

(19)  
(12)

(KR)  
(A)

(51) 。 Int. Cl. <sup>7</sup>  
B21B 28/02

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(43)

2002 - 0041596  
2002 06 03

(21) 10 - 2000 - 0071260  
(22) 2000 11 28

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(72)

700

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(74)

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(54)

가

(11) (102) (11) (105)  
(12) (11) (13)  
(14a)(14b) (16a)(16b) (16a)(16  
(17a)(17b) (15a)(15b) (104) ( (104)  
10); (16a)(16b)(17a)(17a) (104) (104)  
(31) (30) (32) (104)

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6(a)(b)(c) 3

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7(a)(b)

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8(a)(b)

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11 ....

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13 ....

14a,14b ...

15a,15b ...

16a,16b ...

17a,17b ...

31 ....

32 ....

33 ....

33a ...

34 ....

34a ...

39a,39b ... 1,2

104 ....

105 ....

가 ,  
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 1 , (104) , (103) (104) (104) (101) (104)  
 , (104) , (103) (107) (104)  
 (104) , (103) (107) (104)  
 (107) , (104) (101) (111) , (104) (104)  
 , (104) (107) 가 (101) (106)  
 (101) (105) (104) (106) (107) (104) (106)  
 , (107) (106) (104) 가 가  
 2 , (104) (108) (109)가 (109)가 가 가  
 , (104) (107) (104) (106) (107)가 (107) (104) 가  
 가 가 가 , (107)가 (104) (104)  
 (110) , (104)  
 , (110) (104) (108) (1  
 10) (104) , (104) (104) 가 가 , (104)  
 (104) 가 (104) 가 (104) 가 가 , 가 가  
 가 , 가 가

(101) (104) (107) (104) (106) (104) (104) (110)

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6(a)(b)(c) 3  
7(a)(b)

8(a)(b)

9

10

(100) 3 10 (104) (101) (104) 가  
(103) (104) (105) 가  
(104) (10) (30) (100)

(10) (101) (103) (104)

(11), 1 (12), , (14a)(14b)(15a)(15b) , (16a)(16b)(17a)(17b)  
 , (11) (104) (105)  
 1 (12) (11) (102) (11a) ,  
 (13) (11) (11c) 1 (12)  
 , (13) 1 (12) (11b) 가 .  
 , (13) (13) (13)  
 , (13) (11c) .  
 , (13) (13b) (16) (16)  
 (16a)(16b) 가 , (16a)(16b) (16)  
 (14a)(14b) (13) (14) 가 가  
 , (16a)(16b) (17) (17)  
 (17a)(17b) 가 , (17a)(17b) (16a)(16b) (15) 가 가  
 (15a)(15b) .  
 , (30) (31)  
 , (16a)(16b)(17a)(17b) (104) (31)  
 (32) , (31) (104)  
 (31) (32) .  
 (31) (104) (33a) ,  
 , (33) , (33)가 (35a) (35a)  
 , (16a)(16b)(17a)(17b) 1 (37a)  
 가 (35) , 1 (37a) 1 (P1)  
 1 (39a) .  
 , (32) (34a) (34) ,  
 (34) , (16a)(16b)(17a)(17b) 2 (33b) ,  
 , 2 (33b) 2 (P2) 2  
 (39a) .  
 (101) , (104) (104)  
 , (104)

(104)  
 (102)가 ( ) ,  
 (12), (13) (14a)(14b)(15a)(15b)가 (16a)(16b)(17a)(17b)  
 b) (11b) (12) (13)가 (104) (11) (16a)(17a)(17b)  
 (13) (14a)(14b) (13) (16) (104)  
 (16a)(16b)  
 (14a)(14b) (16a)(16b) (17a)(17b) (17a)(17b)  
 (15a)(15b) (16a)(16b) (17) (104)  
 (104) (17a)(17b)  
 (104) (14a)(14b)(15a)(15b) (16a)(16b)(17a)(17b) (16a)(16b)(17a)  
 (17b) (31) (32)  
 (P1) (31) 1 (39a) 1  
 (31) (33) 가 (3)  
 3a) (33a) (104) (39a) ( ) (33)  
 (39a) 10kg/cm<sup>2</sup> 1 (39a) (33)  
 (31) (32) 1 (P  
 1) (P) 2 (P2) 2 (39b) (32)  
 (34) 가 (34) (34a) (34a) (34a) (34a) (34a) (34a)  
 104) (34) (34a) (104) 가 (33)  
 (34) (104) (33) (33) (11)가 (102)  
 (34) (34) 가 (105) 가 (2000m)  
 m/mpm) (33) (101) (104) 가  
 가 (33a) (33a) (34a)  
 (33a)

(105) ( ) (104) 1 (39a) ,  
 (31) (33) (33a) ,  
 (34) (34a) .  
 (105)가 ,  
 (33) (33a) (34) ,  
 (34a) .  
 (105)가 (15a)(15b)  
 (17a)(17b) (14a)(14b) (16  
 a)(16b) (16a)(16b)(17a)(17b) (104) , (16a)(16b)(  
 (12) (13) ,  
 17a)(17b) 가 (104) .

가  
 가  
 가  
 가

(57)

1.

(104) (104) (101) , (104) , (105)  
 (105) (11) (102) , (11)  
 (13) (12) , (11)  
 (16a)(16b) (14a)(14b) , (16a)(16b)  
 (17a)(17b) (15a)(15b) (104)  
 (10);  
 (16a)(16b)(17a)(17a) (104)  
 (31) , (32) (104)  
 (30) .

2.

1 ,

(31)	(104)	(33) ,	(33)가	(33a)	,
		(16a)(16b)(17a)(17b)		(35a)	(35a)
가		(35)		1 (37a)	
	1	(39a)		1 (37a)	1 (P1)

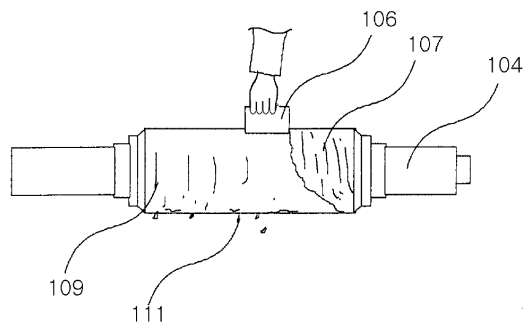
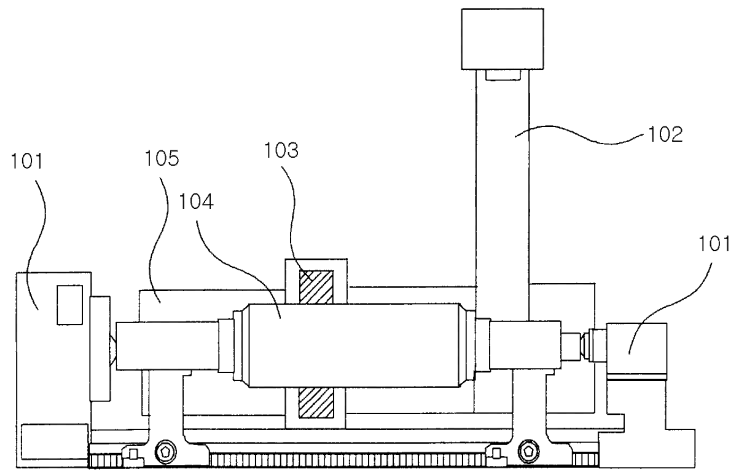
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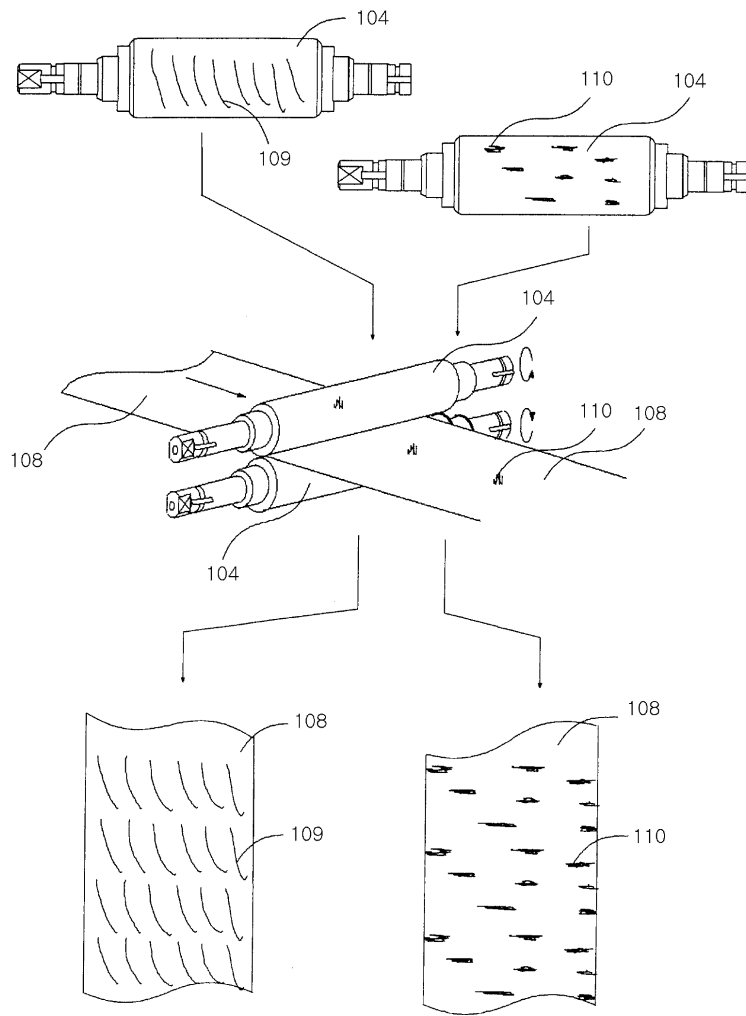
(32)	(34a)	(34)	,
(34)	(16a)(16b)(17a)(17b)	2 (33b)	
	(33b)	2 (P2)	2
(39a)			



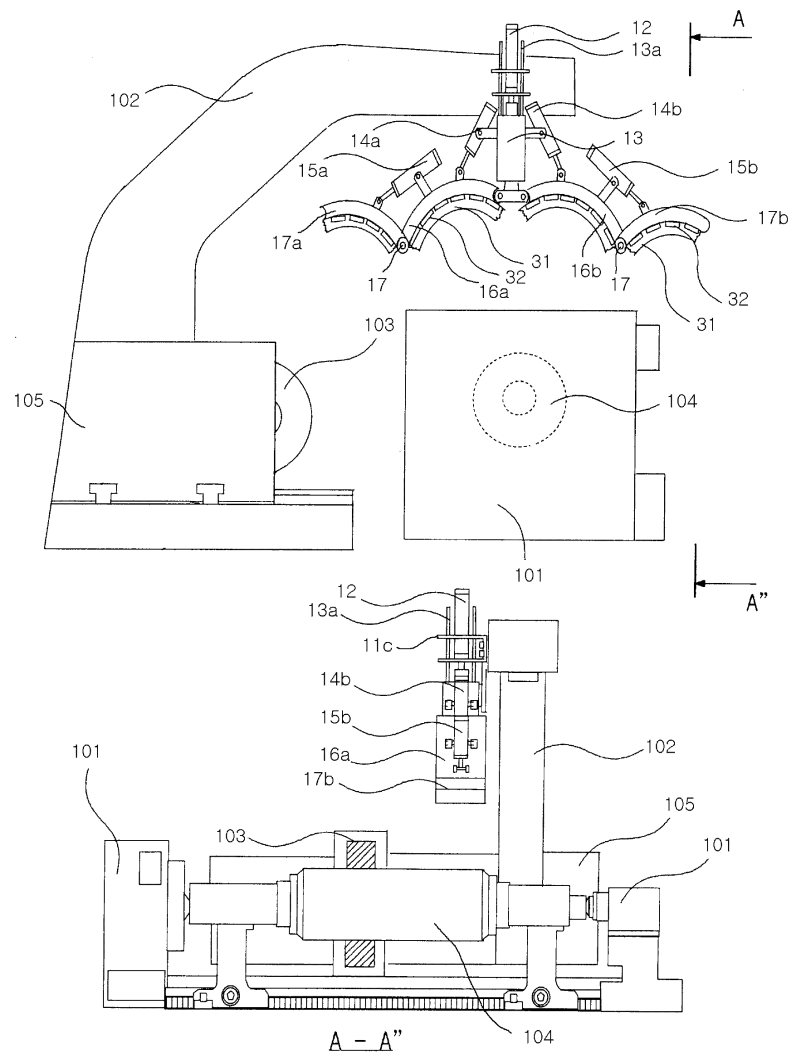
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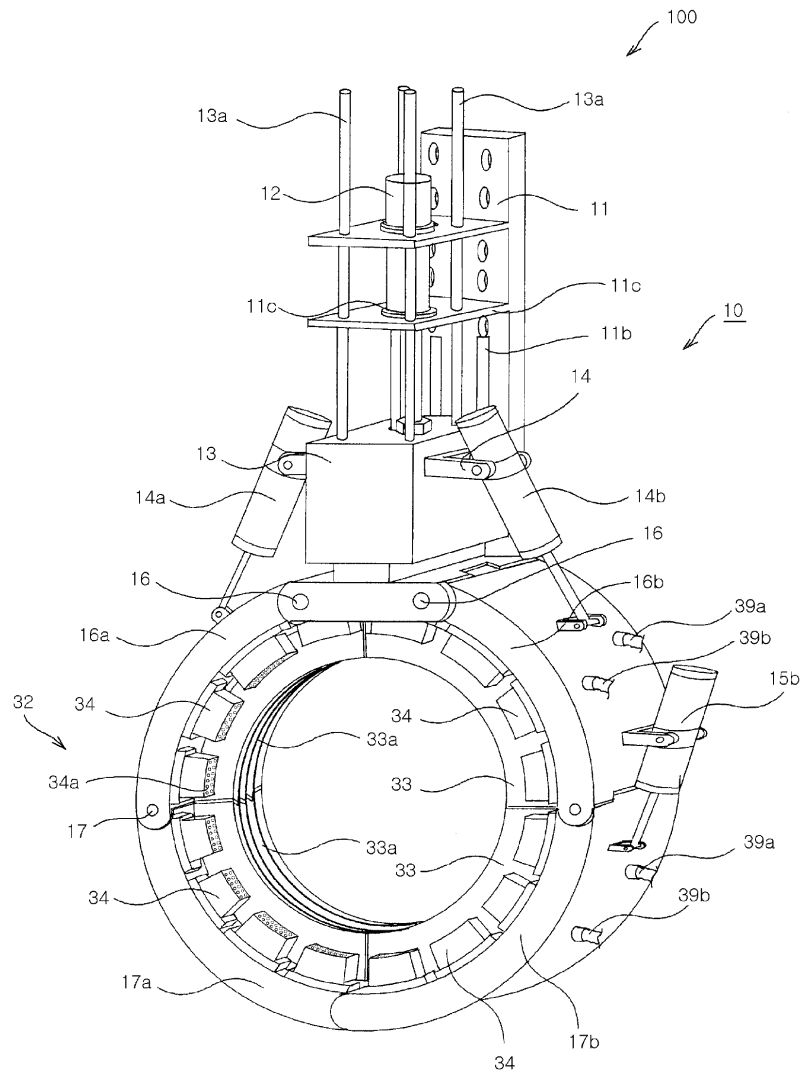
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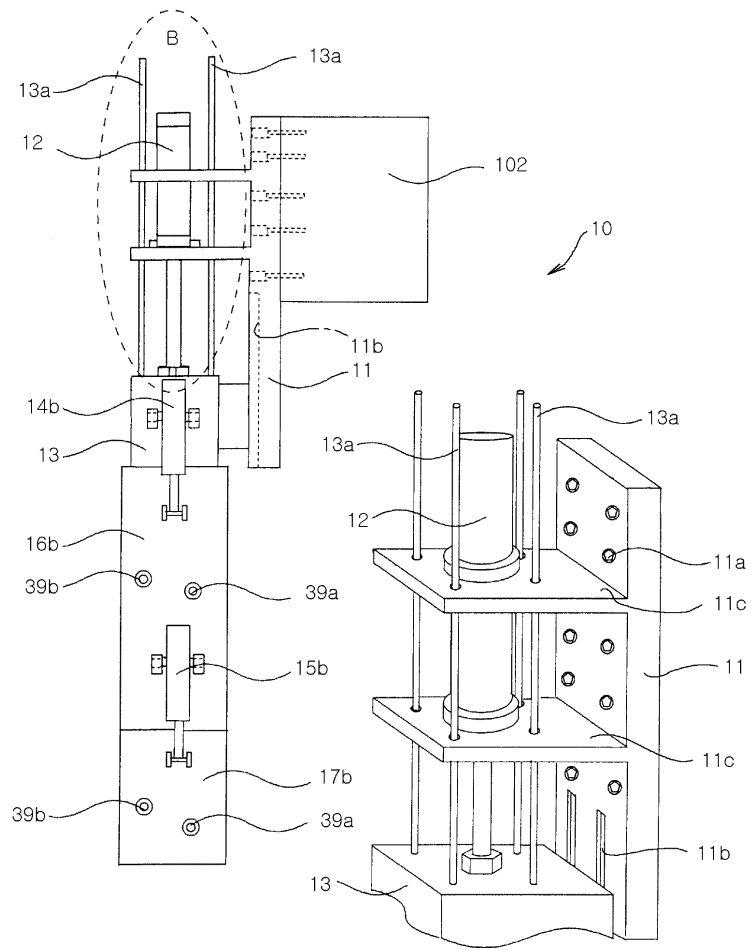
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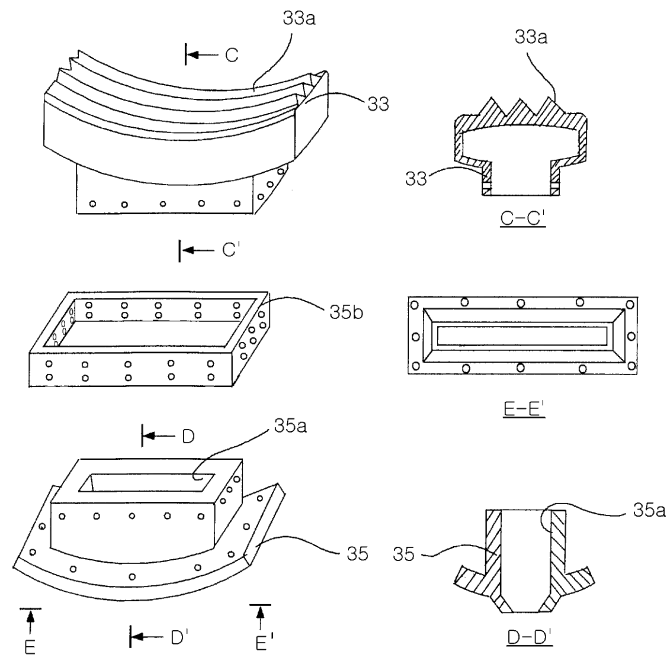


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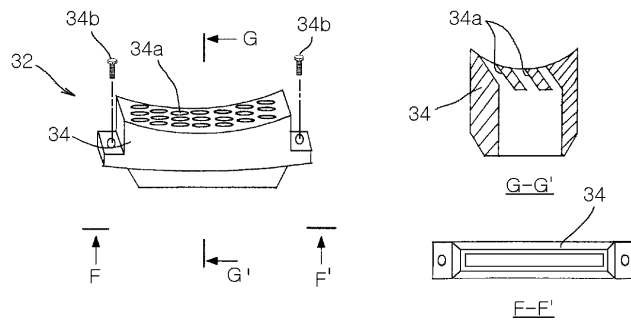


B부 확대도

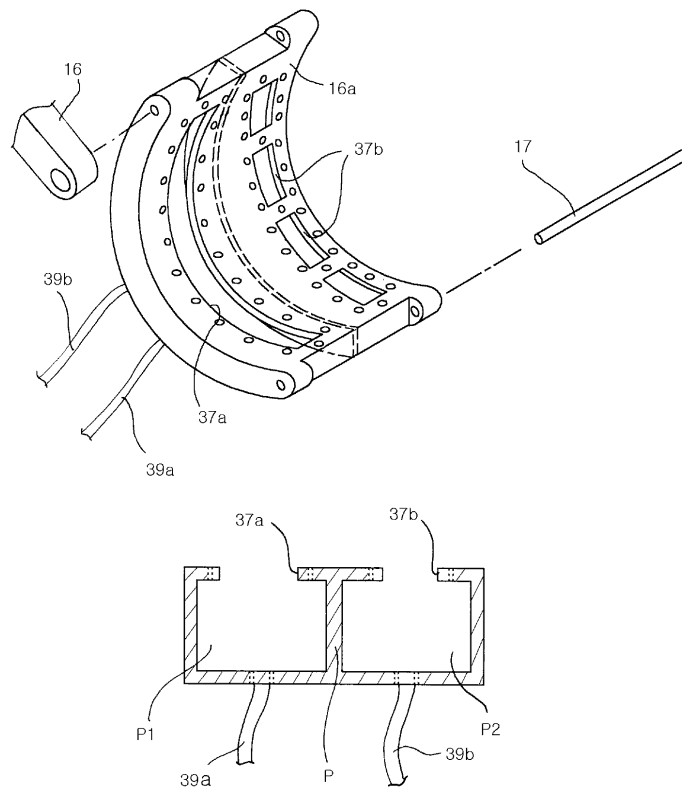
6a



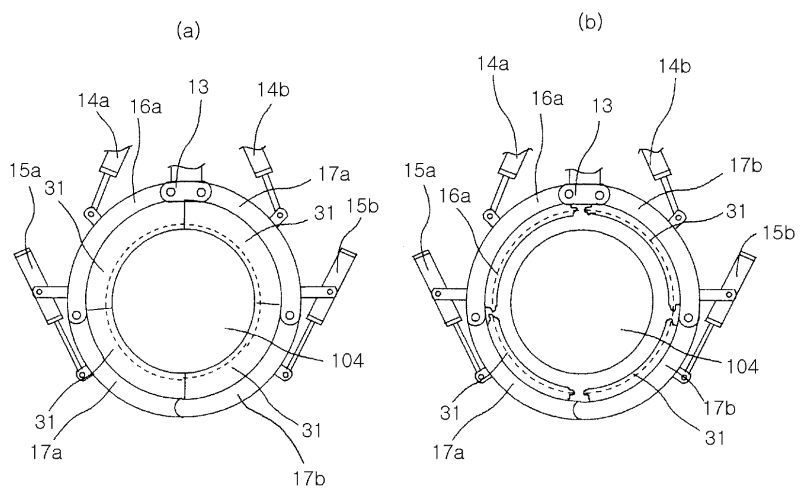
6b



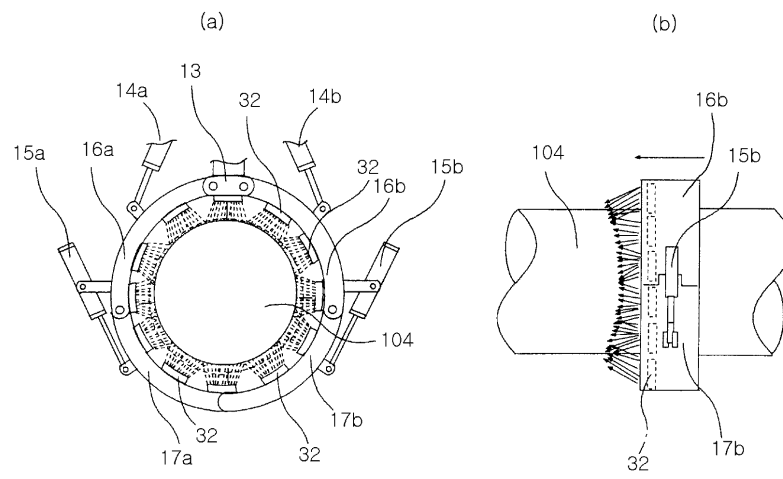
6c



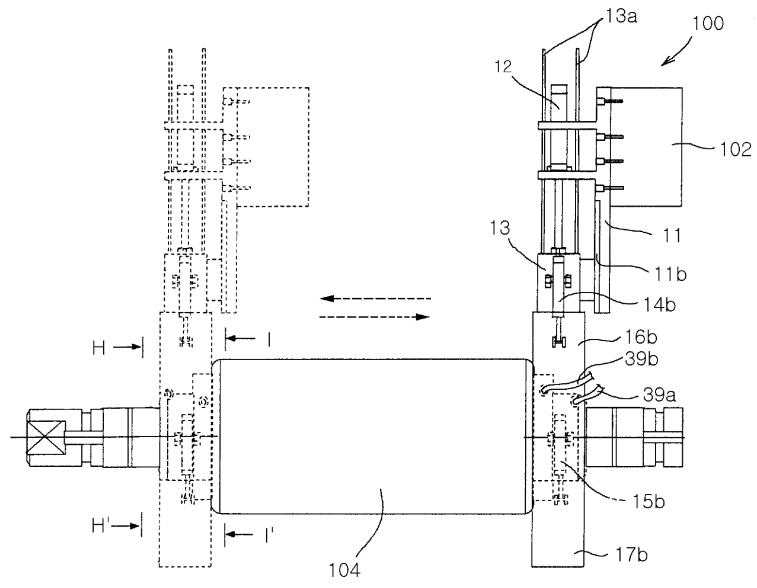
7



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(a)

