

(19)  
(12)

(KR)  
(Y1)

(51) 。 Int. Cl. <sup>7</sup>  
B01D 35/16  
B01D 46/04

(45)  
(11)  
(24)

2002 12 27  
20 - 0298749  
2002 12 09

(21) 20 - 2002 - 0028324  
(22) 2002 09 19

(73) 1 1083 - 6 5/2  
118 - 16 201

(72) 118 - 16 201  
1 1083 - 6 5/2

(74)

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가 :

(54)

가

가

2

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2

3

4a

4b

4c

5

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10 ; 14 ;

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33 ;

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60 ;

70 ;

71 ; 72 ;

73 ; 75 ;

76 ; 77 ;

731 ; 751 ;

752 ;

218611)가 ( 가

가

가

가

1 , 2  
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0) , 가 (11) (12)가 (1  
(20) , ( ) (f)  
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가 (60) , 가  
(70)

(10) (12) (60) (f) (1  
3)가 , (11)  
(20) (21)가 (22)  
(23)가  
(B1) (10) ( )

(30) (20) (22)  
(31)  
(32) (f) (33)

(40) (21)  
(20) (41) (42)  
(B2)

(41) (43) (42) (30) (32)

(43) (40) (42) (32)  
(22) (31) (30)

(30)가 (20)가 (22) (31)

(f)가 (30)가 (50)

(50) (52) , (f) (51)  
(54) (52) (53)  
(55)

(60) (52) (10)  
(62) (12) (61) (54) (64)  
(63) (55)

(53)(62) (55)(64) (B3) (50)  
(60) (10)  
가

(60) (13) (h1)가 가  
(b) (12) 가 (h2)가

(13)가 (12) (60) (61)  
(f) (10) (15)가  
(14)

(f) (12) (h2) (b) 가

(14) (12)  
( )

(70) (30) (31) (B4)  
(71) , (731)가  
(73) , 가 (751) (752) ( )  
(75) , 가  
(76) , (10)

(77)

(30)가 (70) , (20)

(71) (73) (75) (77)

(73) 가 (731) (751) (76)

(71) (B4) (78)

(35) (30) (B4) (31) 가 (34)

, (73) (72) (75) 가  
,  
(732)

(40) (30) (11) (43)  
(50) (f)  
가

, (11) (13) (12)  
(60) (30)(50) (f) ( )  
) (20)

(50)가 (f) (20) (30)가 ,

, (f) 가

, (f) 가 (15) (14) (12)  
, (10)

, (f) (13) , 가

(f) (12) (11) (43) (13)가  
(50)

, (f) (30)(50) (33)(51) 5  
(33a)(51a)  
(30a)(50a)

, 가

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(57)

1.

, 가 ;

가 ;

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2.

1 , 가 가 ;

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3.

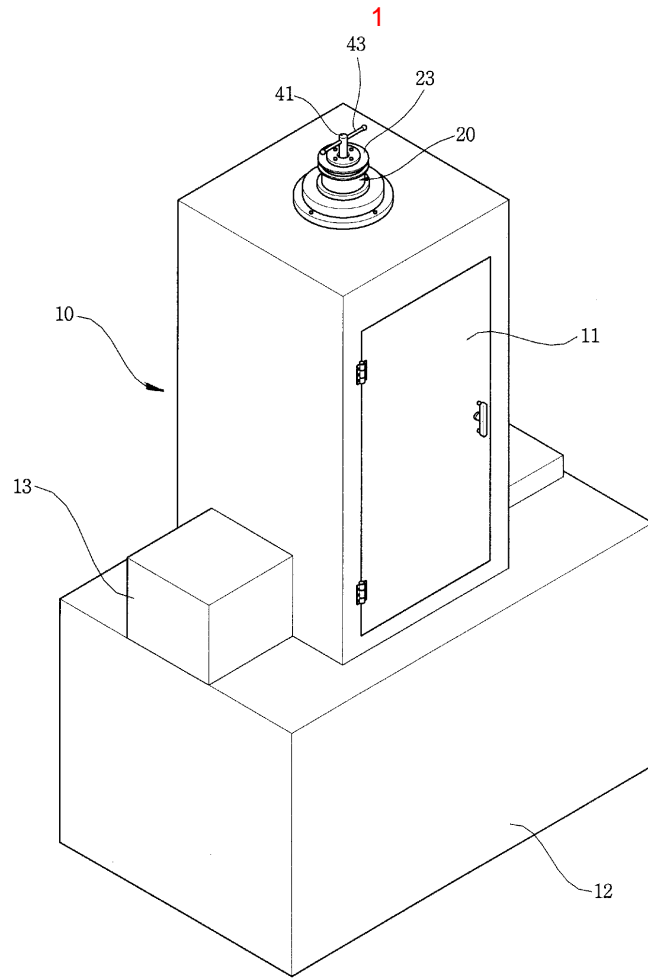
1 2 , 가 .

4.

3 ,

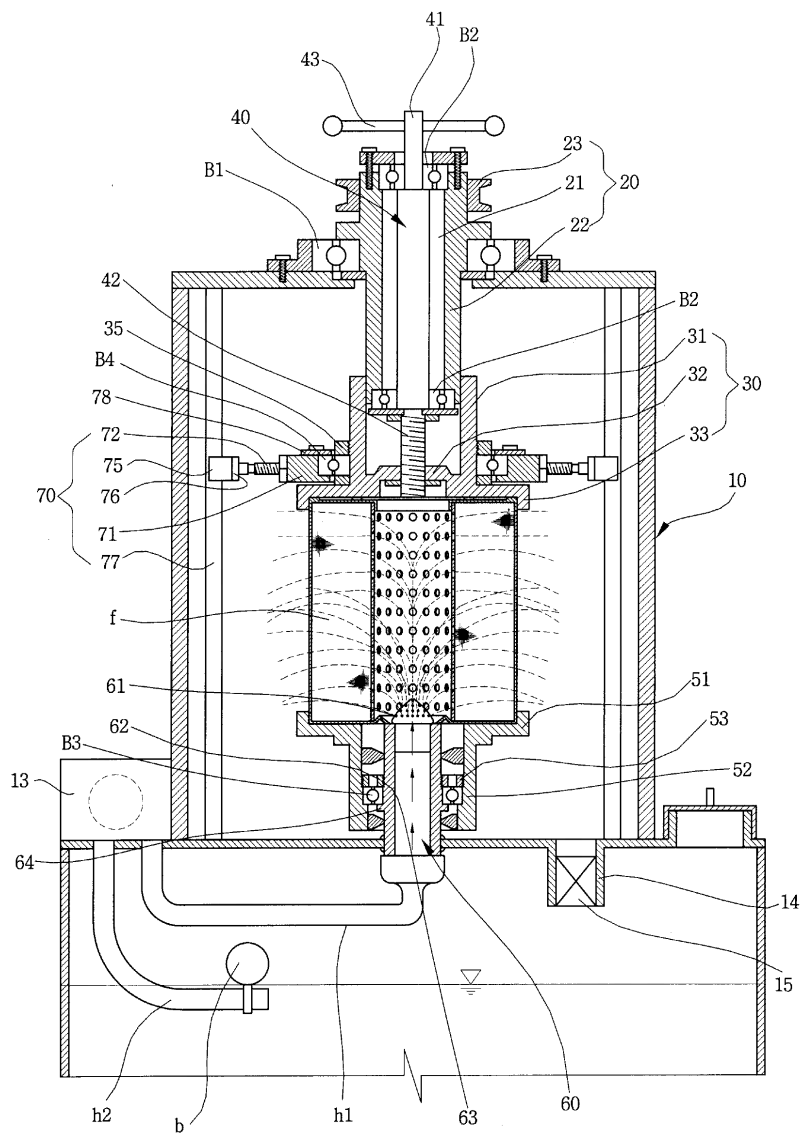
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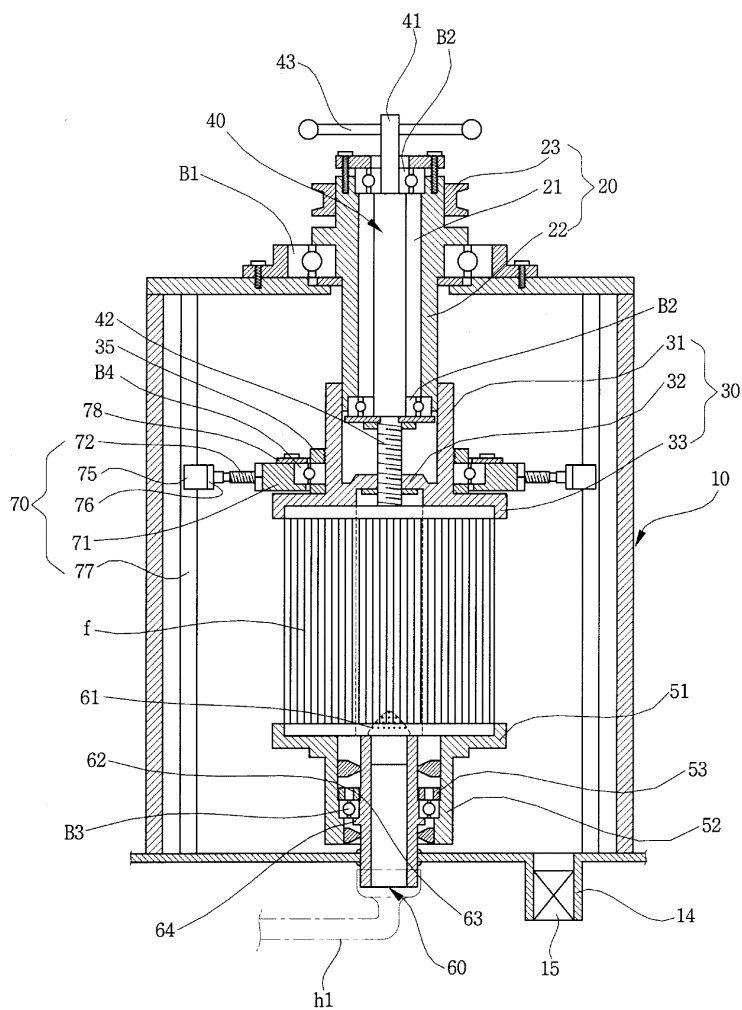




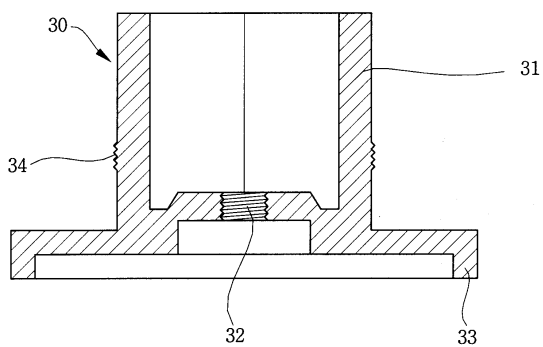
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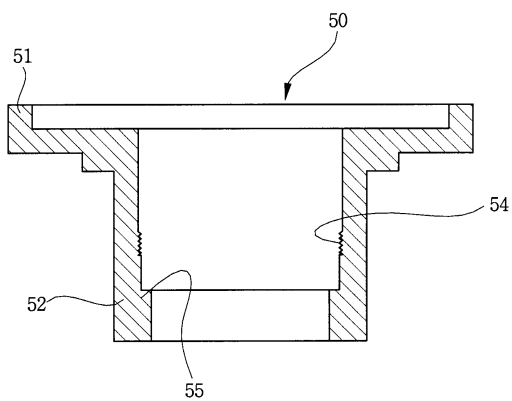
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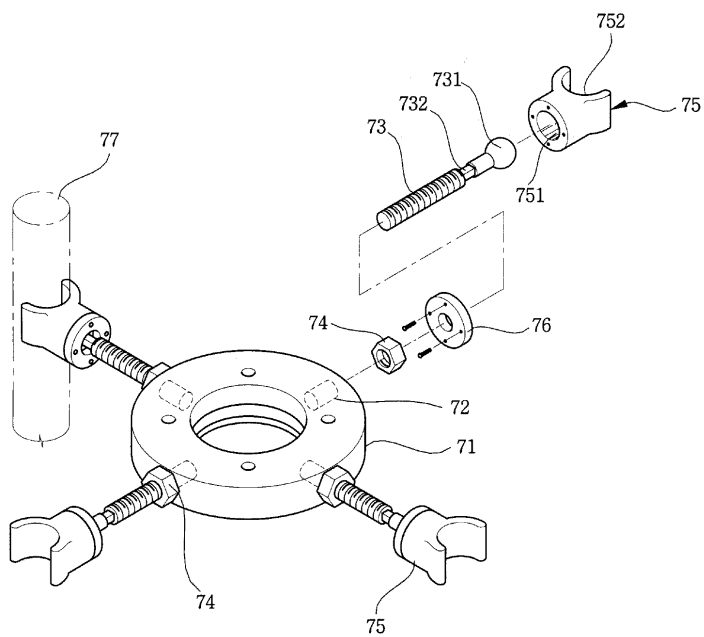
4a



4b



4c



5

