

(19) (KR)  
(12) (B1)

(21) 10-1997-0003726 (65) 1997-0063842  
(22) 1997 02 06 (43) 1997 09 12

(30) 96-44306 1996 02 06 (JP)

(72) 157 가 4-10-20

243 가 가 304-1 - 205

가 가 가 2-26-2, 202

243 가 가 304-1 - 102

(74) \_\_\_\_\_

가

1A 1B  
2 (homogenizer)  
3A 3B  
4A 4F  
5 (照射)  
6A 6B  
7  
8  
9 9  
10 18  
11 (矩形)

101: 102 105: 106 108:  
109: 110: 111:  
201: 202: 401:  
402: 403: 404: (水膜)  
405: 406: 407:  
408: 409: 410:  
411, 415: 413: 416:  
417: 418:

가 . , . . . ( ) 가 가

, KrF 가 Kr F  
 102 105 (homogenizer) . (10  
 2, 105) 가 .  
 가 , (103, 104)  
 . ,  
 106 (106)  
 107, 108, 110  
 , (110) 109 (109)  
 (111) , , (111)  
 , , (103, 104) )  
 , (103, 104) 가 ,  
 , (103, 104)  
 (102, 105) (103, 104)  
 3A 3B 1A 1B (104) 1A 1B (104)  
 3A 5 mm 12 3B 6.5 mm 5 1A 1B (201) 1A 1B (202)  
 104) 2 1A 1B 104  
 가 7 , , 10  
 , 2 (202) 'a' 5 mm  
 3A 3A 3B 12 cm  
 3A , 3B (stripe)  
 (走查) (照  
 射) , (104)  
 , 0.1 5mm  
 , (mm) ,  
 (100, 20) 가, (100, 7), (700, 50), (700, 140)  
 가  
 가 7 7  
 가 5 15 mm  
 , 가, (mm) , (mm)  
 (30, 0.1), (80, 0.1), (80, 5), (50, 5) (30, 3)  
 가  
 가 8 8  
 , 10 , 30 80 mm  
 , 0.1 5 mm  
 2 201  
 가 , 202





가 1000 mm , , 72 200  
 , 100 가 , , 500 1  
 ,398 mm , , 가 500 1,398 mm  
 , ,  
 0.1 5 mm

(57)

1.

0.1 5mm

2.

1

3.

1

가,

2

4.

3

90

5.

6.

y x/10 (30 mm x 50 mm)

x(mm)  
 가, 30 mm x 0.1 mm y 5 mm  
 (座標系)

7.

y x/10 (30 mm x 50 mm)

x(mm)  
 가, 30 mm x 0.1 mm y 5 mm

0.1 5 mm

8.

;

, 0.1 5 mm 가

;

(非)

(照射)

9.

(非)

(mm) , , , , ,  
 가, (30, 0.1), (80, 0.1), (80, 5), (50, 5), (30, 3)

**10.****11.****12.****13.****14.****15.****16.****17.****18.****19.****20.****21.**

(非) (照射)

(mm) , , , , ,  
 가, (30, 0.1), (80, 0.1), (80, 5), (50, 5), (30, 3)

(mm) , , , , ,  
 가, (30, 0.1), (80, 0.1), (80, 5), (50, 5), (30, 3)

2

(mm) , , , , ,  
 가, (30, 0.1), (80, 0.1), (80, 5), (50, 5), (30, 3)

2

90

x(mm)

가,  $(43/600)x - (1/6)y - (x/5)$

**20.**

2

**19.**

**22.**

21 , 90

**23.**

가, (100, 7), (700, 50), (700, 140), (100, 20)

가  
가**24.**

가, (100, 7), (700, 50), (700, 140), (100, 20)

가  
가**25.**

가, (100, 7), (700, 50), (700, 140), (100, 20)

가

**26.**

25

**27.**

26 , 가, 2

**28.**

27 , 90

**29.**

가, (100, 7), (700, 50), (700, 140), (100, 20)

가

**30.**

29

**31.**

8 , 가, 2

**32.**

31 , 90

**33.**

33 , 0.1 5 mm

**34.**

33

**35.**

33 , 가, 2

- 36.**  
35 , 90
- 37.**  
33 , KrF XeCl
- 38.**  
, (非), , ; , , ,  
0.1 5 mm
- 39.**  
38 ,
- 40.**  
38 , KrF XeCl
- 41.**  
, , , , 0.1 5 mm 가  
; , , (非)
- 42.**  
41 ,
- 43.**  
41 , KrF XeCl
- 44.**  
, (非), , , , (mm) (mm)  
(30, 3) 가, (30, 0.1), (80, 0.1), (80, 5), (50, 5),  
,
- 45.**  
44 ,
- 46.**  
44 , KrF XeCl
- 47.**  
, , , , ,  
; , , (非)  
, , (mm) (mm)  
(30, 3) 가, (30, 0.1), (80, 0.1), (80, 5), (50, 5),

**48.**

47

**49.**

47

KrF

XeCl

**50.**

(30, 3)

(mm)

(mm)  
가, (30, 0.1), (80, 0.1), (80, 5), (50, 5),**51.**

50

**52.**

50

가,

2

**53.**

52

90

**54.**

50

KrF

XeCl

**55.**

(30, 3)

(mm)

(mm)  
가, (30, 0.1), (80, 0.1), (80, 5), (50, 5),**56.**

55

**57.**

55

KrF

XeCl

**58.**가, (100, 7), (700, 50), (700, 140), (100, 20)  
가**59.**

0.1 5 mm

**60.**

(mm)

(mm)  
가, (30, 0.1), (80, 0.1), (80, 5), (50, 5), (30, 3)

61.

y (x/5)

62.

58

y

x(mm)가

(43/600)x - (1/6)

63.

60

KrF

XeCl

64.

58

1000

가

65.

58

, 가

66.

58

, 가

67.

59

KrF

XeCl

68.

59

1000

가

69.

59

, 가

70.

59

, 가

71.

60

KrF

XeCl

72.

60

1000

가

73.

60

, 가

74.

60

, 가

75.

61

KrF

XeCl

76.

61

1000

가

77.

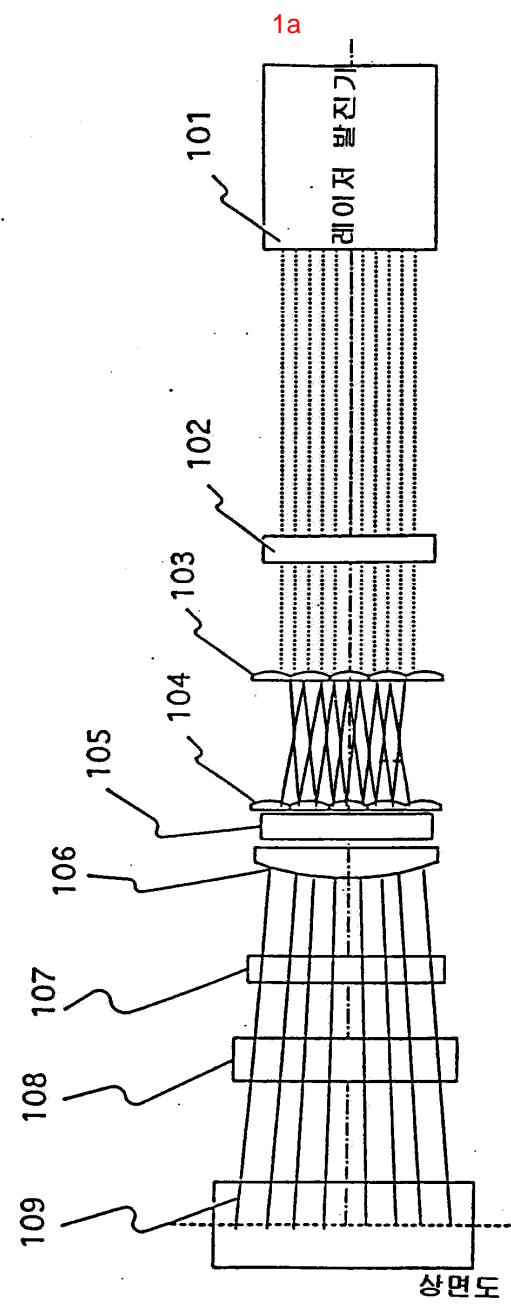
61

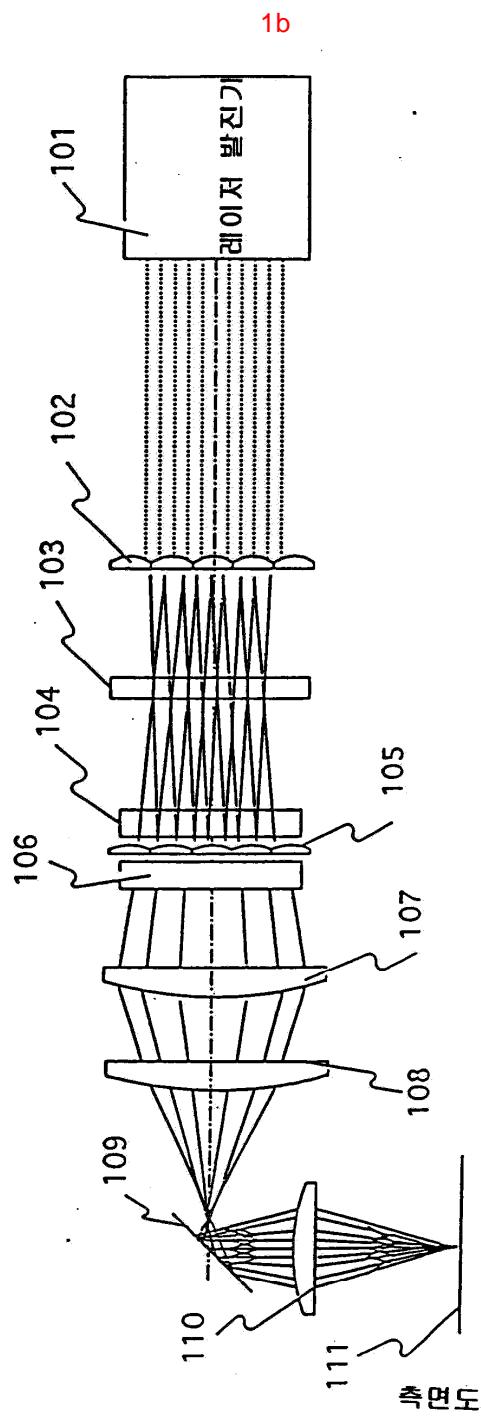
, 가

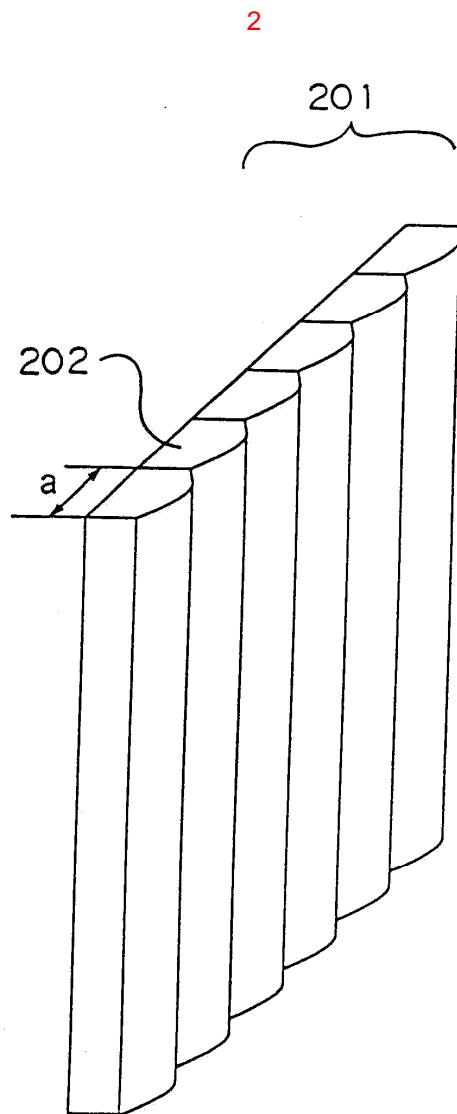
78.

61

, 가







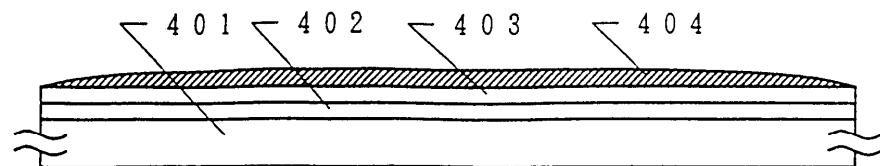
3a



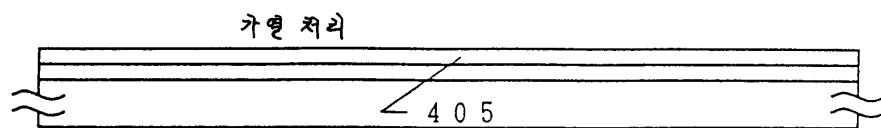
3b



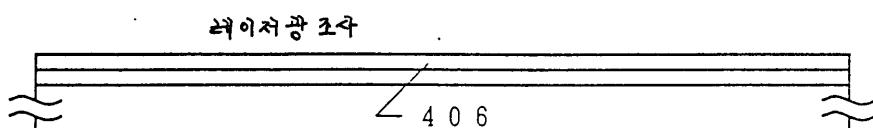
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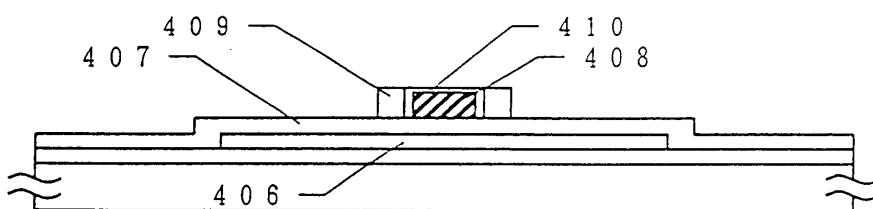
4b



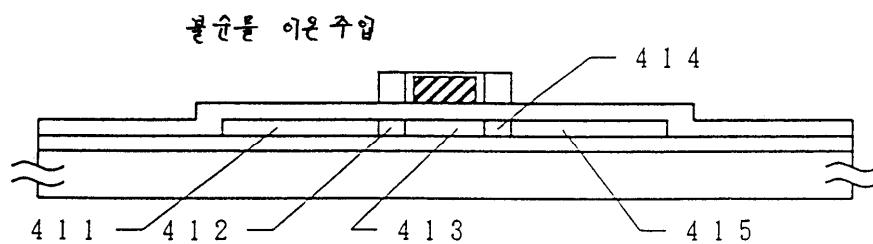
4c

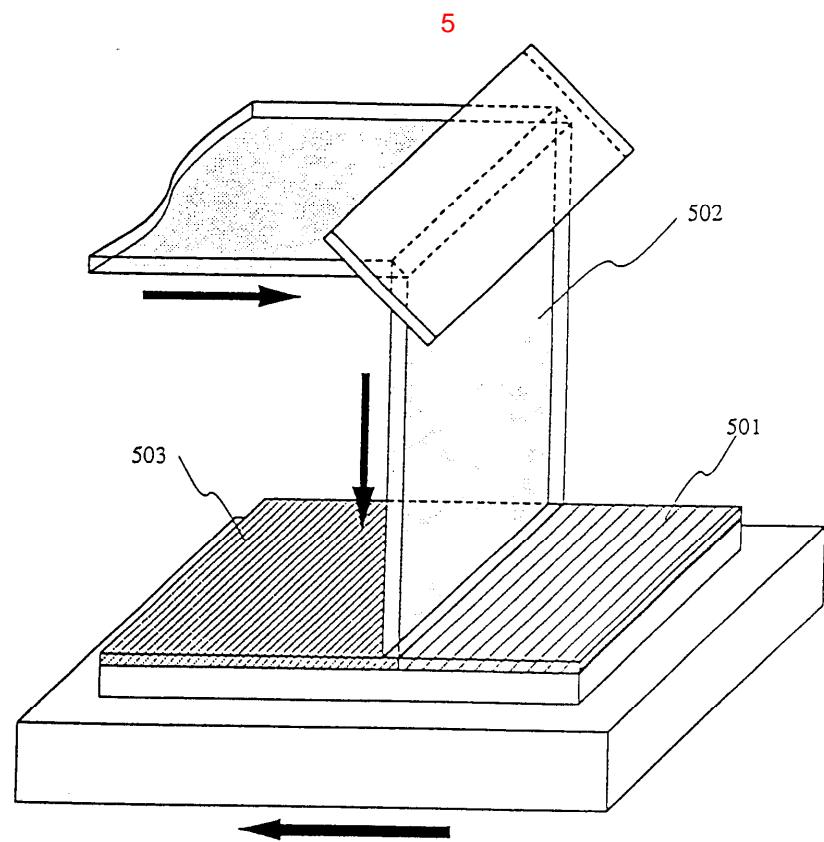
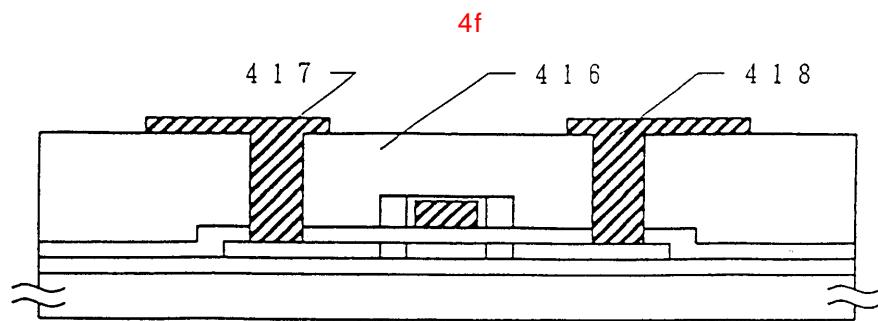


4d

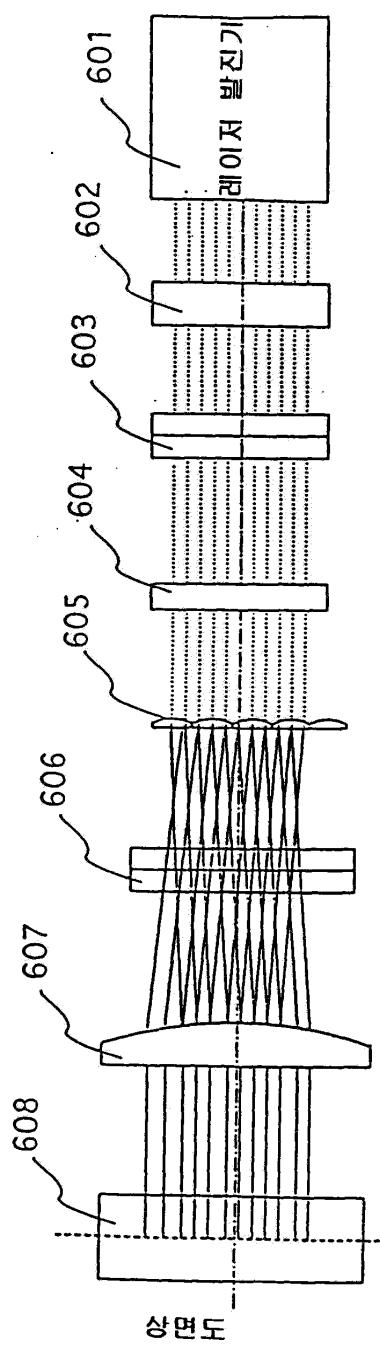


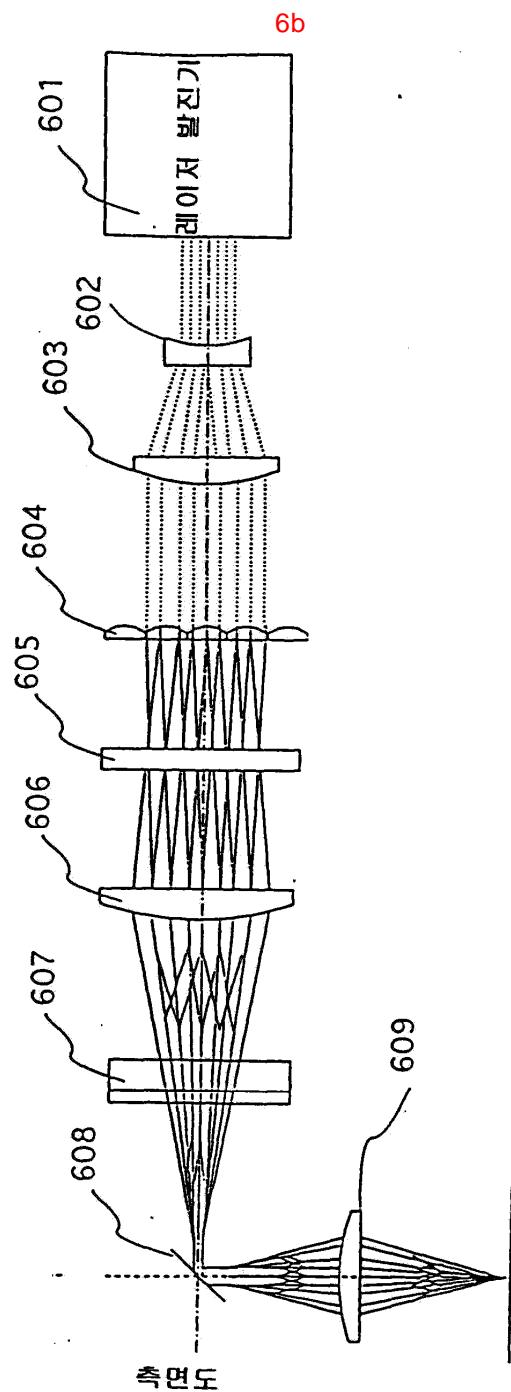
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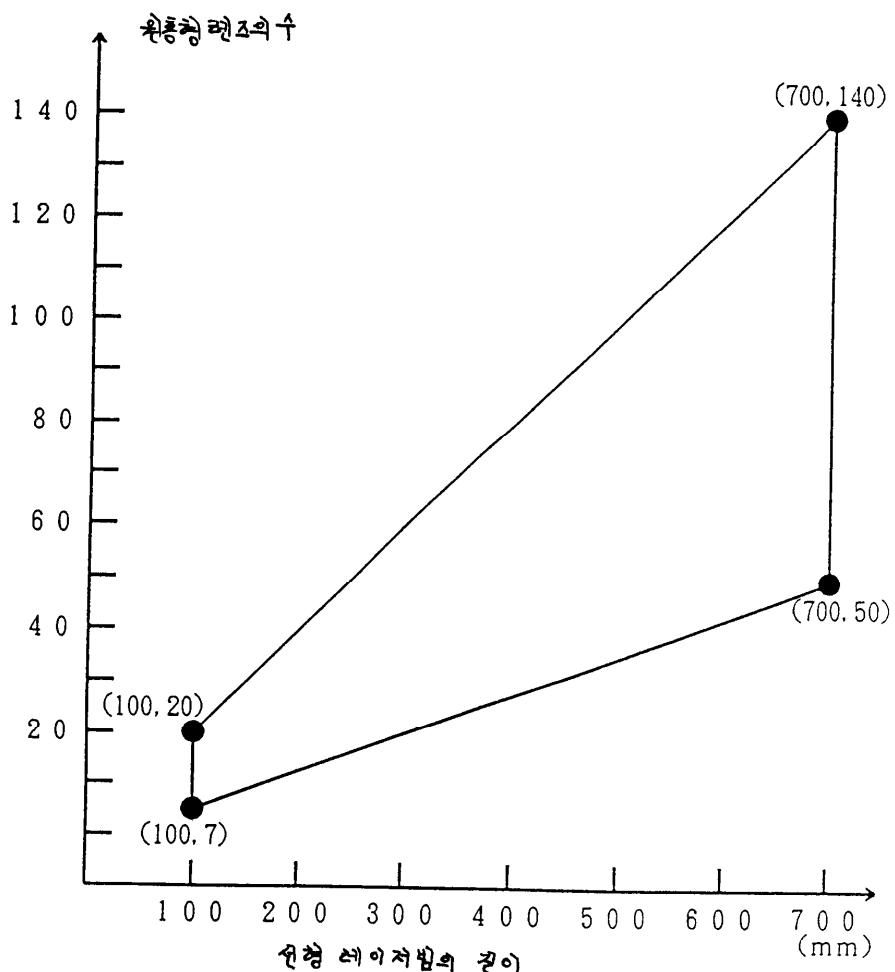


6a

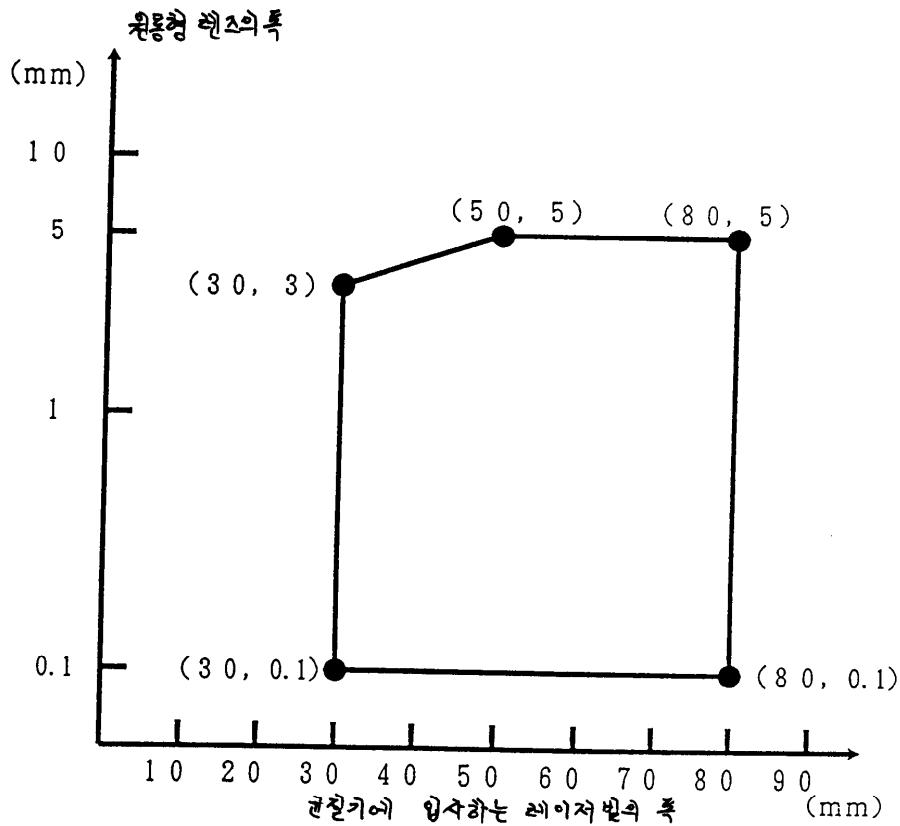




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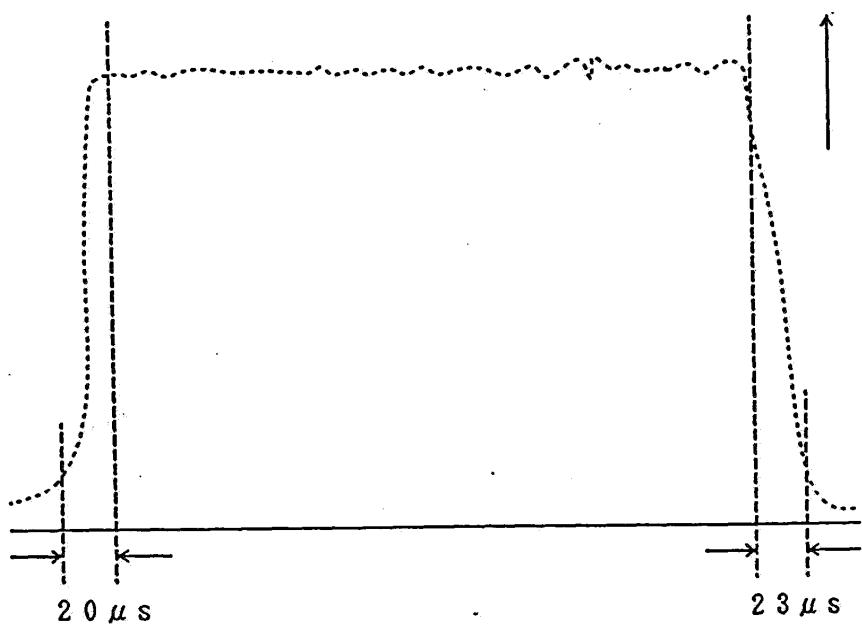


8



9

**조사·에너지 밀도의  
구형 레이저파의 빔 프로파일**



10

구형 레이저파의 빔 프로파일

조사 에너지 밀도의  
정규화 값

11

최종점 렌즈의 수

