

FIG. 1

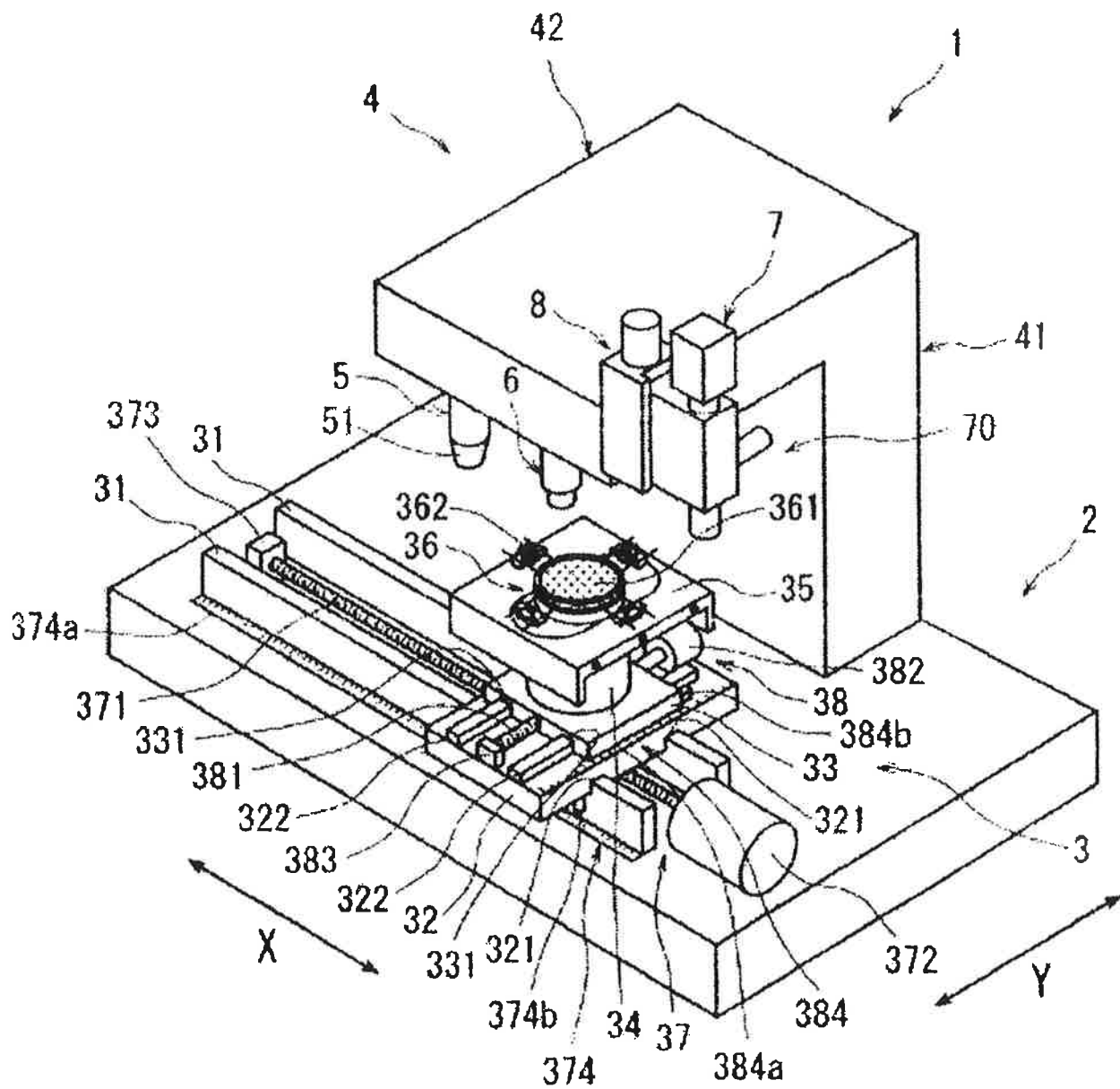


FIG. 2

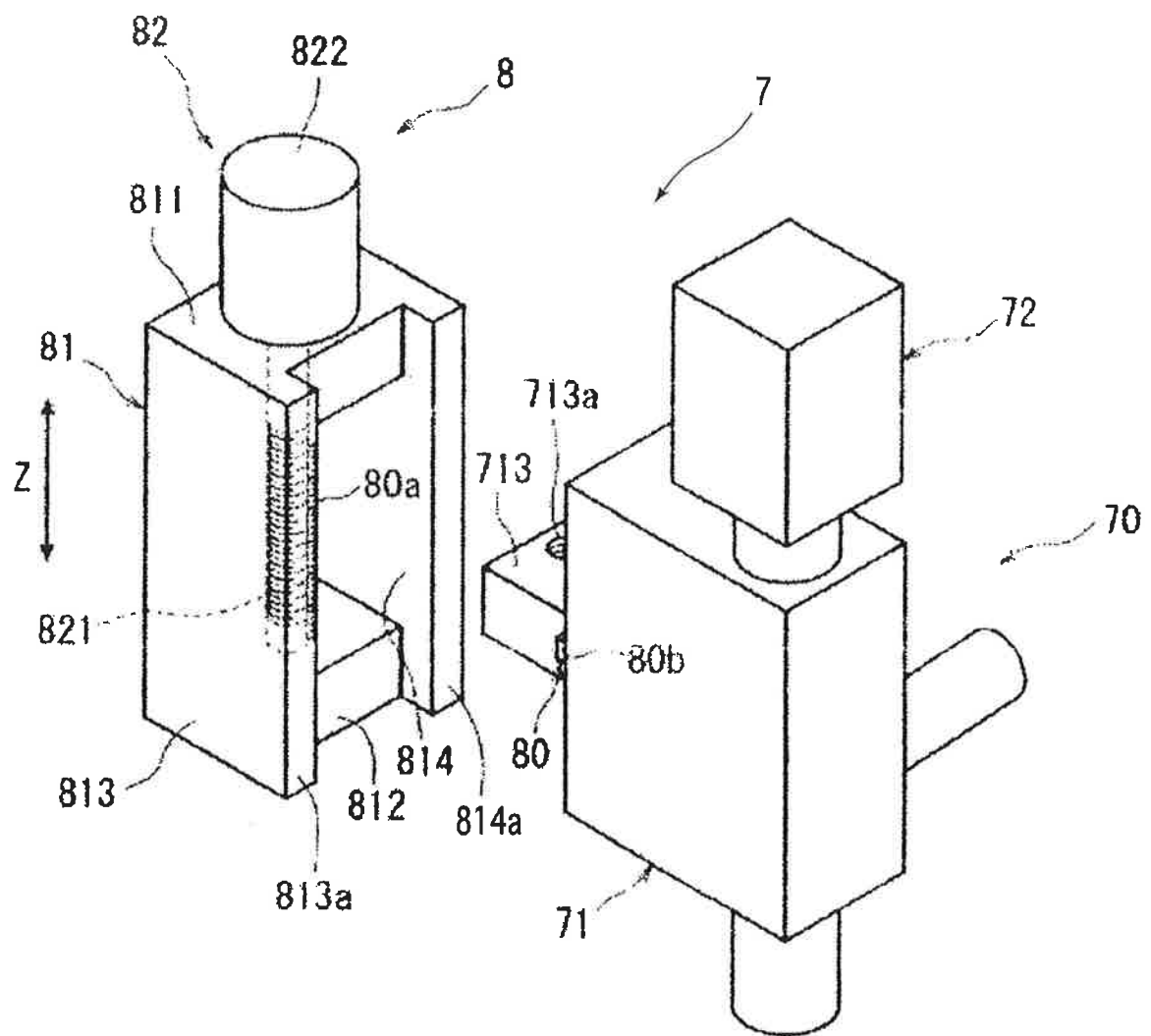


FIG. 3

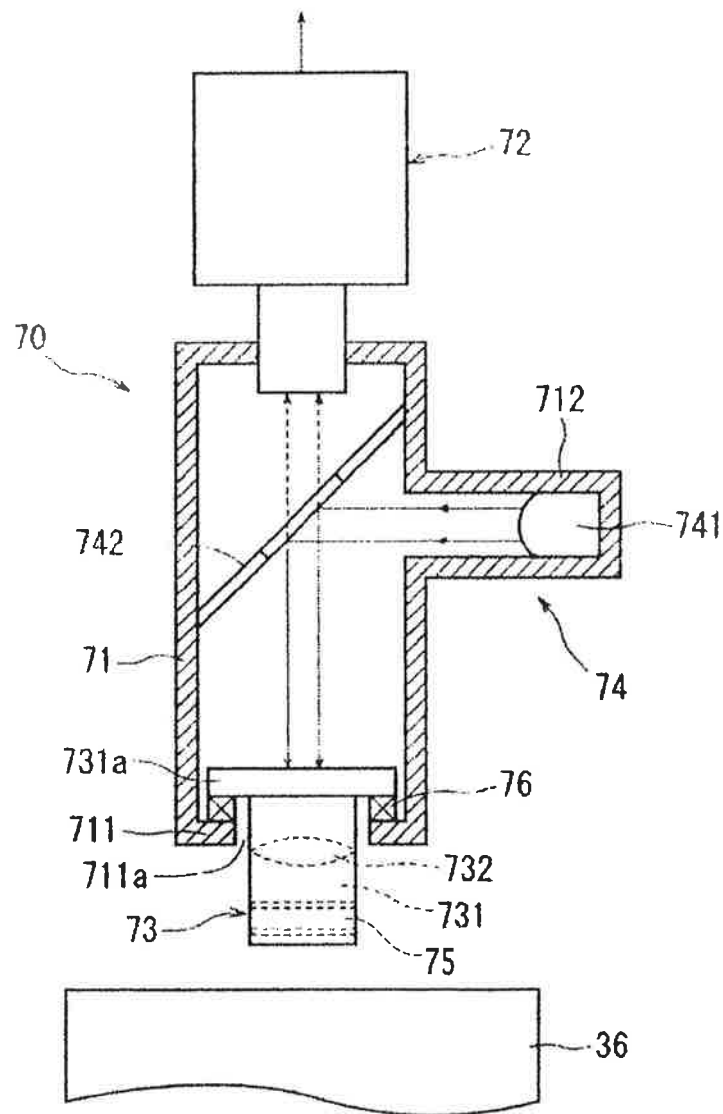


FIG. 4

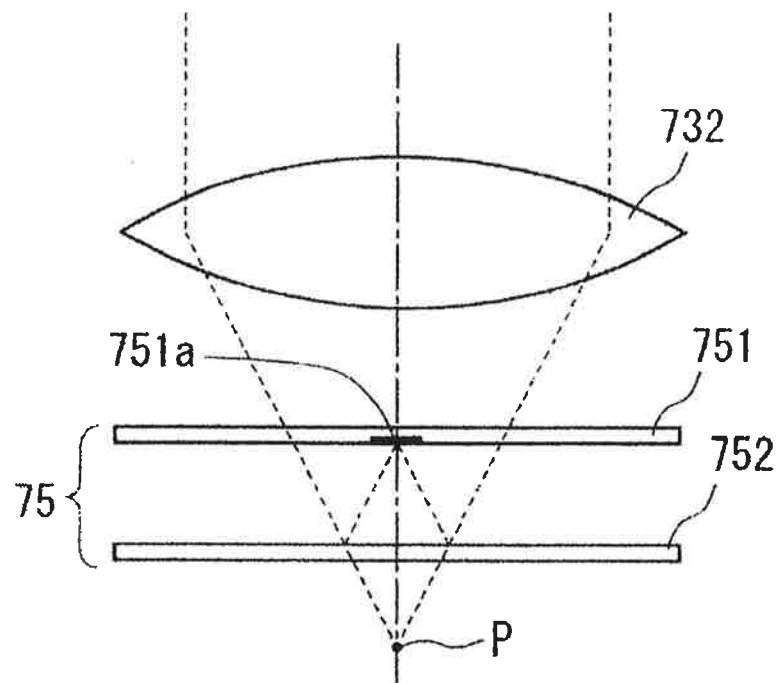


FIG. 5

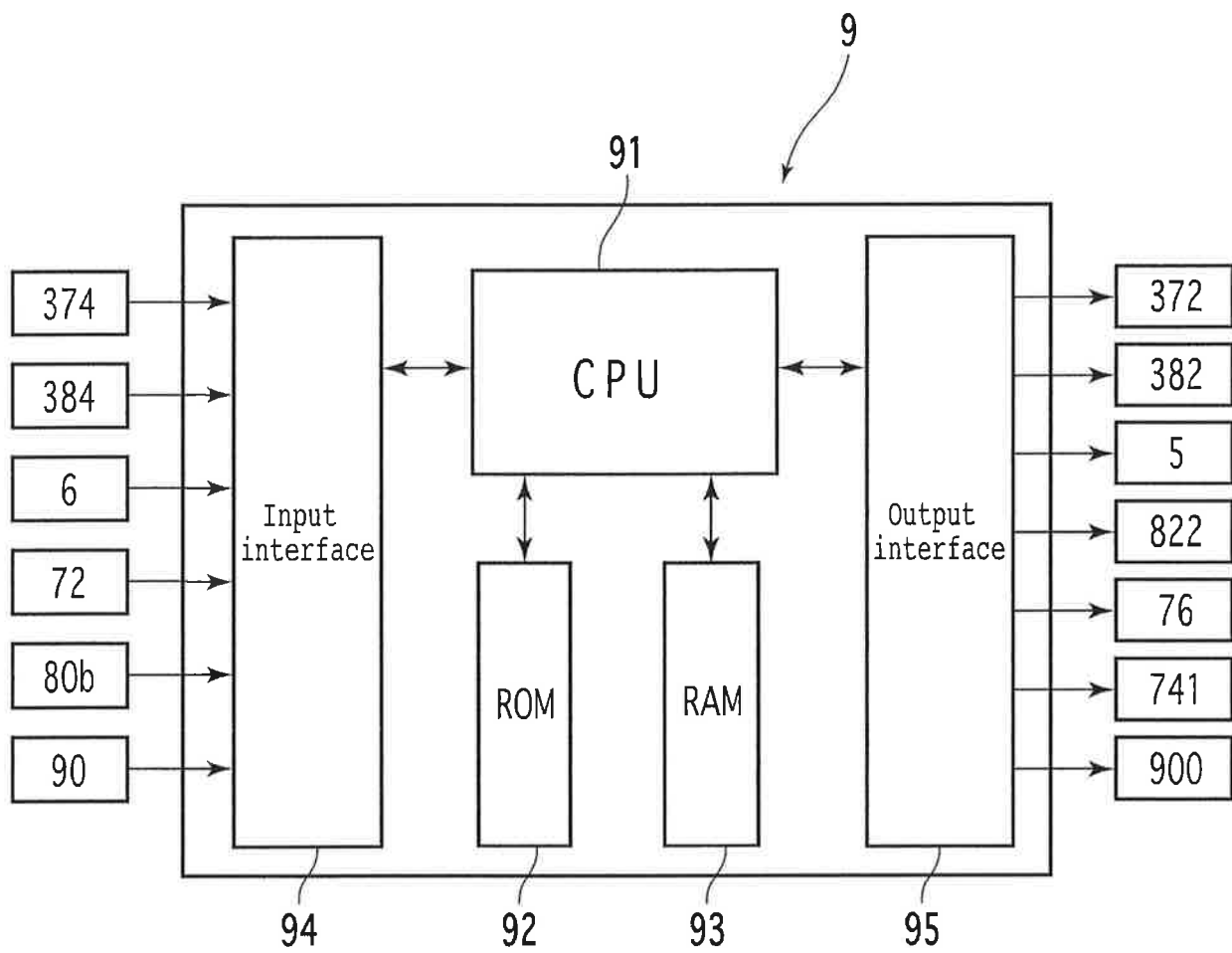


FIG. 6

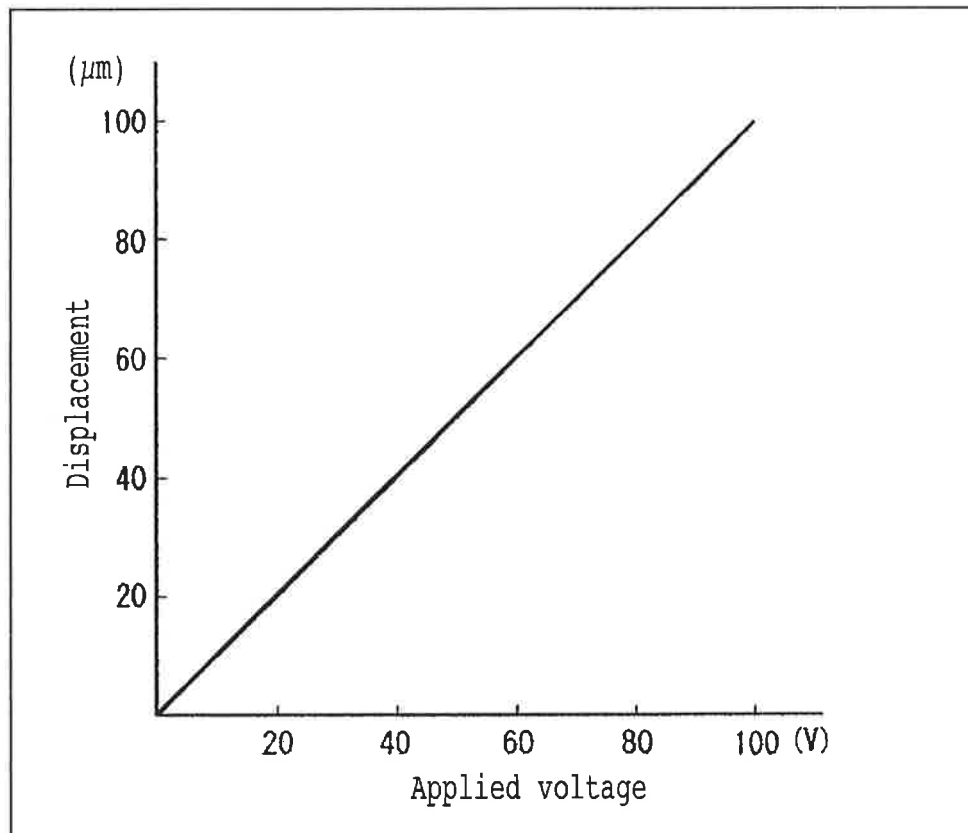


FIG. 7

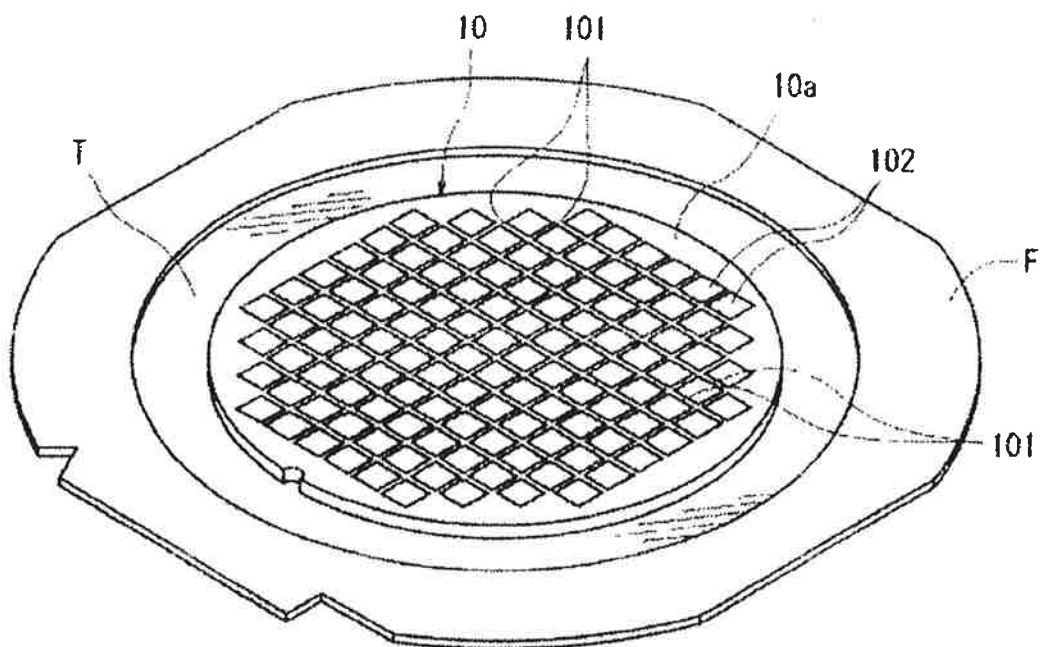


FIG. 8

Processing factor	Nemurical range	
Repetition frequency (KHz)	Max	200
	Min	40
Power (W)	Max	2
	Min	0.5
Work feed speed (mm/second)	Max	200
	Min	50

FIG.9A

Test sample No.	Repetition frequency (KHz)	Power (w)	Work feed speed (mm/second)	Groove depth (μm)
#1	200	2	200	
#2	40	2	50	
#3	40	0.5	200	
#4	120	1.25	125	
#5	200	0.5	50	

FIG.9B

Test sample No.	Repetition frequency (KHz)	Power (w)	Work feed speed (mm/second)	Groove depth (μm)
#1	200	2	200	18.4
#2	40	2	50	30.0
#3	40	0.5	200	3.3
#4	120	1.25	125	16.8
#5	200	0.5	50	22.5

FIG. 10

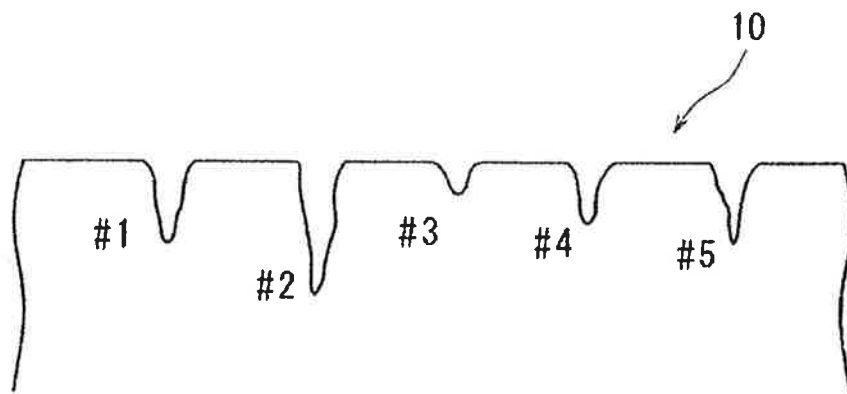


FIG. 11

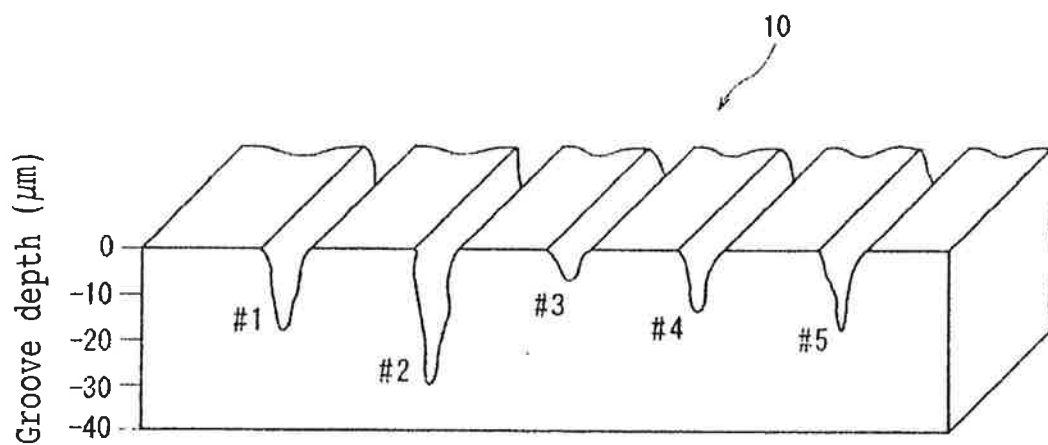


FIG. 12A

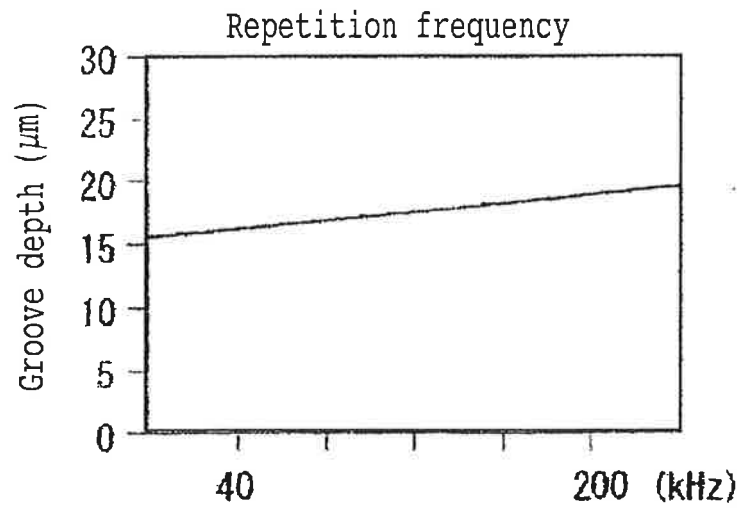


FIG. 12B

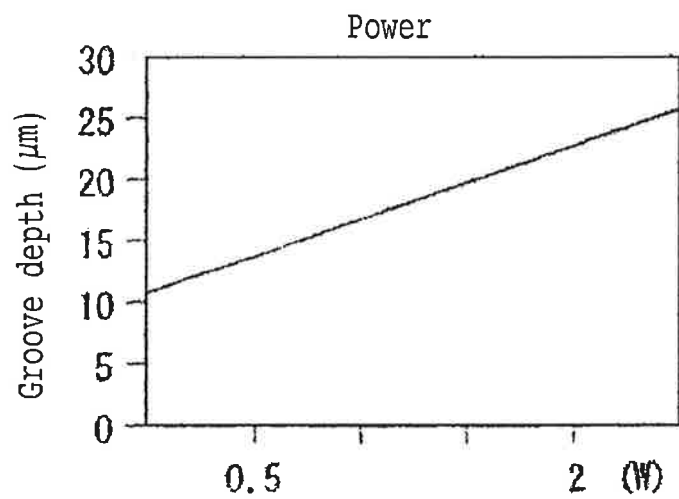


FIG. 12C

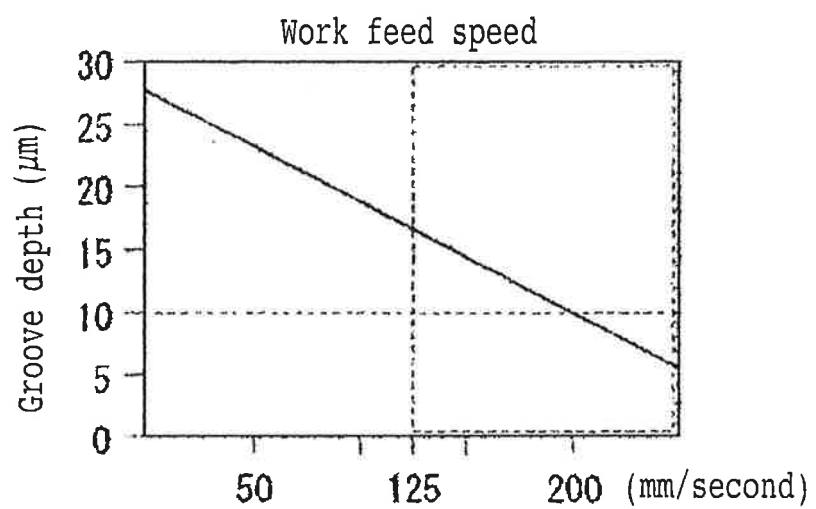


FIG. 13

Processing factor	Nemurical range	
Repetition frequency (KHz)	Max	200
	Min	40
Power (W)	Max	2
	Min	0.5
Work feed speed (mm/second)	Max	200
	Min	125

FIG. 14A

Test sample No.	Repetition frequency (KHz)	Power (w)	Work feed speed (mm/second)	Groove depth (μm)
#1	40	0.5	200	
#2	120	1.25	162.5	
#3	200	0.5	125	
#4	200	2	200	
#5	40	2	125	

FIG. 14B

Test sample No.	Repetition frequency (KHz)	Power (w)	Work feed speed (mm/second)	Groove depth (μm)
#1	40	0.5	200	3.6
#2	120	1.25	162.5	13.7
#3	200	0.5	125	10.4
#4	200	2	200	18.5
#5	40	2	125	15.1