

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

(21)	10-2002-0010377	(65)	10-2002-0070135
(22)	2002 02 27	(43)	2002 09 05

(30) JP-P-2001-00052860 2001 02 27 (JP)

(74)

10

(54)

5       $300\mu\text{m}$       가      .      .      .      ,

1

1  
2  
3  
4  
5

6a 6b

(23)

가

(63)

7  
8< >  
10 :  
11 :  
12 :  
14 :  
15 :  
16 :  
17 :  
19 :  
21 :  
81 :  
82 :  
84 :  
85 :

가

가

(가)

) 가

가

가

가,

가

가

8

(81)

(A)

(82)

(81)

(84)

(84)

(84)

(85)

가

(B)

(82)

(81)

(85)

(81)

SUS

가

가

가

1 (10)

$$\frac{1}{12}, \quad (11) \quad (A) \quad \dots, \quad (11) \quad ($$

$$(13) \quad \vdash \quad . \quad (11) \quad \vdash \quad \text{가}$$

(14) (11) 가 (1)

$$(18) \quad \quad \quad (11) \quad \quad \quad (11) \quad \quad \quad \text{가} \quad \quad \quad (17)$$

(14)가 2 21

$$\begin{array}{ccccccccc} & & & & & & & & (22) \\ & & (14) & & (21) & & & & (11) \\ & & & & (11) & & & & (23) \end{array}$$

$$(11) \quad (11) \quad (23) \quad \nabla d = -700V$$

$$V1 = -150V \quad (23) \quad \text{at} \quad V1, \quad Vdc = -400V$$

가 (23)가 (21) 가 (21) (21) (14)

(23) (11) 가 50μm 가

$$3) \quad \lambda = 10 \mu\text{m} \quad 104 \quad 106$$

(23) 500gf (11)

, (11) 90mm/sec 30mm , (23) (11)  
 . 120mm/sec 20mm . .

-400V (23) 가 . , 10k  
가 . (23) . .

(23) , (24)가 , (24)

$$(24) \quad (23) \quad (23) \quad . \quad . \quad . \quad (11)$$







가  $100 \mu\text{m}$   
 $25 \text{ g/cm}^2$

4

$t (\mu\text{m})$	(mg/cm <sup>2</sup> )		
1000	0.70	0.50	0.35
500	0.68	0.52	0.38
300	0.55	0.50	0.46
200	0.51	0.49	0.48
100	0.50	0.51	0.51
20	0.52	0.49	0.49
5	0.49	0.48	0.50

가  $500 \mu\text{m}$ 

가

(t) 가  $t = 300 \mu\text{m}$ 

가

 $0.3 \mu\text{m}$ 

가 0.1

,  $t = 200 \mu\text{m}$ 

가

(ensphered configuration)

가

가  $t = 2 \mu\text{m}$ 

(fish eye)

(62) 가

 $5 \mu\text{m} < t < 300 \mu\text{m}$ ,  
(63) $5 \mu\text{m} < t < 200 \mu\text{m}$ ,  
(61)

(23)

30 %

 $4 \mu\text{m}$ 

가 30 %

가

, 10,000

가  $t = 80 \mu\text{m}$   
(23)

가

 $120 \mu\text{m}$ 30 g/cm<sup>2</sup>  
가  $4 \mu\text{m}$ 

가 30 %

7

가

(70)

가

(71),

(71)

(74),

(78, 79)

(70)

(75),

(76)

(72),

(77)

(73)

(70)

가

(70)

가

,  
가

(57)

1.

,  
,  
가 , 10<sup>4</sup> 300  $\mu\text{m}$

2.

1 , 5 200  $\mu\text{m}$

3.

4.

1 ,

5.

1 ,

6.

1 5 ,

7.

1 ,

8.

1 ,

25 35 g/cm 가

9.

10.

11.

1 ,

12.

11 ,

100 180 SF-1 100 140 SF-2

13.

11 ,

30 % 4  $\mu\text{m}$  가 %

14.

,  
,  
가 , 5 300  $\mu\text{m}$

15.

14 , 5 200  $\mu\text{m}$

16.

14 ,

17.

14 ,

18.

14 17 ,

19.

14 ,

20.

14 , 25 35 g/cm 가  
**21.**  
**22.**  
**23.**  
14 ,  
**24.**  
23 , 100 180 SF - 1 100 140 SF - 2  
**25.**  
23 , 30 % 4  $\mu$ m 가 %  
**26.**  
, ,  
, 10<sup>4</sup> 300  $\mu$ m  
, ,  
**27.**  
26 ,  
**28.**  
26 , 5 200  $\mu$ m  
**29.**  
**30.**  
29 ,  
**31.**  
26 ,  
**32.**  
26 31 ,  
**33.**  
26 ,  
**34.**  
26 , 25 35 g/cm 가  
**35.**  
**36.**  
**37.**  
29 ,  
**38.**  
37 , 100 180 SF - 1 100 140 SF - 2  
**39.**  
37 , 30% 4  $\mu$ m 가 %  
**40.**  
26 ,  
**41.**  
26 , 가  
**42.**

가 5 300 $\mu\text{m}$

**43.**

42 ,

**44.**

42 , 5 200 $\mu\text{m}$

**45.**

42 ,

**46.**

42 ,

**47.**

42 46 ,

**48.**

42 ,

**49.**

42 ,

25 35 g/cm 가

**50.**

**51.**

**52.**

42 ,

**53.**

52 , 100 180 SF-1 100 140 SF-2

**54.**

52 , 30% 4 $\mu\text{m}$

%

**55.**

42 ,

가

**56.**

42 ,

**57.**

,

,

가 , 10<sup>-4</sup>

300  $\mu\text{m}$

,

25 35 g/cm

가

**58.**

,

,

가 , 10<sup>-4</sup>

300  $\mu\text{m}$

,

, 100 180

SF-1 100

140

SF-2

**59.**

,

,

가 ,

5 300  $\mu\text{m}$

25 35 g/cm

가

60.

가

5

300  $\mu\text{m}$ 

, 100 180

SF-1 100

140

SF-2

61.

가 10<sup>-4</sup>300  $\mu\text{m}$ 

62.

가 10<sup>-4</sup>300  $\mu\text{m}$ 

25 35 g/cm

가

63.

가 10<sup>-4</sup>300  $\mu\text{m}$ 

F-1 100 140

SF-2

64.

가

5 300  $\mu\text{m}$ 

65.

가

5 300  $\mu\text{m}$ 

25 35 g/cm

가

66.

가

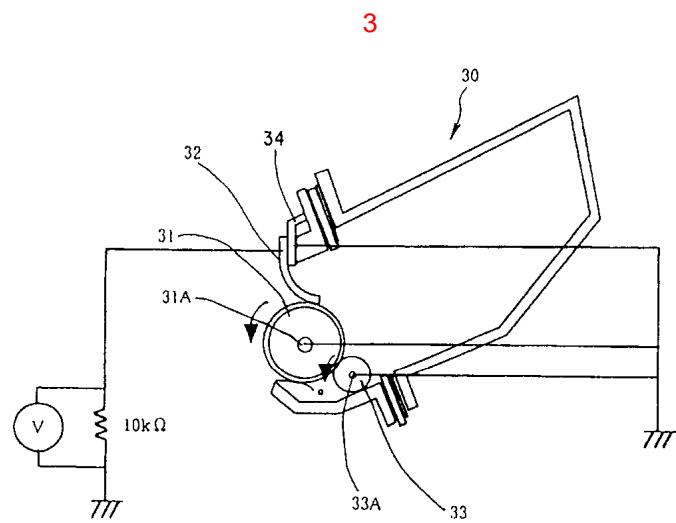
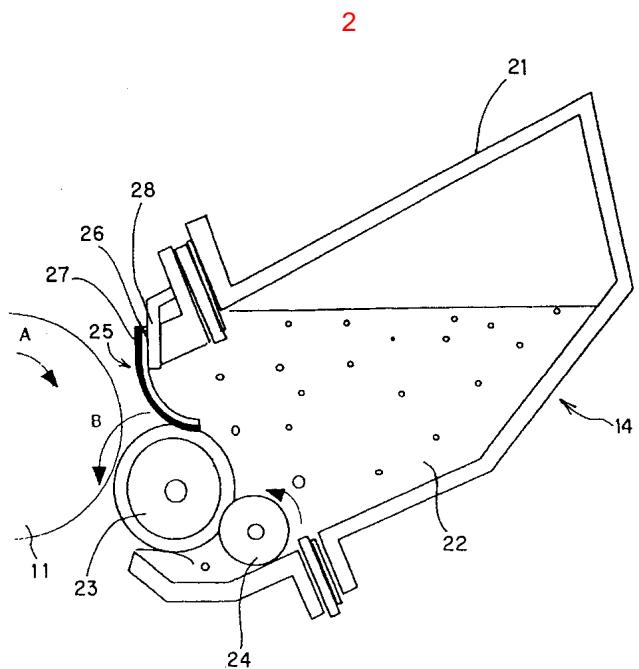
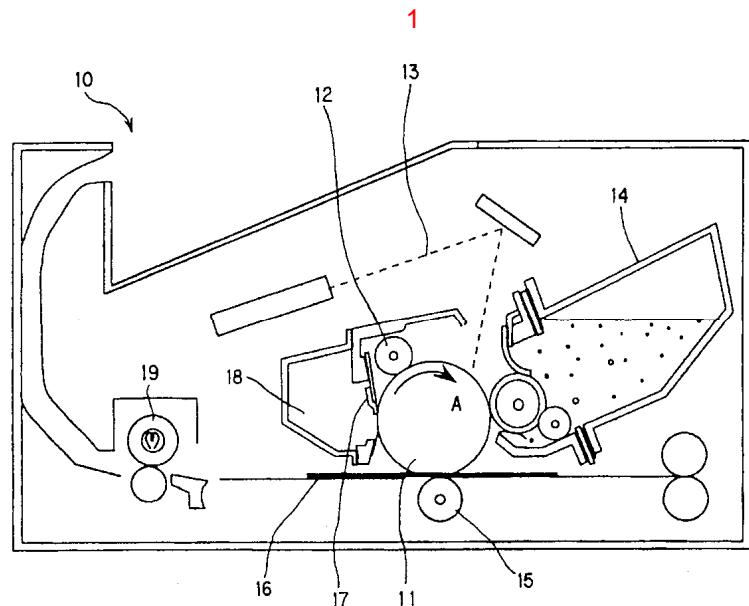
5 300  $\mu\text{m}$ 

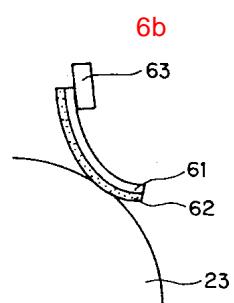
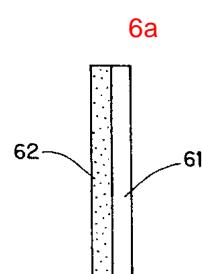
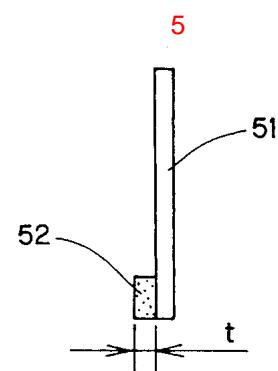
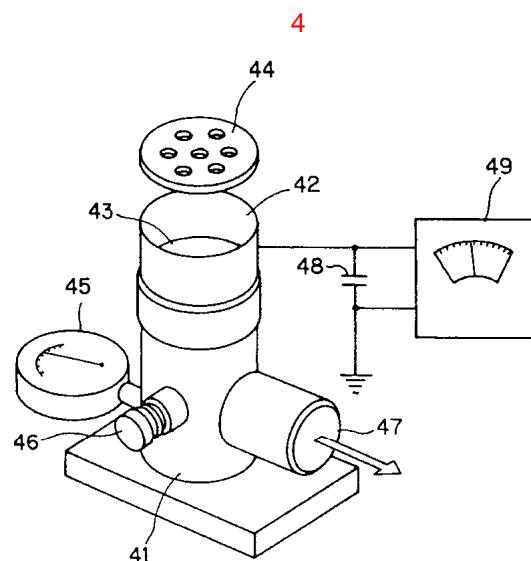
, 100 180

SF-1 100

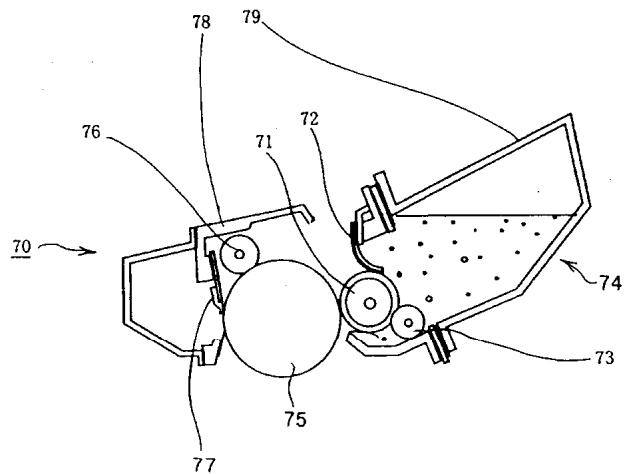
140

SF-2





7



8

