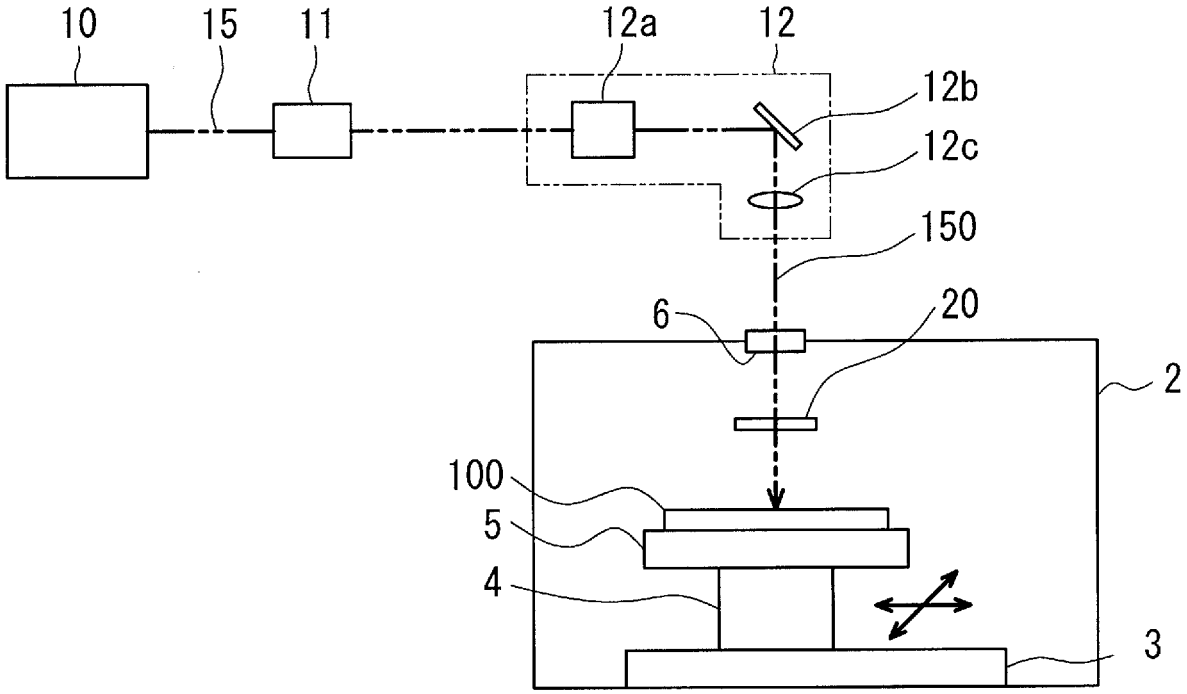
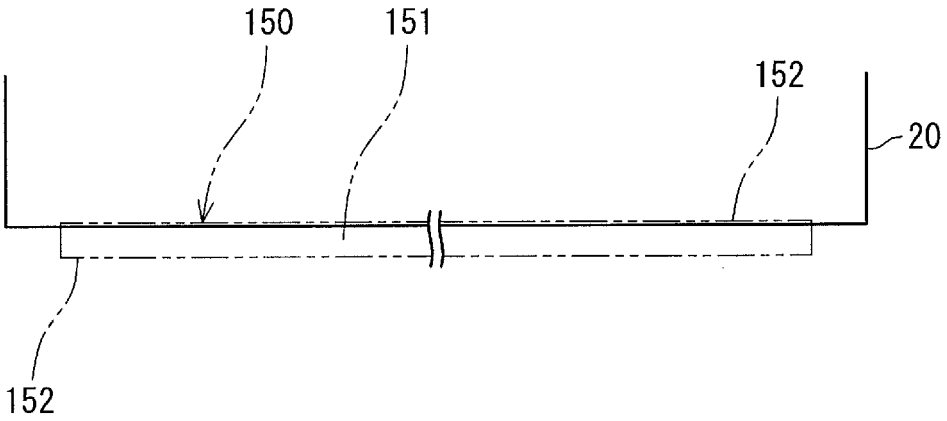
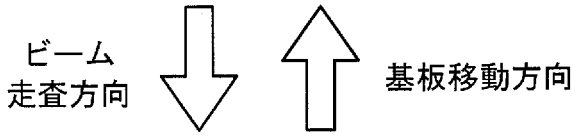
[図1]


10
15
11
12a
12
12b
12c
150
6
20
2
100
5
4
3

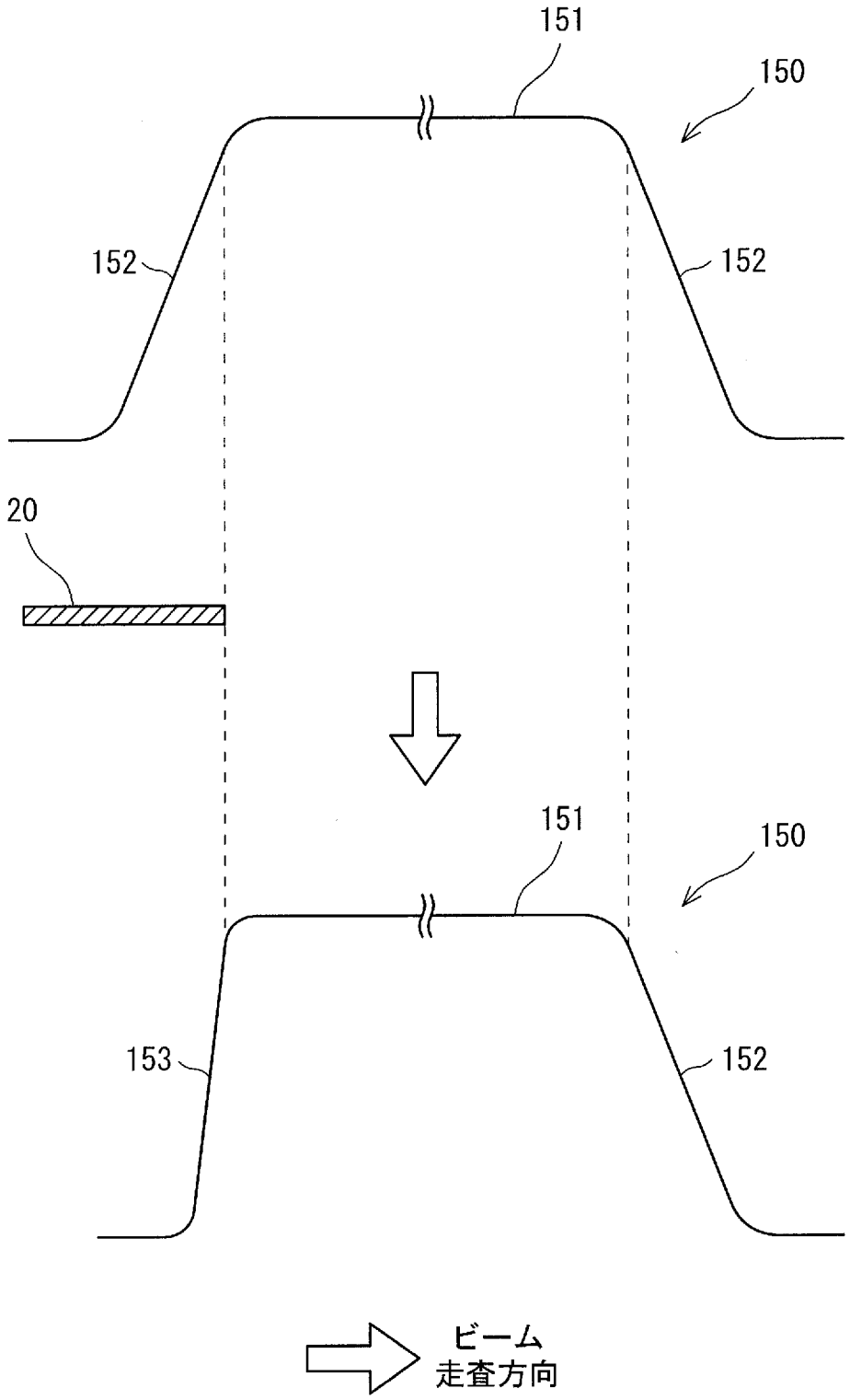
1

[図2]

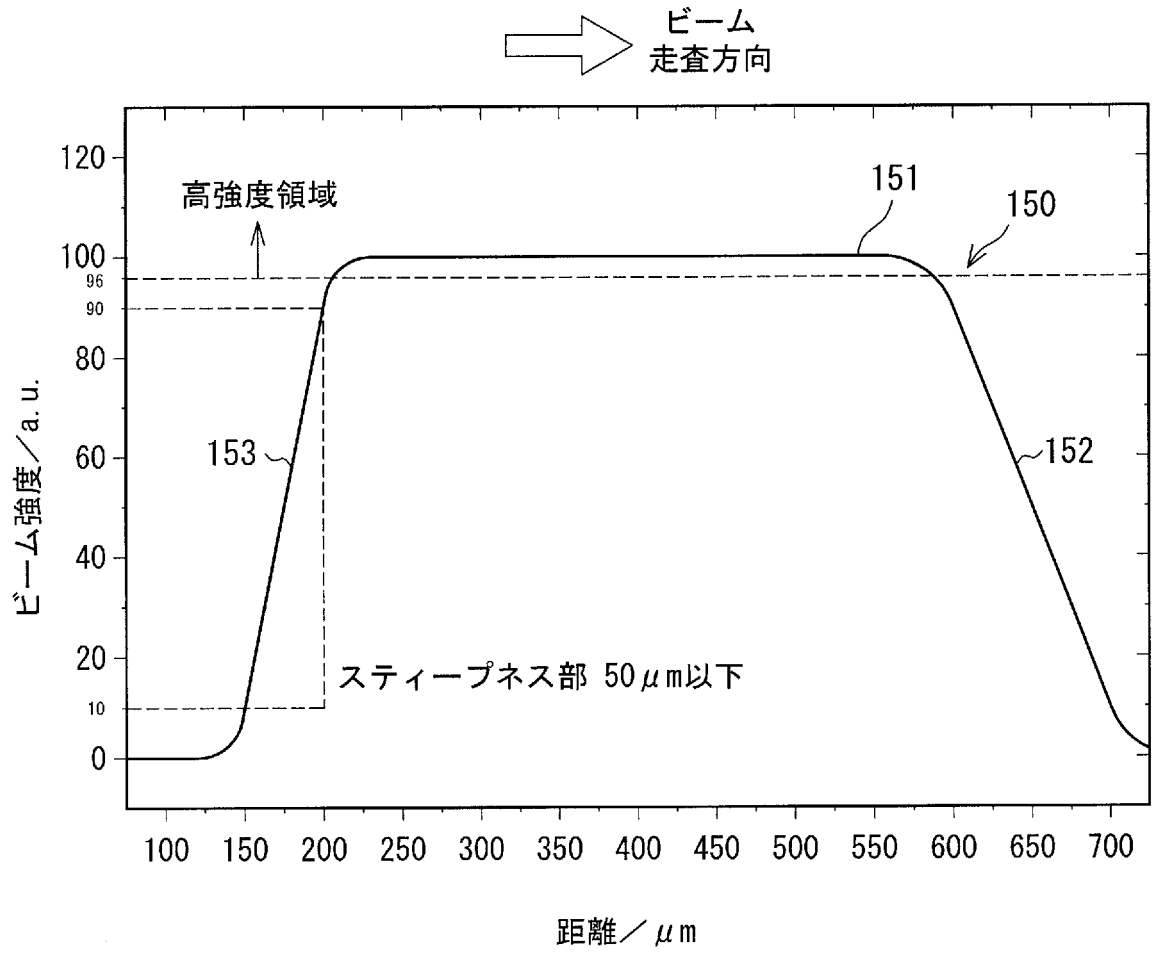

150
151
152
20
152


ビーム
走査方向
基板移動方向

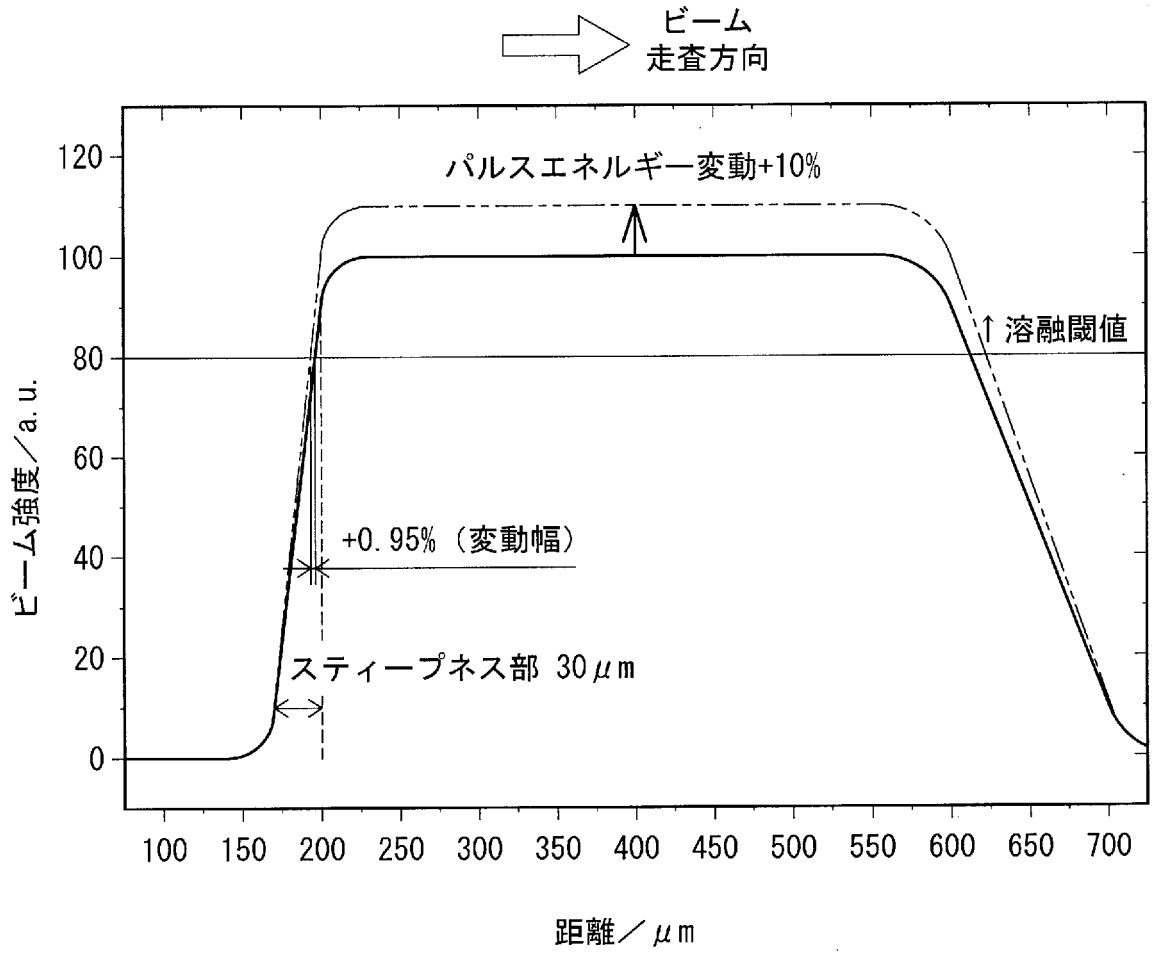
[図3]



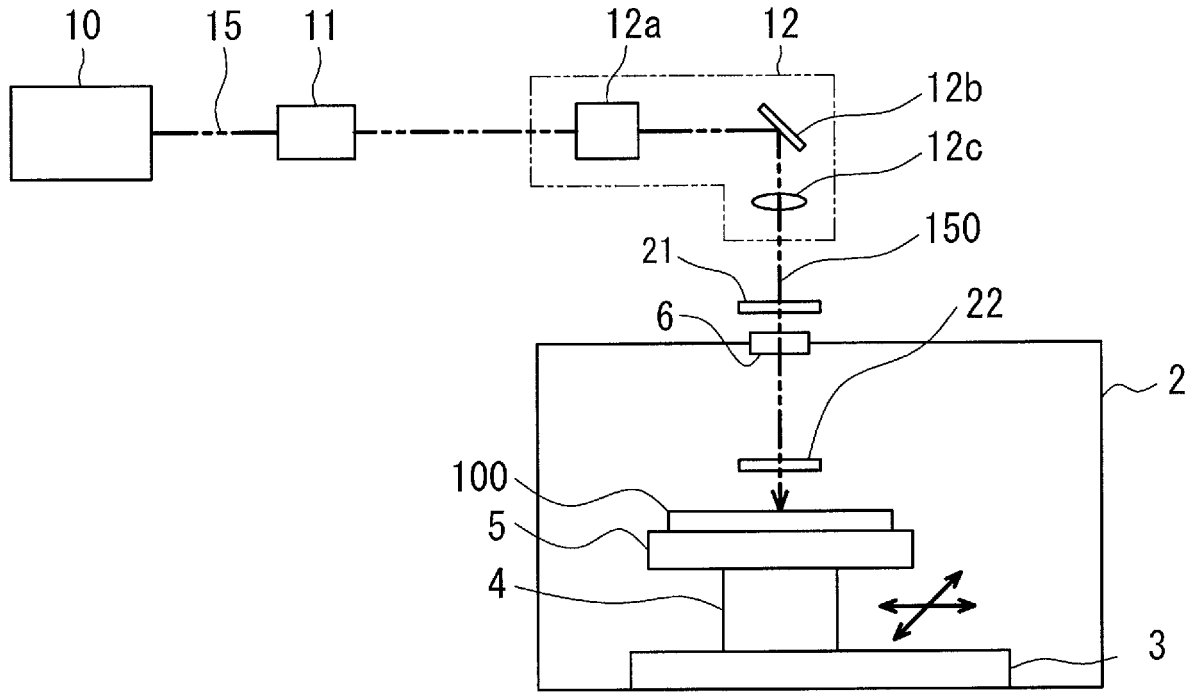
[図4]


ビーム
走査方向
高強度領域
151
150
153
152
スティープネス部 50μm以下
ビーム強度／a.u.
120
100
96
90
80
60
40
20
10
0
100
150
200
250
300
350
400
450
500
550
600
650
700
距離／μm

[図5]

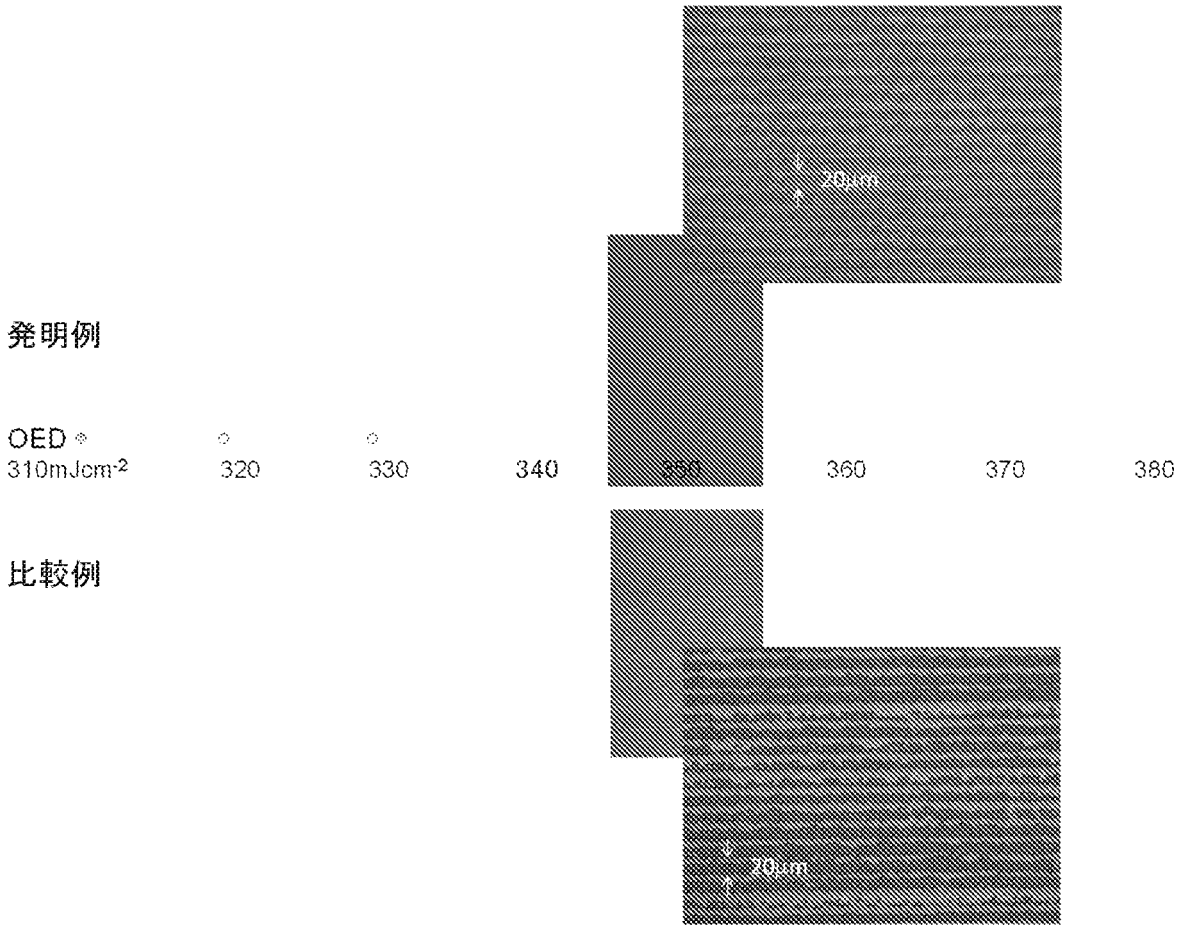

ビーム
走査方向
パルスエネルギー変動+10%
↑溶融閾値
+0.95%（変動幅）
スティープネス部 30μm
ビーム強度／a.u.
120
100
80
60
40
20
0
100 150 200 250 300 350 400 450 500 550 600 650 700
距離／μm

[図6]


10
15
11
12a
12
12b
12c
150
21
22
6
2
100
5
4
3

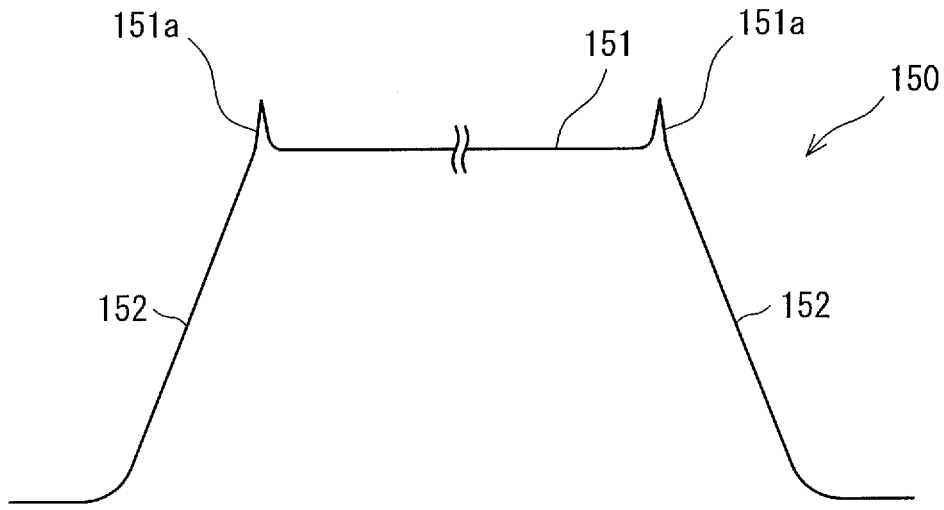
1a

[図7]

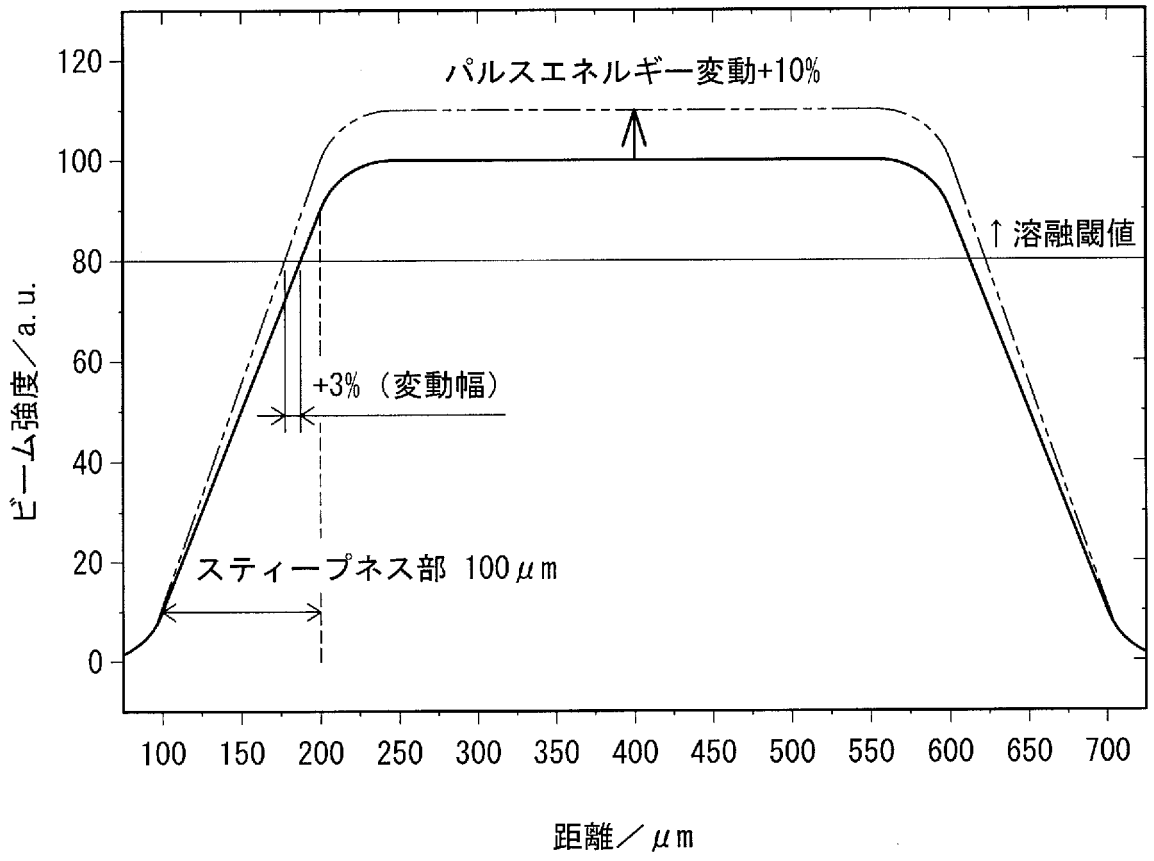

20μm
発明例
OED
310mJcm-2
320
330
340
360
370
380
比較例
20μm

図面代用写真

[図8]


151a
151
151a
150
152
152

[図9]


パルスエネルギー変動+10%
↑溶融閾値
+3%（変動幅）
スティープネス部 100μm
ビーム強度／a.u.
120
100
80
60
40
20
0
100 150 200 250 300 350 400 450 500 550 600 650 700
距離／μm