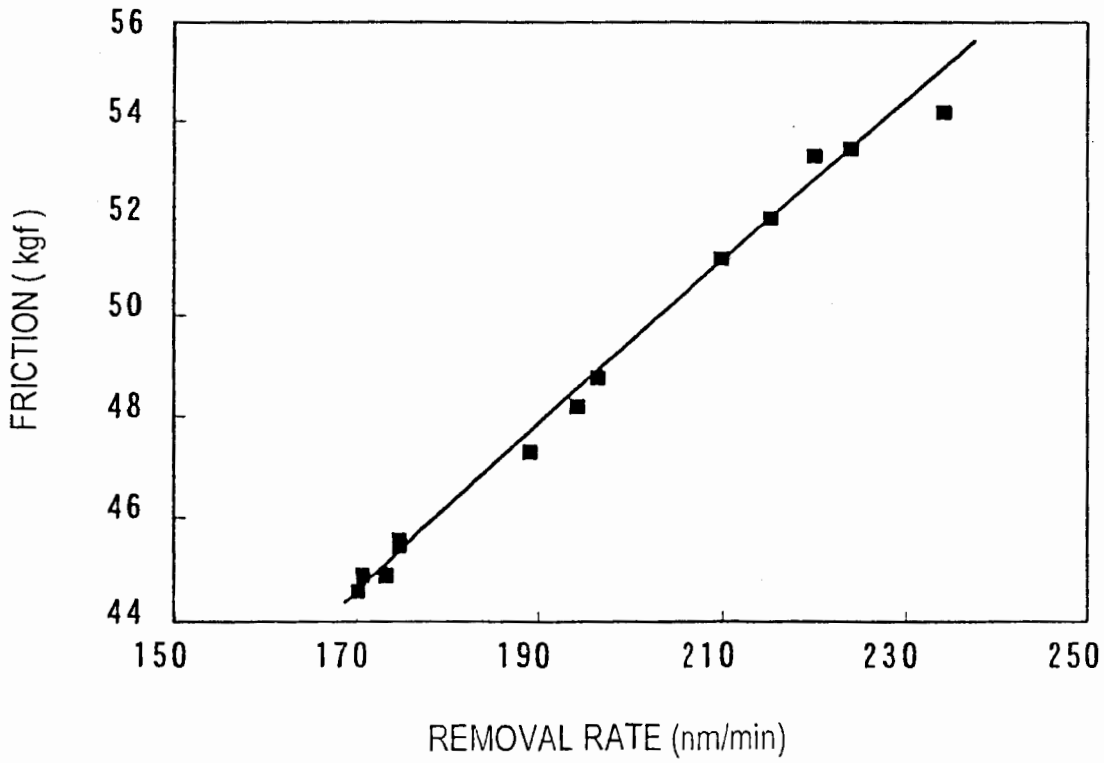

FRICTION (kgf)
56
54
52
50
48
46
44
150
170
190
210
230
250
REMOVAL RATE (nm/min)

FIG.5

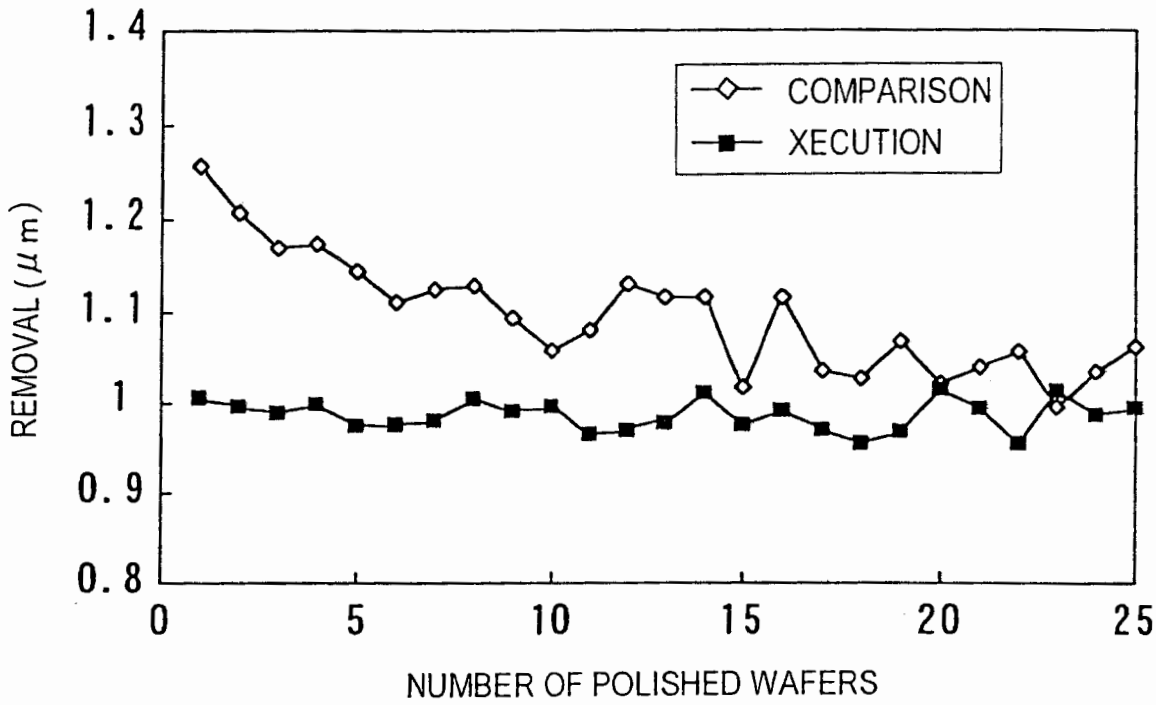

1.4
1.3
1.2
1.1
1
0.9
0.8
REMOVAL (μm)
COMPARISON
XECUTION
0
5
10
15
20
25
NUMBER OF POLISHED WAFERS

FIG.6

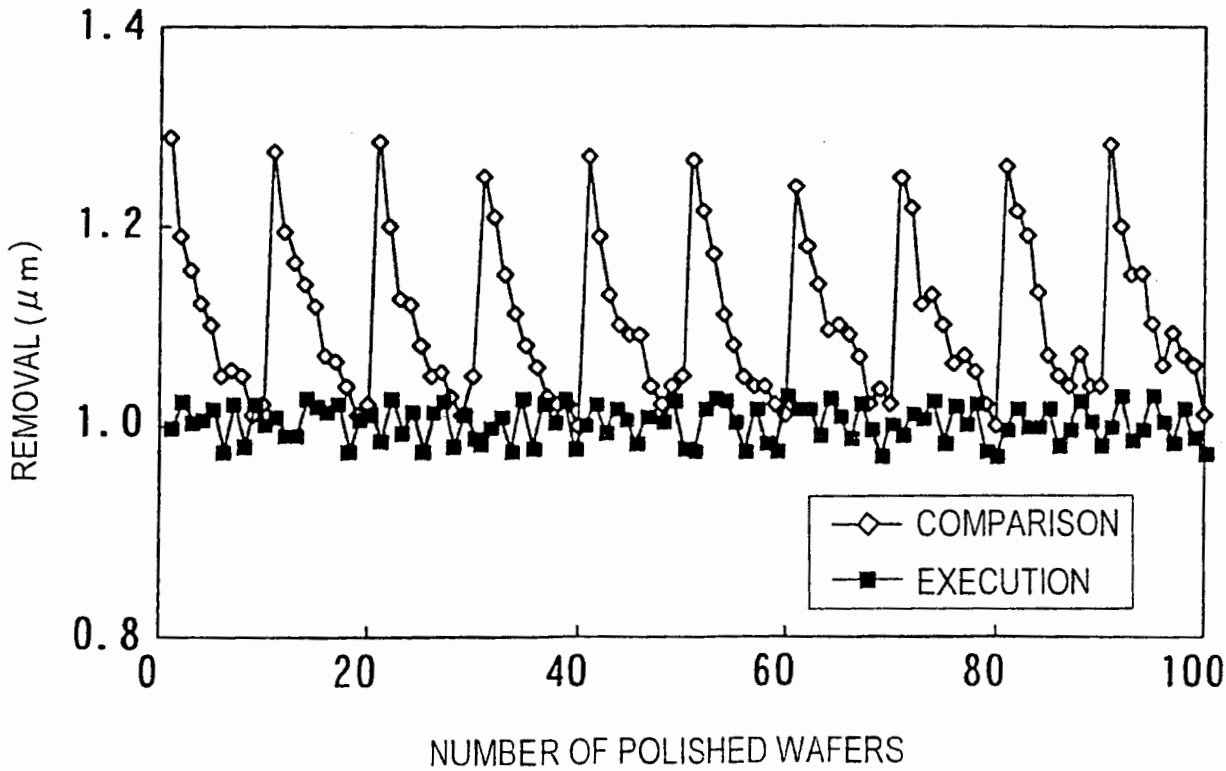
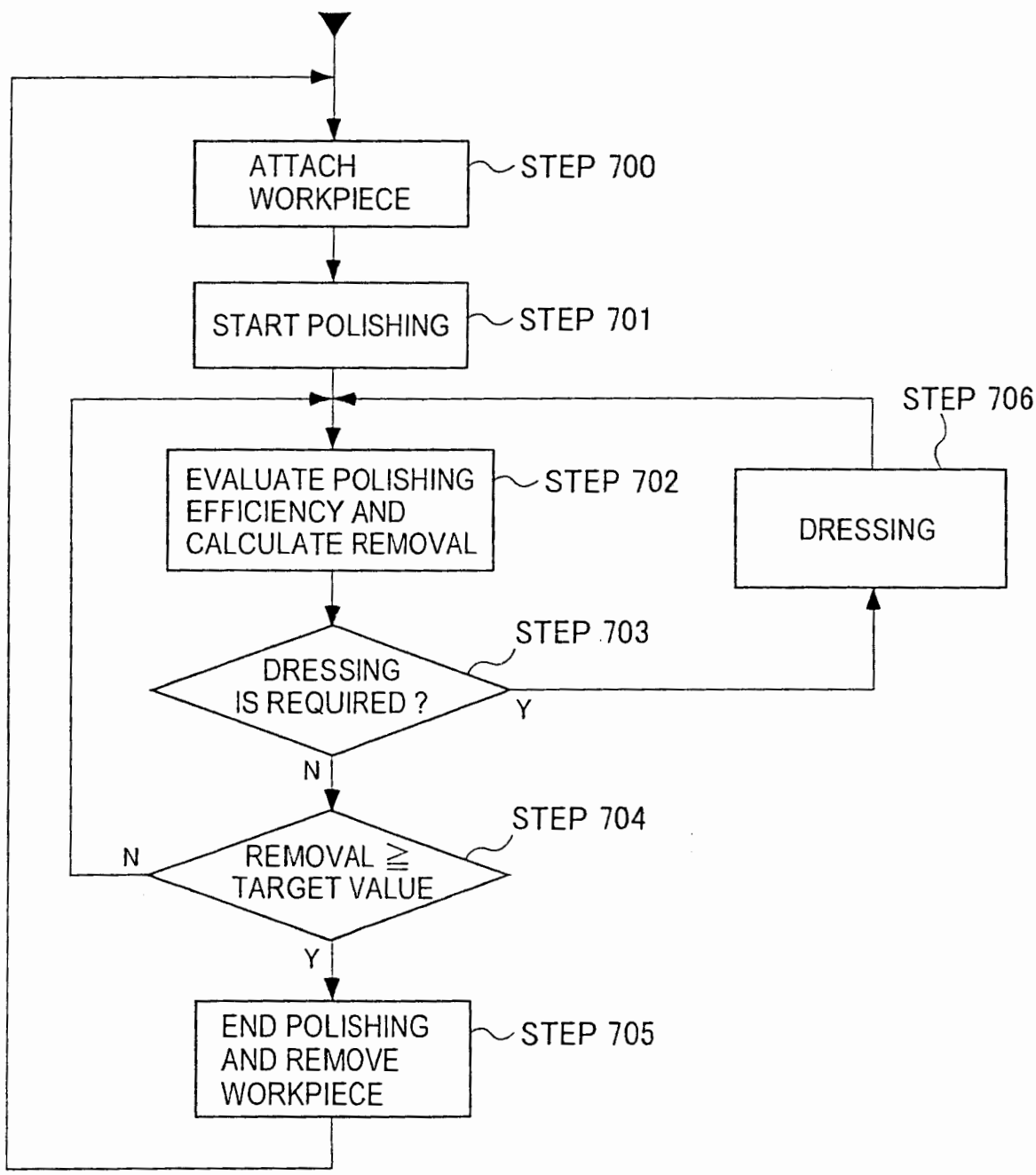

1.4
1.2
1.0
0.8
REMOVAL (μm)
COMPARISON
EXECUTION
0
20
40
60
80
100
NUMBER OF POLISHED WAFERS

FIG.7


ATTACH WORKPIECE
STEP 700
START POLISHING
STEP 701
STEP 706
EVALUATE POLISHING EFFICIENCY AND CALCULATE REMOVAL
STEP 702
DRESSING
DRESSING IS REQUIRED ?
STEP 703
Y
N
REMOVAL ≧ TARGET VALUE
STEP 704
N
Y
END POLISHING AND REMOVE WORKPIECE
STEP 705