

(19)
(12)(KR)
(B1)(51) 。 Int. Cl. 7
B41J 15/08(45)
(11)
(24)2003 05 14
10-0383700
2003 04 29(21) 10-2001-0003045
(22) 2001 01 19(65)
(43)2001-0076362
2001 08 11(30) 2000-9778 2000 01 19 (JP)
2000-390778 2000 12 22 (JP)

(73) 가 가 3 30 2

(72) 가 10-5-101

가 가 3-9-7-403

가 가 23-5-203

(74)

:

(54)

1 , 1 가 2 , 1 ,
 , 가 2 , ,

1

, 1 , 2 , ,

[illegible]

< >

1:
2:
10:
12:
18:
19:
21:
41:
101:
103:
151: 1
152: 2
154:
155:

가 ,

， (LED)，

[illegible]

, , 가 가 .
가
. , 가 가
. , 가 , 가
가 , 가
가 .
가
,
2 , 1 1
2 , , 1
2 , 가

.
,
,
.

가 가

1. 가 .
 , " " 가 () .
 가 가 , " " 가

(
1 2 (101) (101)
1 (101) , 2
, (, OHP)
(P) (110) , (P) (116)
(stacking plate)(117) (118) 가 (110) , 가
(110) () , 1 , (119) (P)
(110) (110)
(118) (121) (121) , (118) ()
) 가 (P) (separation claw)(122)
가 , 가 (123)()가
(P) (125) (124)가
, () (121)
, (118) (P) 가 (123) (P) (118)
(P) (125) (nip) (P) (1)
(1) (108) (125)
, (108) (P) (1) 가
(P) 가 (130) (109) (P) 가
(112) 가 (113) 가 , (P)
(P) (134) (135)가 (114)
(106), (138) (1)
(106) - , (1) (1)
(103) (1) () 가 (101)
, (103) (103) (101) (60)
(40)가 (103)가 (103)가 (61) (101)
(40) (60) (103) (18)
(154) ()
() (103)
()
3 1 () 151
1 (151) (9) (1) (151) (1)
(10) , (1)
(11) , 1 (152)()
()
()
3 , 2 () 152 2 (152) (12) , ()
) (2) , (13) 2 (152) ,
(12) (19) (14) (13)
(2) 가 (19a) (19b)
(19) 2 (152) 가
(19)
4 , 1 (151)() 2 (152)(
) (21)() 가 (1) (1) (2) 가 (22)(
) 가 5 (2) (2a) 가 (3)
, (1) (2) 가 (3) (2)
(22) , (1) (3) (1) (2)
()
6 (103)

(103) 1 (151) 2 (152) (101)
 . 2 (152) (2) (15) , (18)
 (16, 17) (154) (101) (18) (101)
 가 (1) , (1) 가 2 (103)가 (18) (101)
 (1) (41) (1) 가 1 (152) (1)
 (101) (41) 가 () ()
 (103)가 (101) , (1)
 (41) 1 (151)
 ()
 , 2 (152) (20) (20)
 7 2 (152) (20) (20) (20)
 (2) (20a), (16, 17) (20b, 20c), (18) (2)
 0d) (20) (20d) 1 (151) (20e)
 , () 1 (151)
 (2) (2) (20a)
 (20e)() (20e)
 () (14) (14)
)
 1 (151) 2 (152) 2 (152)
 (20) (20e) , 1 (151) (151a) , (21)
 (151a) (20e) (21) (151a) (20e) 1 (151)
 2 (152) , 1 (151) 2 (152) (21)
 (18) ()
 1 (151) 2 (152) 가 (22)
 (2) , (1) (2) 가 가 (22) (1)
 (2) (18) , 가 (22)
 가 (22)
 9 (101) (103)
 , 1 (151) 2 (152)
 (103) (101)
 가 (F2) (154) (18)
 , (1) (F2) (101) 가 (41) 1 (151)
 , (F2) (101) 가
 1. (101) 가 (103) ,
 ,
 1 (151) ,
 (21) 1 (151) 2 (152) ,
 1 (151) (1) ,
 2 (152) (1) (2) ,
 (103)가 (101) (101) (2)
) (18) (21) (18) ,
 2. 1 , (18) , (2) (2)
 3. 2 , (18) (103)가 (101)
 (154) 가
 4. 3 , 2 (152) 1 (151) (155)
) (154) 가
 5. 3 , (103) (154) (18)
 6. 1 , (103)가 (101) (1)
 01) (41) ,

(18)가 (41)가 (101)

7. 6 , (41)

8. 1 , (18)가 , 가 (2)

9. 8 2 (152) 1 (17, 16, 15) (2) 2 (10)

10. 9 , 2 (12) (19)

11. 1 , (18) (103)가 (101)

(41) (41) , (18) (103)

12. 11 , 가 (101) (41)가 , (18)가

13. 11 , (18) (41) ,

(2) , (10)

14. 13 (103)가 1 (151) (101) (12) (12) (10) ,

(103)가 가 ,

15. 6 , (41) , 가

(101)

16. 7 15 , ,

17. (101) 가 , (151)

(103)가 (101) 1 (151)

(21) 1 (151) 2 (152) ,

(103) 2 (152) (103)가 (2) ,

(10) 2 (12) ,

(10) 2 (152) (10) ,

(101) (12) 1 (151) , (103)가 (151b) ,

(101) (101) (151) , ,

(103)가 (101) (12) (103)가 (

101) (101) 2 (152) , (21) ,

(18) , ,

(2) , (103)

(18) (103)

18. 17 , ,

19. 14 17 , (12)

20. (103)가 가 ,

(a) , (154) ,
(b) (103) , ,
1 (151) ,
(21) 1 (151) 1 (151) 2 (152) ,
1 (151) , 2 (152) (2) ,
(103)가 (101)
(2) , (21) (18)
21. (103)가 가 ,
, ,
(a) , ,
(b) (154) ,
(c) (103) ,
(103) ,
(103)가 (101)
1 (151) , (103)가
(21) 1 (151) 2 (152) ,
1 (151) , 2 (152) (2) ,
2 (152) (12) ,
2 (152) (10) ,
(10) (103)가
(101) (12) , 1 (151)
(12) , (103)가 (101)
(101) 1 (151)
, (103)가 (101)
(2) (101) 2 (152) (18) ,
(103)가 (101)
(21)
, (2)
, (103)
(101)
. 3 , 11
. 10 , 12
, 13 , 14 1 2 , 가 15
, 16
, 17
. 18 1 가
(, 10) 가 10 (330)
(330) (full-color) (330)
(350) , 4 (350a-350d)
(240)가 가 (240)
, (t) (350a) (t)가
(240a) , (350b) (t)가 (240b)
(350c) (t)가 (240c) , (350d)
t)가 (240d) . (

(330) (350) 4 (240a-240d) , 4
 (244a-244d) (244)
 (244a-244d) (244a-244d)
 (245a-245d), (242a-242d), (244)
 (P) (334), (244a-244d)
 (246a-246d) (244a-244d)
 (331a-331d) (244a-244d)
 (244a-244d)
 (240) (244), (245), (242), (246)
 (240) (244) 230 mm (244)
 (OPC) (244)
 가 () (244)
 (245) (245) 가 가 (24
 5) (244) (245)
 (331a-331d) (244a-244d)
 () (332a-332d)
 (332a-332d) (244a-244d)
 (333a-333d) (244a-244d)
 (242) (t)
 (251) (251)
 (244) (251)
 가 가 가 (244)
 (335) (244a-244d) (244) (135)
 가 700mm , 150 μ m . 4 (336), (337a,33
 7b), (338) (X) (P) (33
 5) (344) (335) (335) (344) 가 (P)
 (335) (335) (244) (P)
 (335) (339a-339d)가 (335) (244a-244d)
 P) 가 (244a-244d) (339) (335) (P)가
 (340) (P) (341) (P)
 (342) (P)가
 (343) (P) (335)
 (244a-244d) (343) (335) (343) (335)
 (335) (244a) (335) (244a) 가 (244a)
 가 (P) (P) (336) (335)
 (P) (P) (345) (346) (346) 가 (3
 45) (347) (P)가 (345)
 (P) (348) (349)
 () 11 18 (240a-240d)가 (240) 1
 (241) 2 (242)
 (243)
 (1)

11 , 1 (241) (244) (244)
 a) (241) 가 (241) (244)
 (245), (244) (244)
 (246), (252) (247)
 (248) (241) (241) (242)
 (241a)(12) (241a) (243)
 가 , " (above)" (240)가 (350)
 , (246) (244)
 (248) (247)
 (248) (249) (247) 가
 (250) 가 (250) (250)
 5mm (247) (249) (13)
 가 (249) 1mm ,
 (249a)가
 가 , (249) , 가
 (2)
 11 , 2 (251),
 (252), (254)가 (252)
 (247) , " " (240)가
 (252) (253) (254) (255)
 Y 가) (Z) (255)
 가 (251) (256) (251)
 (1 2)
 12 , (24)(2) (241)(1) (242)
 (242) (251) (257, 258a) (257, 258)
 257, 258)가 (243) (257a, 258a) (243a) (257, 258)
 a, 258a) (241) (241a) , (241) (242)
) 14 (259) , (244) (251)가 2 , 2
 가 (259) 11 (241) (242) ,
 (244) (251) (259) 가 (259)
 (241, 242)
 () (240) 가 ,
 (240) (241) (242) ,
 12 , (241) (244)
 (260) (260) (260) (244) (261)
 15 , (260) , (pillar) ,
 (261) (261) (261) (261) (244)
 , (261) (260) (261) 2
 , (261) 120 ° , 2
 (244) 가 , (260)
) (244) (248) (250) (262) (262)
 , (241) (263)(17)
 (242) (257), (264)
 (265, 266)가 (257b 254d) (264) ,
 17 (267)
 (264) 가 , (240)가 (350)

, (264) (260) (240) (240)
)가 (350) (240)가 (350) (264) (260)
 (260) (240) (244) (350)
 (257b) (241) (242) (243) (257a) (243a) (, (264) (243))
 (244) (243a) (241) (242) (243a) (241)
 (251) , (240)가 (350) (350) (251)
 (243a) (264) (251) (264)
) (267), (240)가 (350)
 (350) (264) (240) (251) (241) (241b)
 (264) (267)
 (264)가 (350) (260) (350)
 (243) (264) (267) (264) (F) (242)
 (243a) (264) (267) (264) 가
 가 (350) (242)
 (264) (241) (248) (251) (253)
 (251) (264) 1 (265, 266) (269)
 (251) (255) (255) (265)
 (271) (253a) (253b) (253a) (253b) (270a) (270b)
 (271) (271) (271)
 (272) (241) (263) (263)
 (248) (250) (262) (250)
 (249) (242) (264)
 (, (265, 270a, 271, 272, 263, 262)) (249), (241)
 (249) (271, 263)
 (270a, 271, 270b, 272, 262, 263) 2 (264, 265, 266, 268, 269,
 270a, 270b, 271, 272) (242) (267, 262, 263) (241)
 (249) (244) (251), (253) (253)
 (249) (244) 가 (244) 가
 (242) (241) (242) (272)
 (241) (263) (243) (272, 263) 18
 (241) (242) 2 가

(240)
(240) (240a) (240a)
(350a-350d) (244)
(240)가 (350) (264)
(260) (240)가 (350)
(244), (251), (249) (250)
(264) (257a) (243) (257)
(254) (257)
(252)가

(57)

1.

가

가,

1

1

2

1

2

가

2.

1

3.

2

가

가

4.

3

2

가

1

5.

3

6.

1

가

가

가

7.

6

8.

1

2

9.

8

1

2

10.

9

2

11.

1

가

12.

11

13.

11

14.

13

가

1

15.

6

16.

7

15

17.

가

가

1

1

2

1

가

2

2

2

1

가

가

1

가

2

가

18.

17

19.

14

17

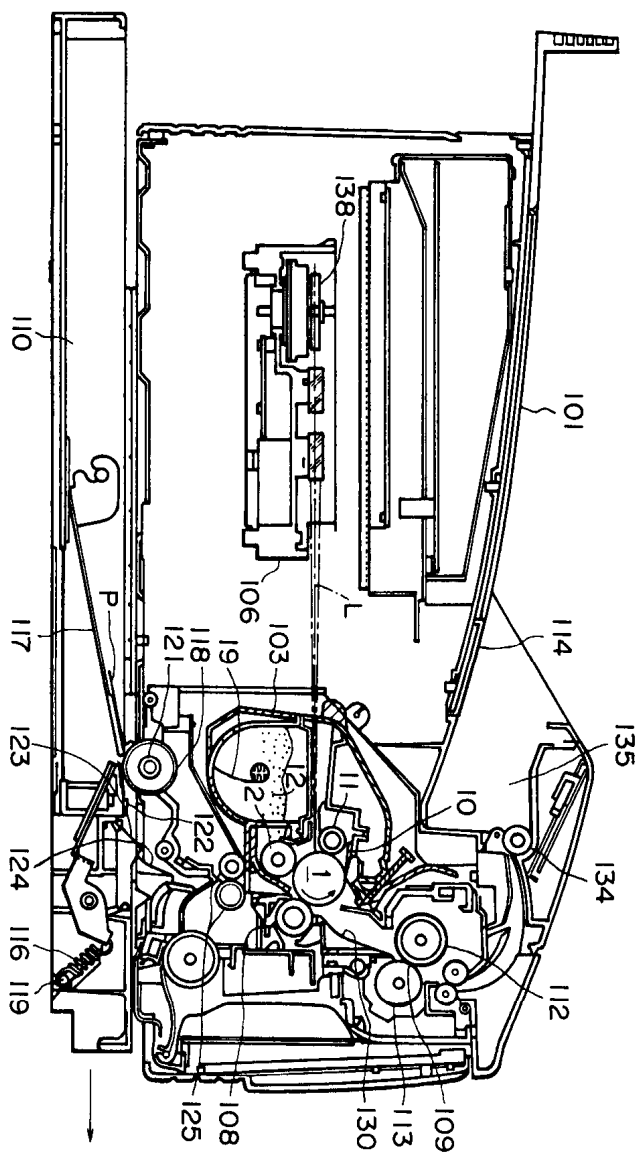
20.

가

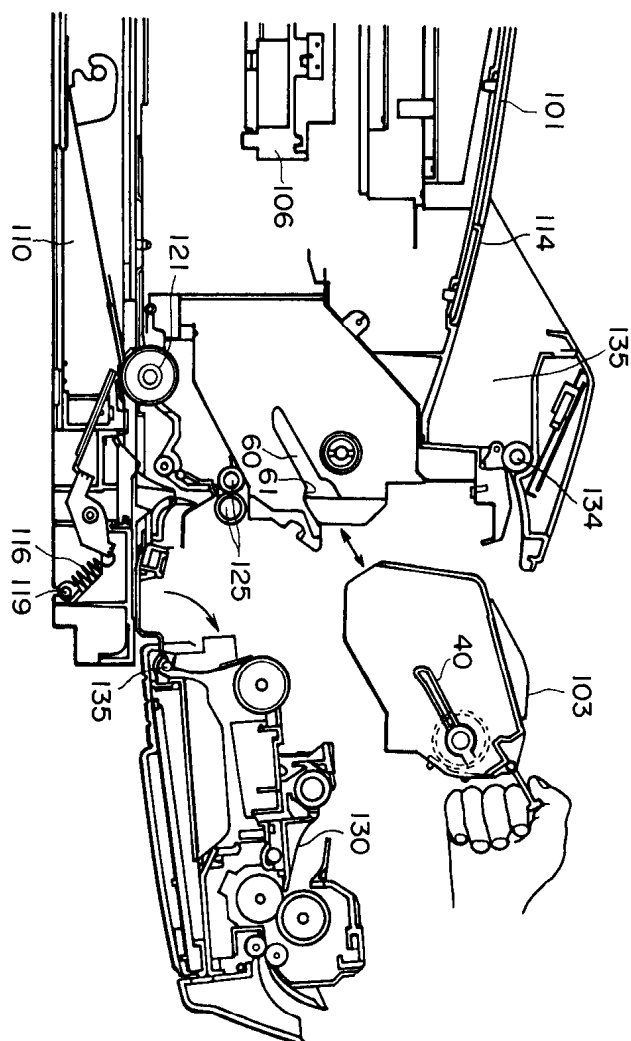
가

(a)
(b)

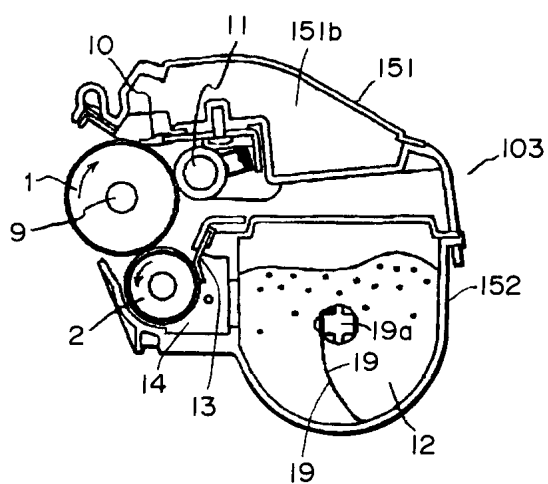
1



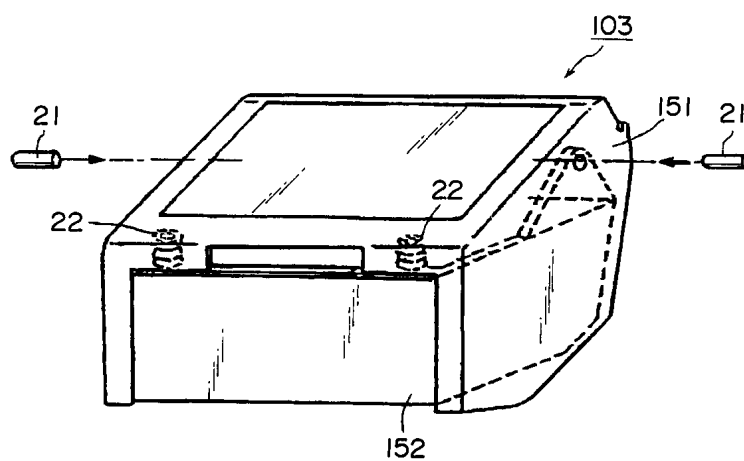
2



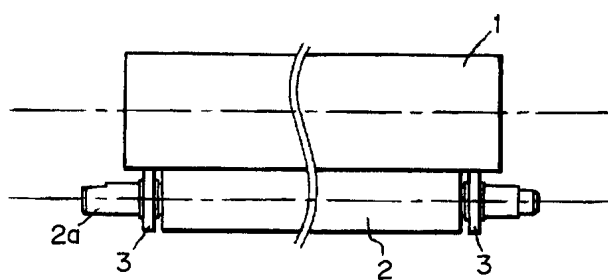
3



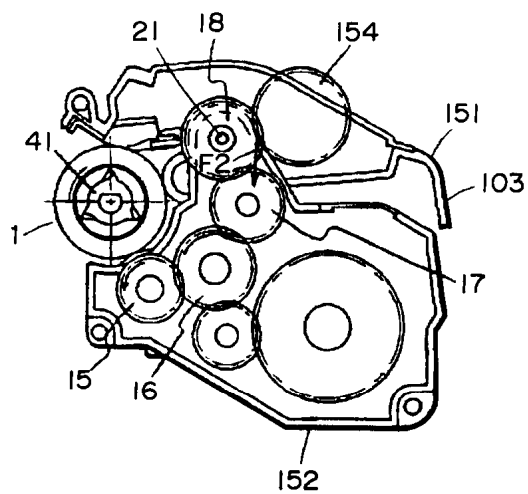
4



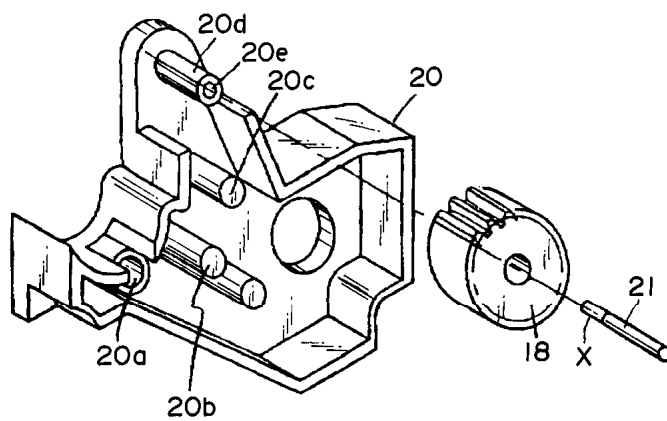
5



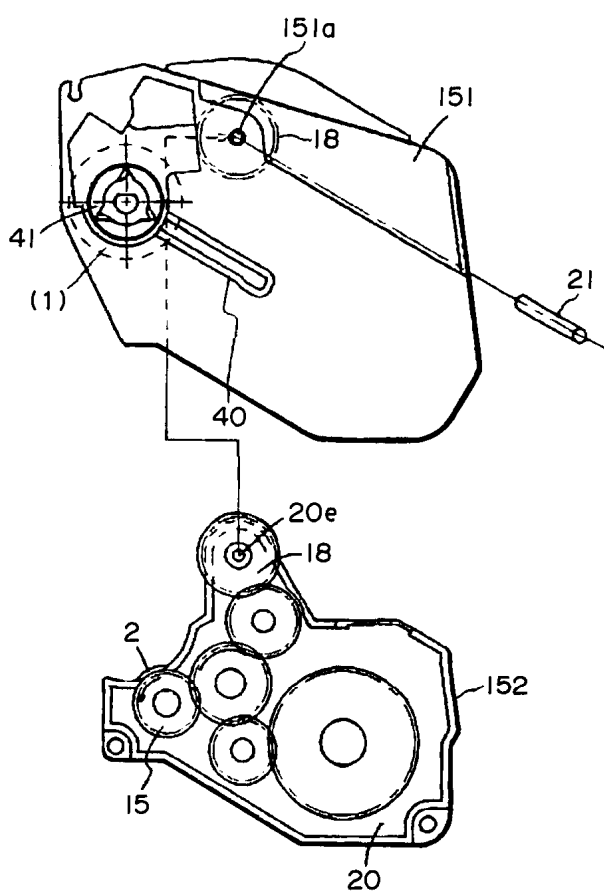
6



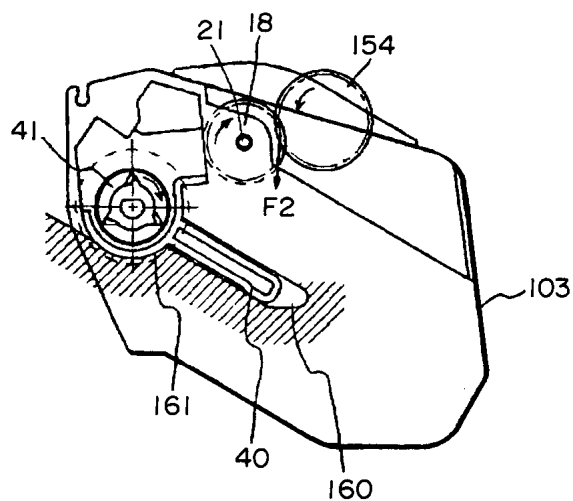
7



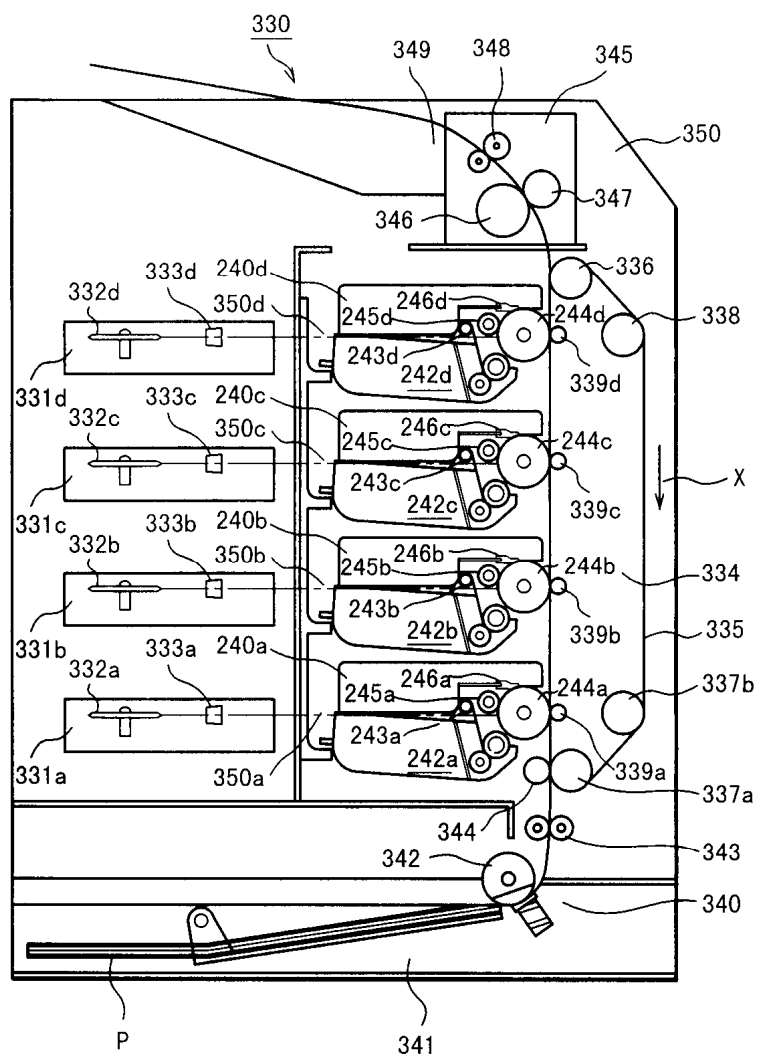
8



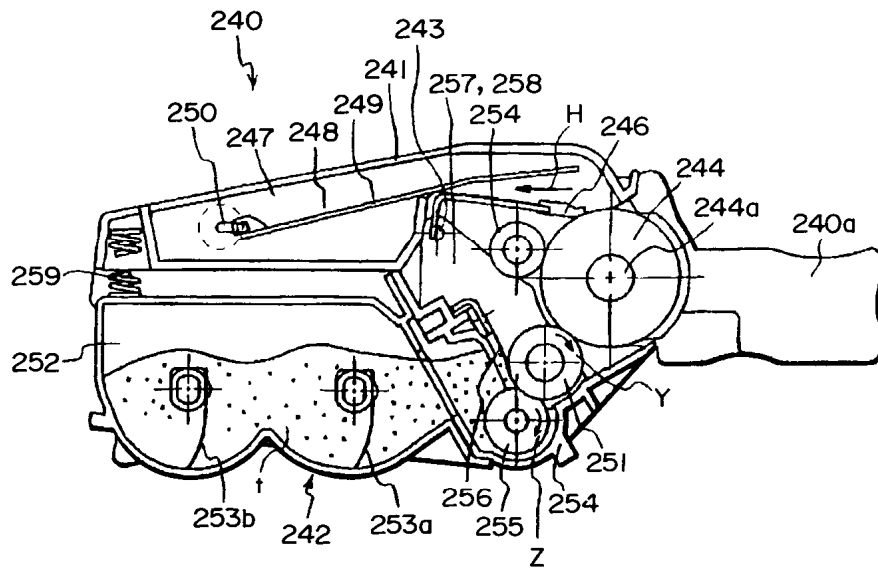
9



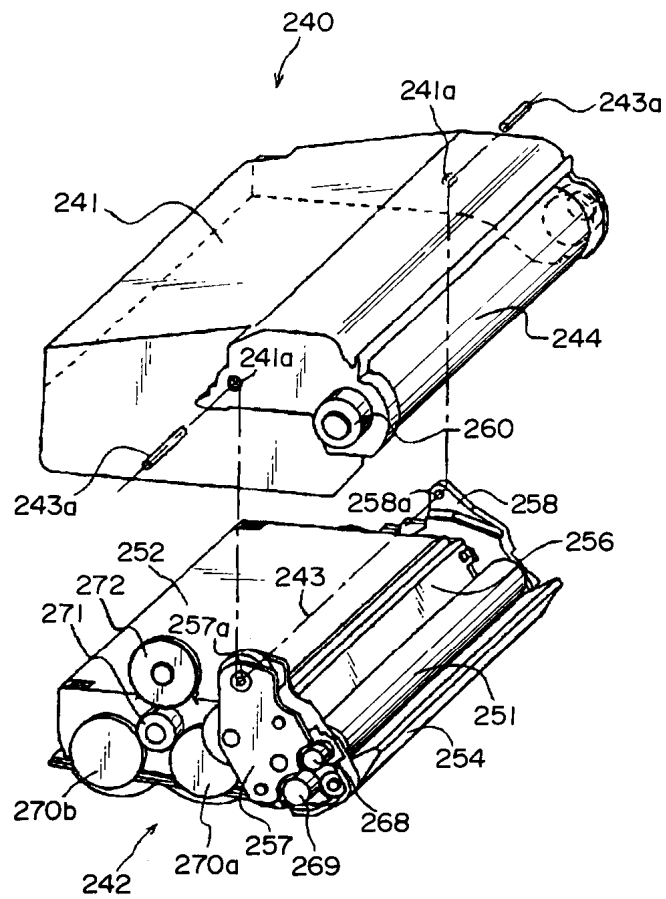
10



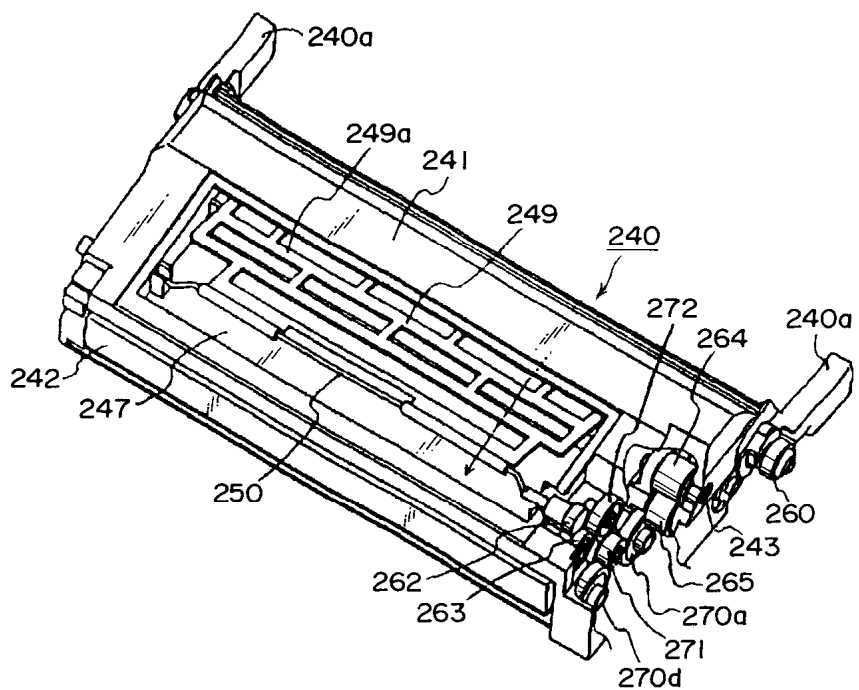
11



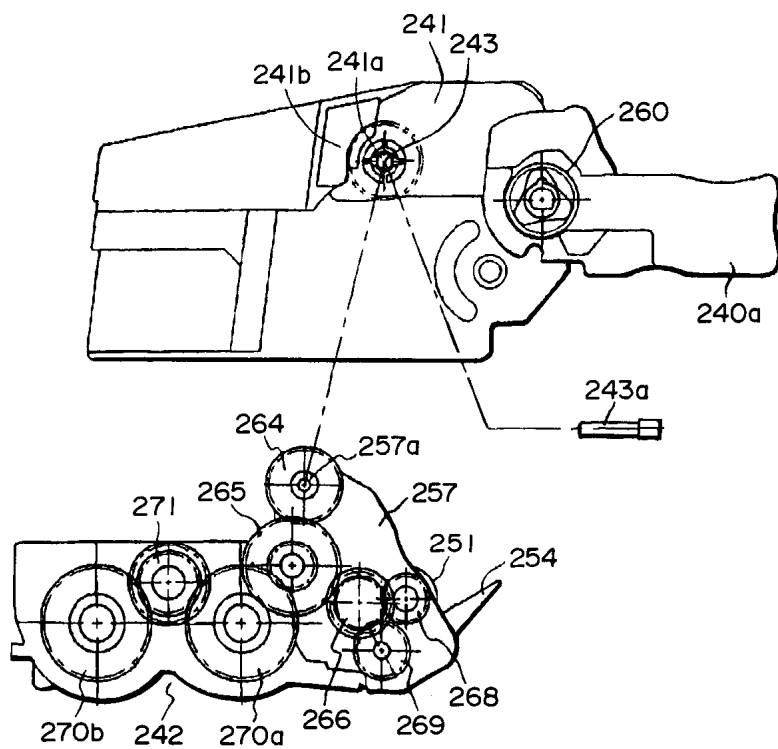
12



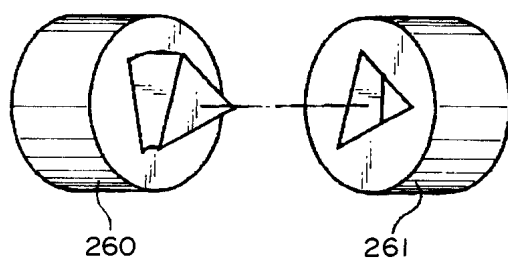
13



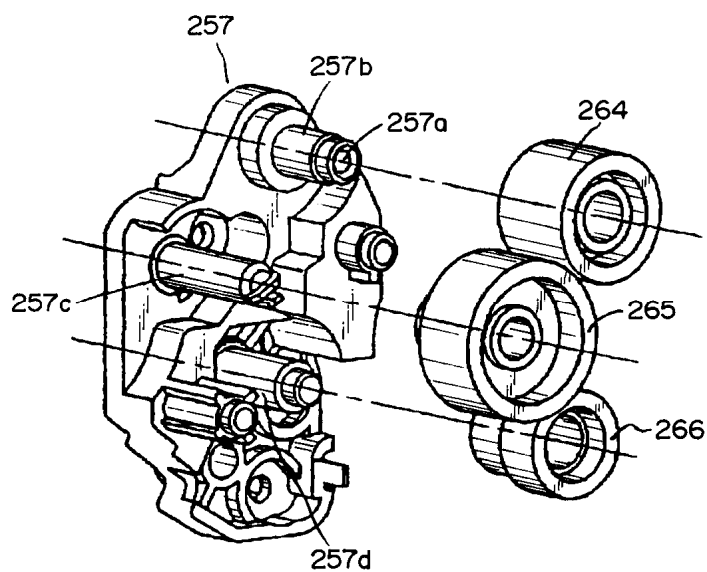
14



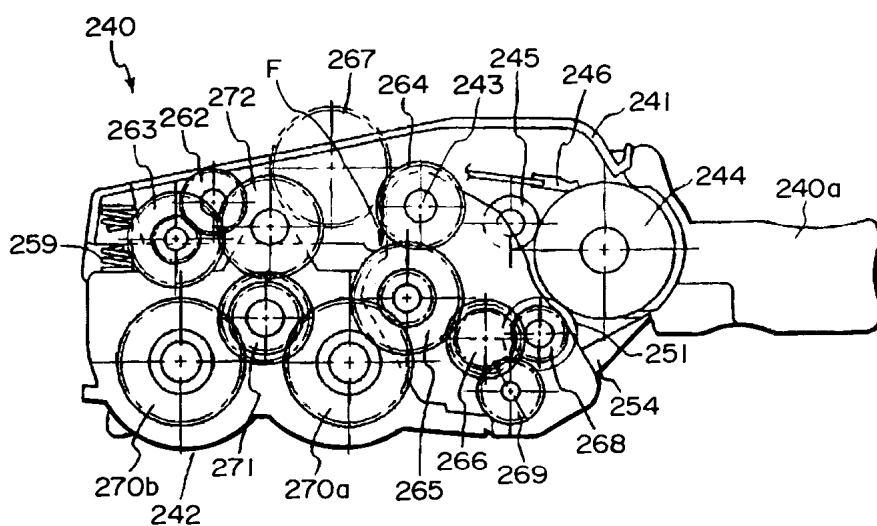
15



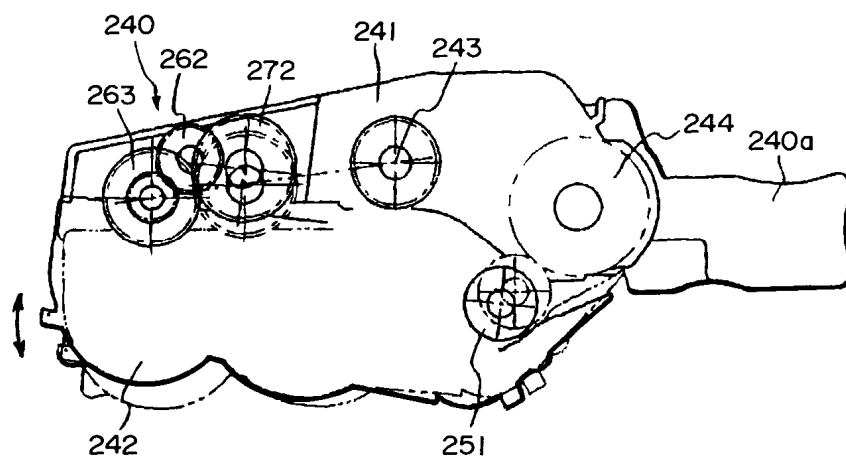
16



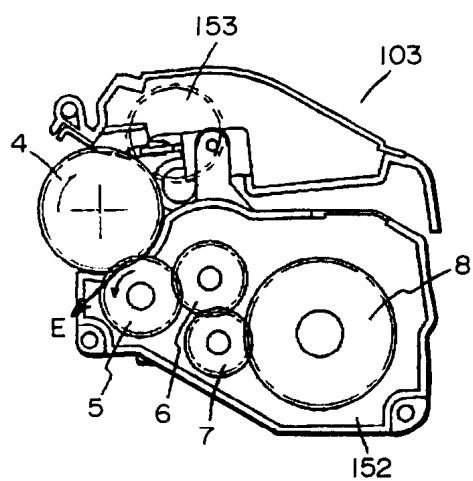
17



18



19



20

