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2003 06 10

(21) 10-2001-0028493
(22) 2001 05 23

(65)
(43)

2002-0089716
2002 11 30

(73) 1261-3 2 304

(72) 가 483-42

(74)

:

(54) 2

, 가 2 가 , ; 가 ;
; 가 ; ;
가 ;
"Z" 가 (1 batch) ;
가 ; .

1

1 2
2a 2b 1
3 1
4 1

5a	5b	1		
6a	6c	1		
7	1			
8a	8b	1		
9a	9b	8		
10a	10b	8		
11a	11b	8		
12a	12b	8		
13a	13b	8		
14a	14c	8		
15a	15c	1	8	1
16a	16c	1	8	2
17a	17b	1	8	

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102...	104...	106...		
110...	112,114...		116,118...	
120...	131,133...		136,138...	
135,137...	141,143...		142,144...	
152,154...	210..		211...	
212...	214...	216...		
220...	213...		215...	
230...	232...		234...	
240...	/	242...	250...	
262...	264...	270...		
280...		290...	310...	
311...	313...	320...		
330...		340...	350...	
360...	370...			

가 "Z"

2

1

2

PC

가

가

2

2

가

2

2

(batch)

"Z"

'가'

2

.

'가 ;

가 ;

가

;

가

,

;

가

(1 batch)

;

"Z" 가

가

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2

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2

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가

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가

2

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2

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가

2

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2

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2

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1

2

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가

가

2

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가

(asymmetrically)

가

가

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가

가

2

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2

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가

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가

2

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가

2

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가

2

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가

2

,

가

2 (1 batch) , 가 : 가 , ;
 ; 가 가 ;
 가 "Z" ; "Z" / . 가 ;
 2 가 ; , 가 ;
 가 "Z" 2 , : ;
 2 가 , , . ;
 2 , / : ;
 ; "Z" 가 가 ; 가 ;
 ; ;
 가 ;
 가 2 , / : ;
 가 2 , : . ;
 1 ; 1 180 가 180 .
 2 , 2 ;
 , , 2 ;
 1 2 ;
 1 , , () ;
 (300) (311)가 가 (313) (301) 가
 (315) 가 (313) (310) , (311) (320) , 가
 (311) (330) , (310) (311) (313)
 (330) (340) , (340) (1 batch)
 (311) (311) "Z" 가 (360)
 (350), (311) (370) (360)
 (301) (310) (320)가 1 (303) , (330)가
 2 (305) , (340), (350), (360) (370)가
 3 (307) (309)가
 (301) (300) (300) (300)

(301)

(301)

(301)

2a 2b 1

2a 2b 가 가 (310) (315) (311)

(317) (319)

(311)

(340) (315) (347) (311) (312)

PE) (PP) 가 가 ()

(311) 가 (317) (301) (314) (311)

(319) (314) 가 (316)

(319) 가 (317) (313)

(316) (315) (311) (311)

(310)

(310) 가 (317) (311)

(318) (318) (313) (318a)

(318a) (318c) (318a)

3 1

1 3 (321) (323) (320) (301) 가 (313)

(325)

(320) (311) 가 (321) (LM)가

(313) 1 1 (327) (301) 가 (325a)

() (325) (Inkjet Marking) (325) (325a)

(311) 가 () 가

4 1 가 (327) () 가

(string)

(325) (325a) 50-300 μ m

(325a) (311) (325) (313) , 2

3 (325) (311) (311) (311) 가

(329)가 (329) 가 가

1 2b 가 (322) (320) (340) 가 (322)가

(313) (320) (311)가 (1)

가 (322) (301) 가 (324) 가 (320) (340)

) 5a 5c 1 가 (26)

1 5a 5c 1 (330) 가

(311)

(330) (102) (104) (112)

(114) (114) 가 (110) (112) (112)

(114) (301) 가 (122) (124)

(350) (230) (340)
 (311) 7 (311) "Z" 가
 8a 8b 1
 1 8a 8b , (350) (301) (102) (104)
 , (1 batch) (311)가 (311)가 (210) (210) ,
 가 (210) (311)가 (212) (212) (220)가 (214) (301)
 (311) "Z" 가 (220) (230) , "Z" (214)
 (311) / (240) (311)
 9a 9b
 9a 9b , (210) (301) (216)
 (212) , (311) (212) 가 (216)
 가 (218) , (212) (216)
 (211) 가 (218) (313)
 , (211) / (240) (245)가
 (210) (212) (311)가 "Z"
 (311)가 (220) (311)
 (213) (213) (311)
 (215) (311)
 1) (210) 가 10a 10b (220)
 (311)가 , 가 (214) (212)
 (222) (301) 가 (220)
 (224)가
 2) (230) (214) (311) 가 (10)
 (104) (311) "Z" (214) (102)
 (104) (232) , (232) (230) (214) 가
 (220) 1 (234) , (232) (batch) (220)
 , (232) 가
 / (240) (210) "Z"
 가 (242) , (242)
 (250) , (262)가 (264) (301) (301) 가
 (262) (301) (270) , (262)
 (242)
 (301) (280) , (301) (280)
 가
 (290) , (250) (262) (311)가 (301) 가
 (270) (311)
 11a 11b , (242) (242) (LM) 가 (246) 가 (248)
 (244) (242) (241) , (212)
 (210) (211) (243)
 (241) (211) (245) (250) (242)
 12a 12b , (250) (313)
 (252) (254) (210) (301)
 가 () 가 (311) (311)
) 가 (256) 가 (258) (270) (301)
 1 13a 13b , (270) (301)
 64) 가 (266), (268) (301)
 (311) , (262)
 (272)

14a 14b , (244) (272) .
 (242) (311) (311) (274) , 가
 (274) (276) (311) (301) (278) ,
 11a 11b (280) , (245)
 (245) (241) (282)
 14a 14c (290) , (280)
 (262) (244) (301)
 (290) (301) (292) ,
 (296) (262) 가 (294) 가
 (360) (350) (370)
 15a 15c 1 (372) 2 (374) (376) (313)
 (371) 1 (378) , 1 (378) 1 (377) 18
 0 (375) , 1 (242) (245)
 (311) 1 (379)
 16a 16c 2 (372) 가 (382) (313)
 (386) 2 (384) , 2 (384) 2 (383) 18
 0 (385) , 1 (379)
 311 (311) (370) (391) 2 ()
 (387) , 1 (300) (301) (360)
 2 (351) (301) (340), 2 (340), (350), (350), (360)가
 (353) , (301) (301) (340), (353) (350), (LM)가 (355) , (353)
 (301) 2 (357)
 17a 17b 가 , (370) (391) (391)
 (301) 가 (392) , (391)
 (393) (393), (393) (394)
 가 (301) 가 2 (315)
 , (300) (310) (320), (330) (313)
) (311) (340) (343) 가
 (330) (320) (116) (118) (102) (104) , 가
 (340) (300) 가
 , (340) (343)가 ,
 (315) (343) (311) (310) 가 (370) (317) 가 (319)
 (320) (311) (325)
 , 가 (311) 가 (322) 가 (329) (330)
 , (311)가 (330) (330)
 (210) 가 , (106) (108) (102)
 (104) (102) (104) (116) (118)
 2) 90 (124) (313) (132) (134) (102) (118)
 104) (116) (118) (102) (1)

2

"Z"

가

(57)

1.

;

가

가

가

;

가

;

가

;

(1 batch)

"Z"

가

가

2

2.

1

,

2

3.

1

,

:

가

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가

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2

4.

1

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2

5.

1

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가

2

6.

5

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2

7.

1

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2

8.

1

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1

2

9.

1 , 가 가 , 2

10. 1 , : , 가 , 가 ;

(asymmetrically) ; 가 가 ;

11. 10 , : 가 2 ;

12. 11 , : 가 2 ;

13. 12 , : 가 2 ;

14. 10 , : 가 2 ;

15. 10 , : 가 2 ;

16. 1 , : 가 2 ;

17. 16 , : 가 2 ;

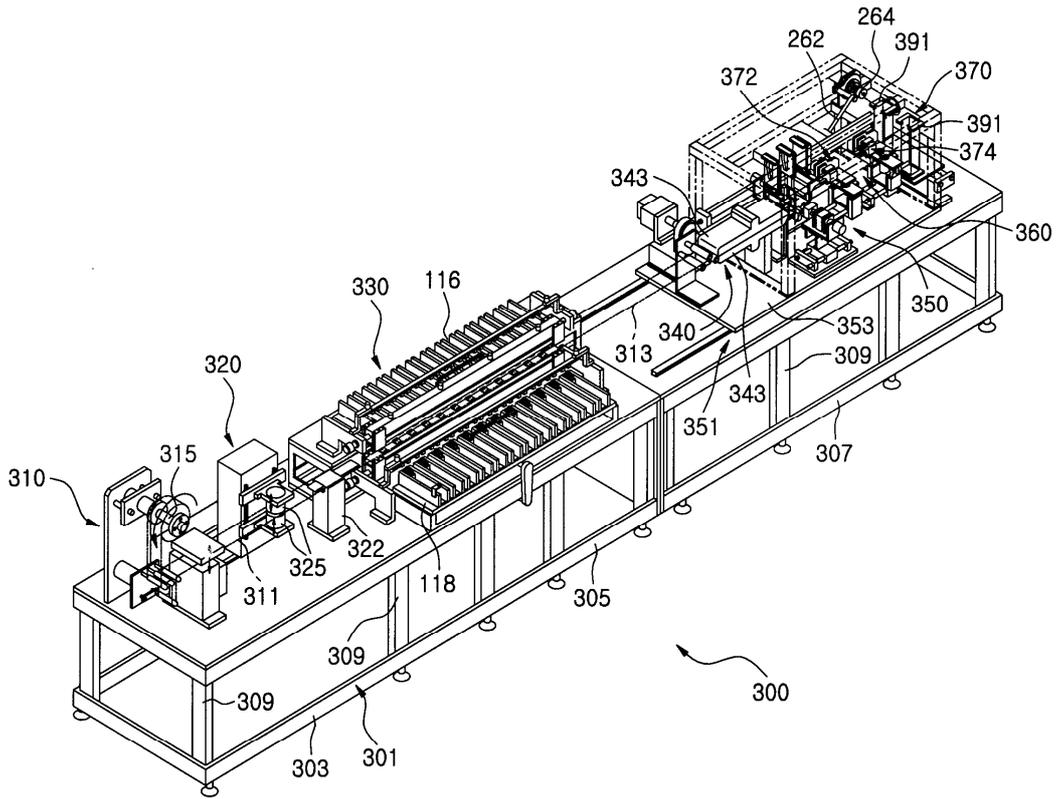
18. 1 , : 가 (1 batch) 가 ;

가 , ; 가 ; 가 ;

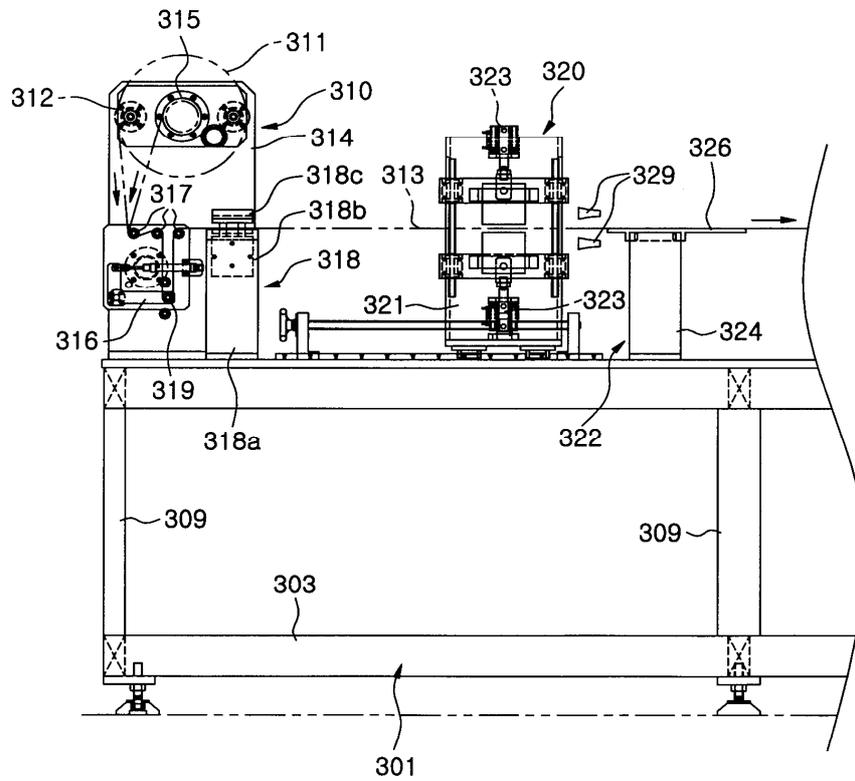
가 "Z"

가 ;
 "Z" / 2 .
 18 19. , 가 가 ;
 2 .
 18 20. , : 가 "Z" 2
 21. , 가 ,
 2 .
 18 22. , 2 .
 2 23. , : "Z" 가 ;
 18 / , : 가 가 ;
 가 가 ;
 ;
 가 2
 23 24. , : 가 가
 / , : 가 가
 2 .
 1 25. , : 180
 가 1 ; 180
 1 2
 2
 1 26. , , 2 , 2
 .

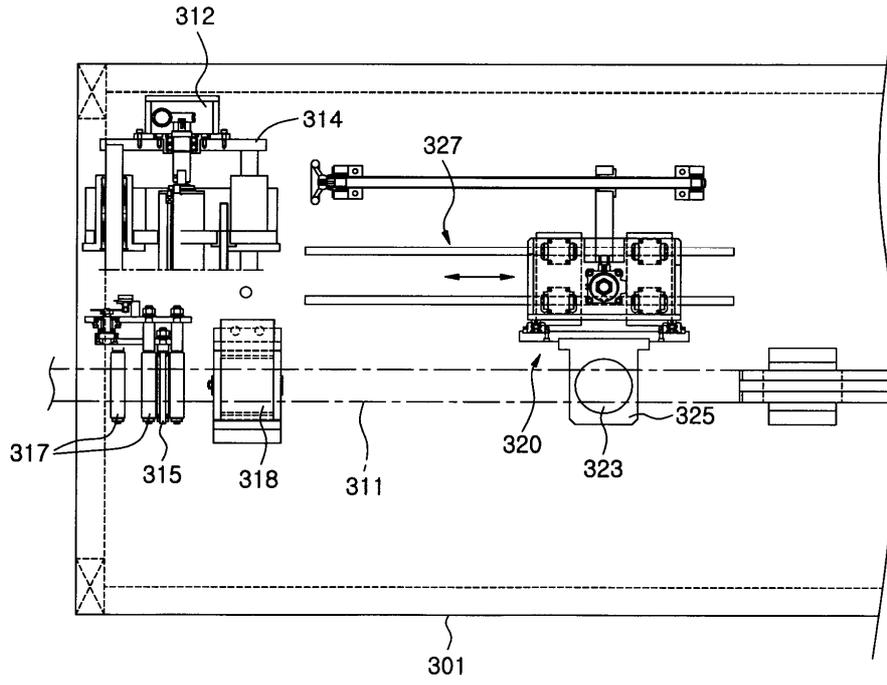
1



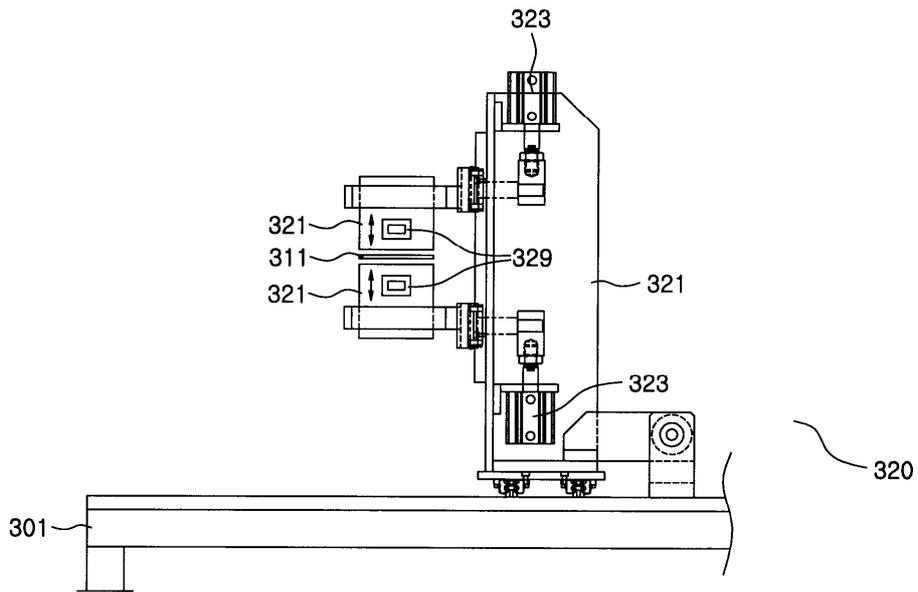
2a



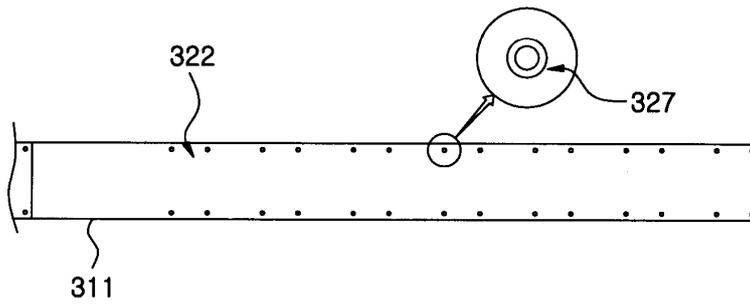
2b

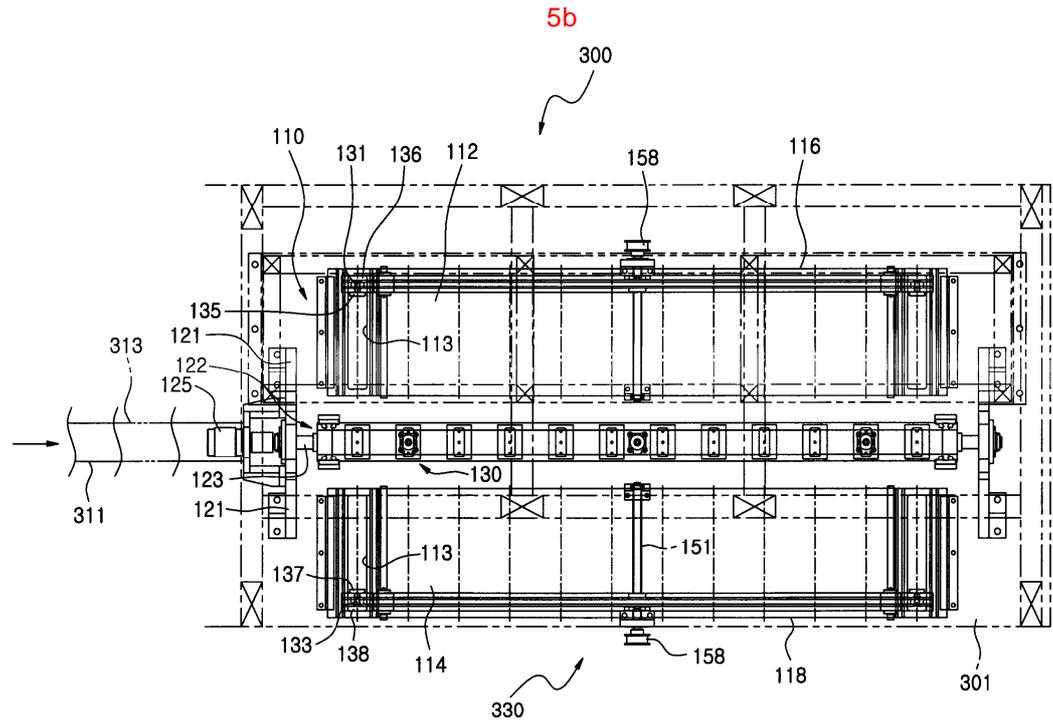
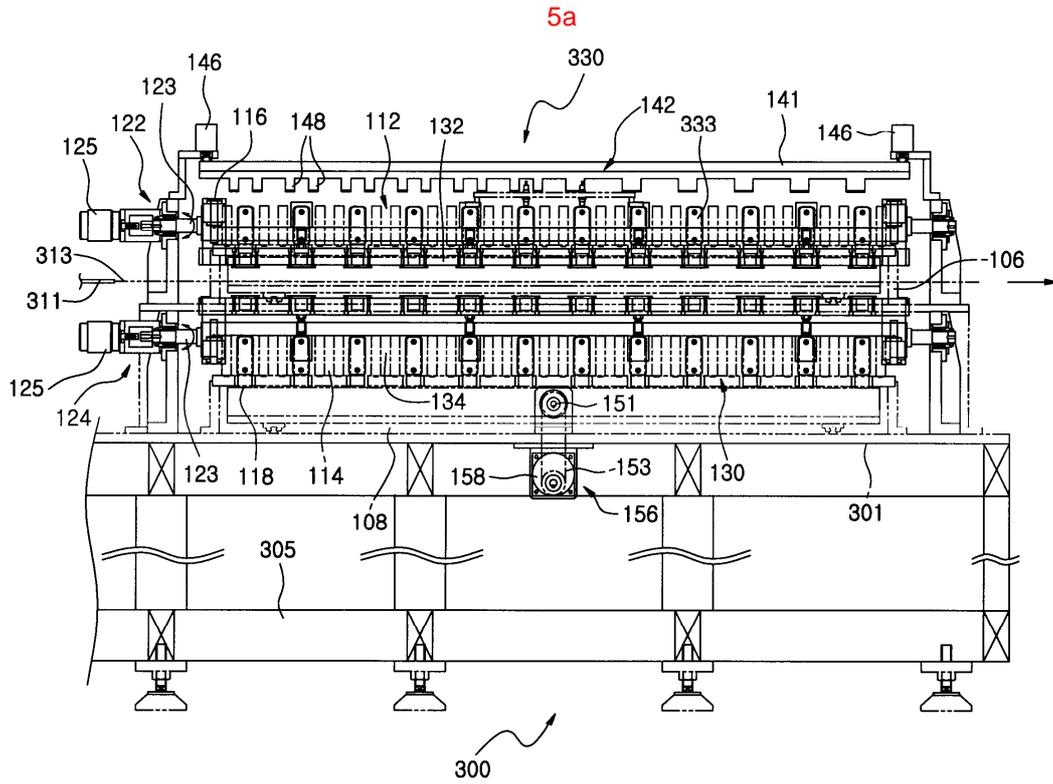


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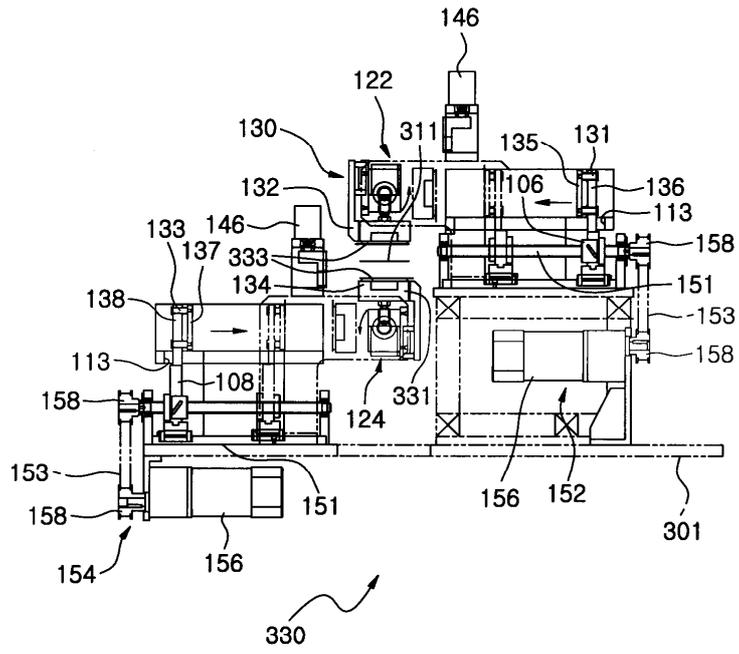


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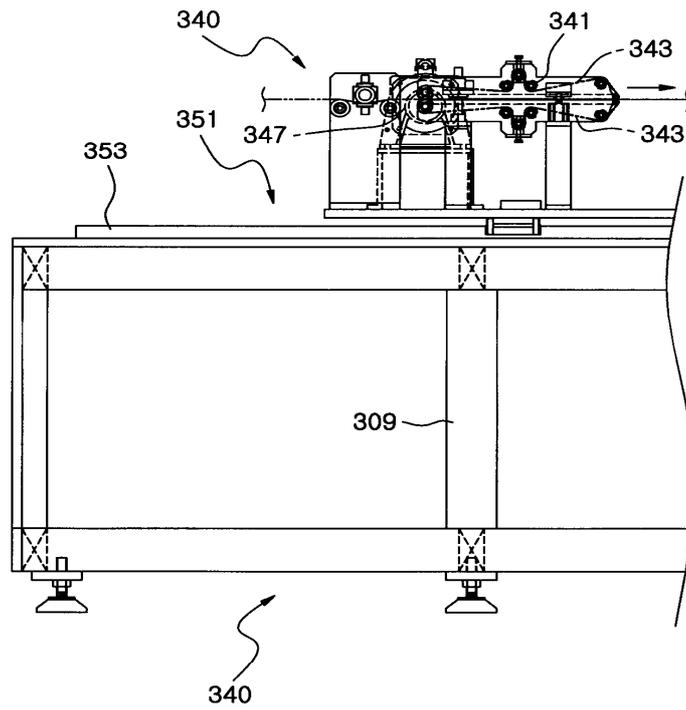




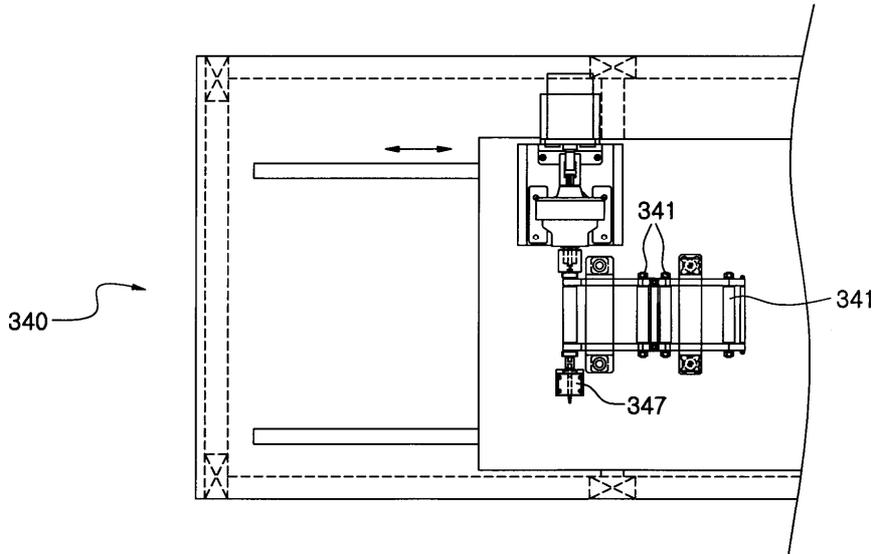
5c



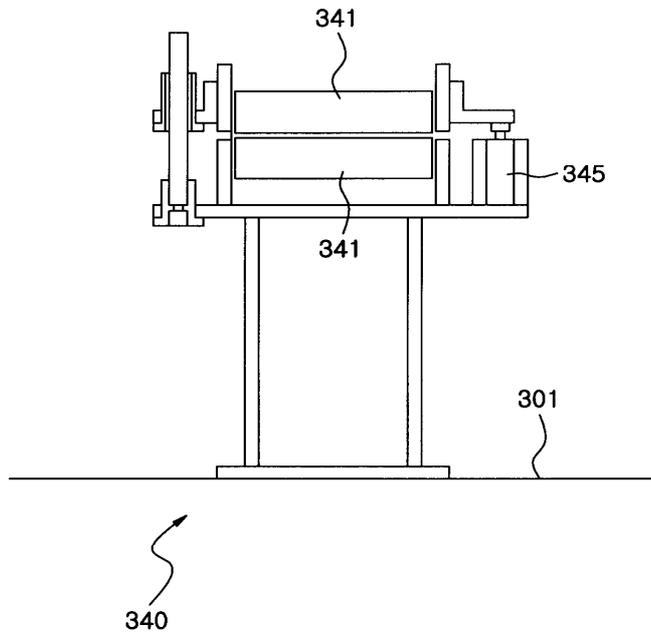
6a



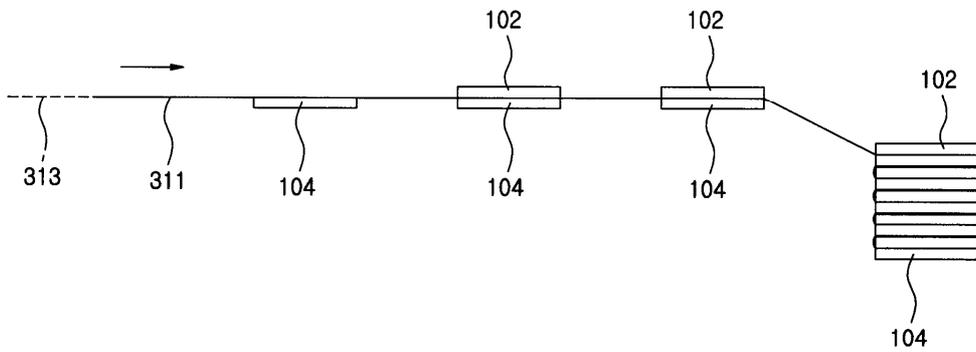
6b



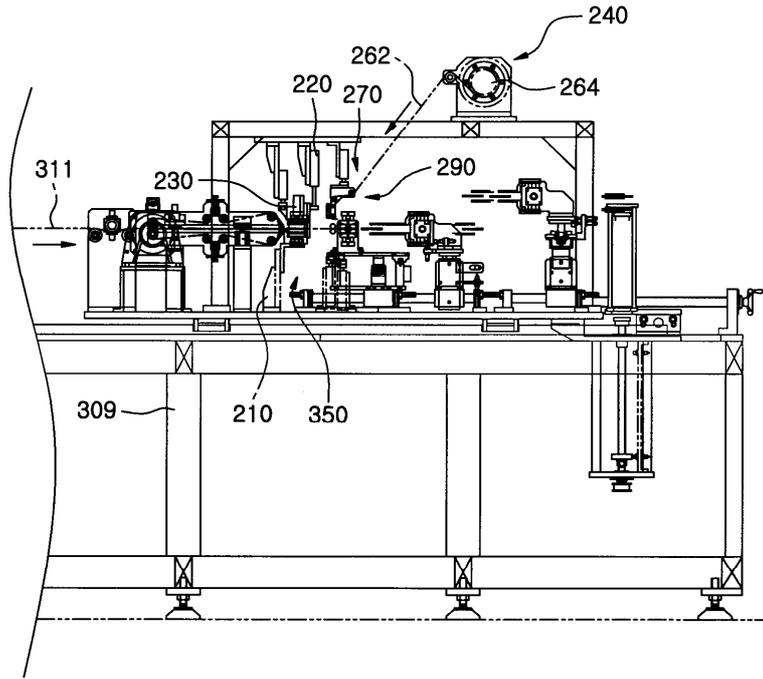
6c



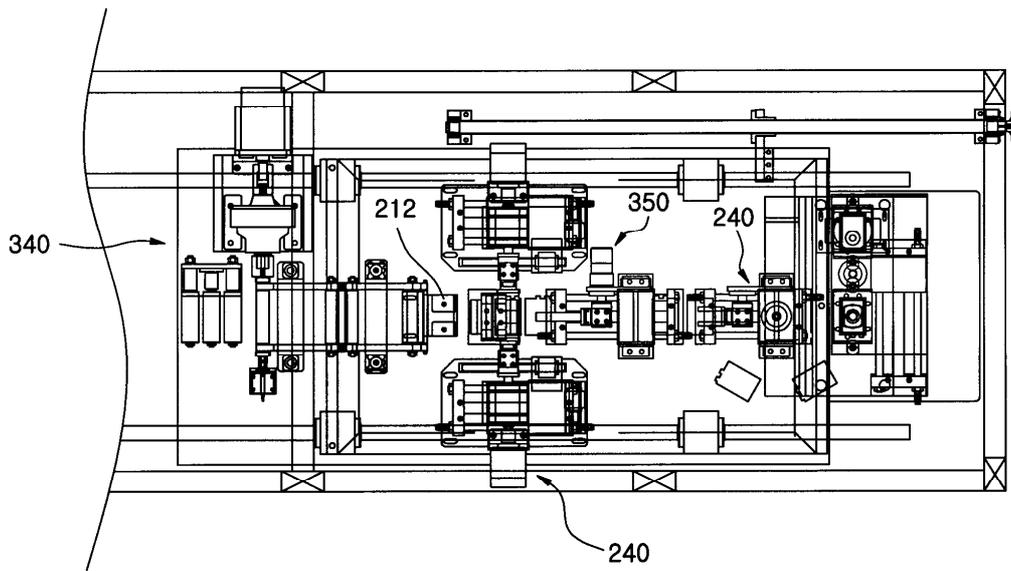
7



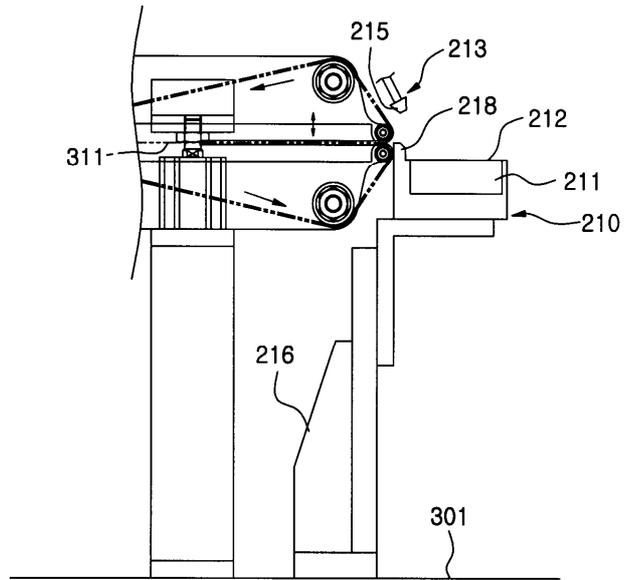
8a



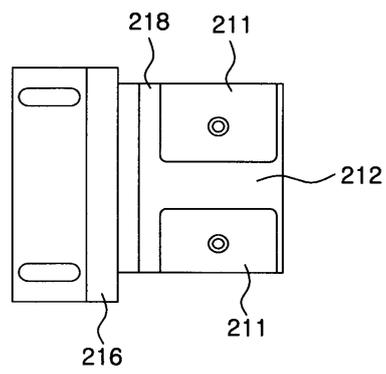
8b



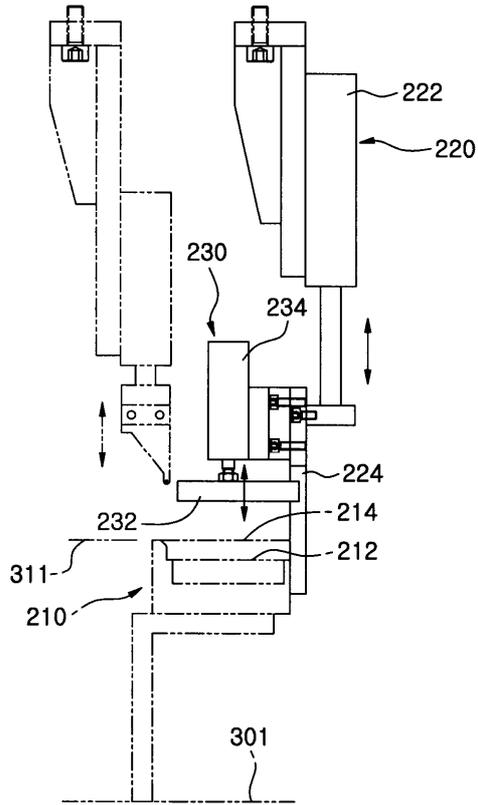
9a



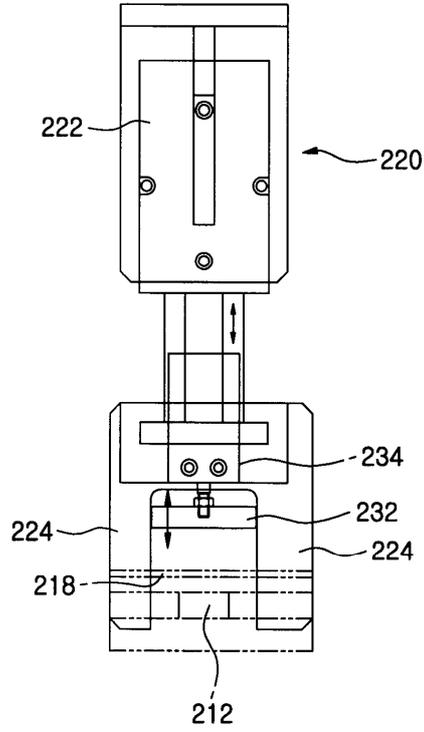
9b



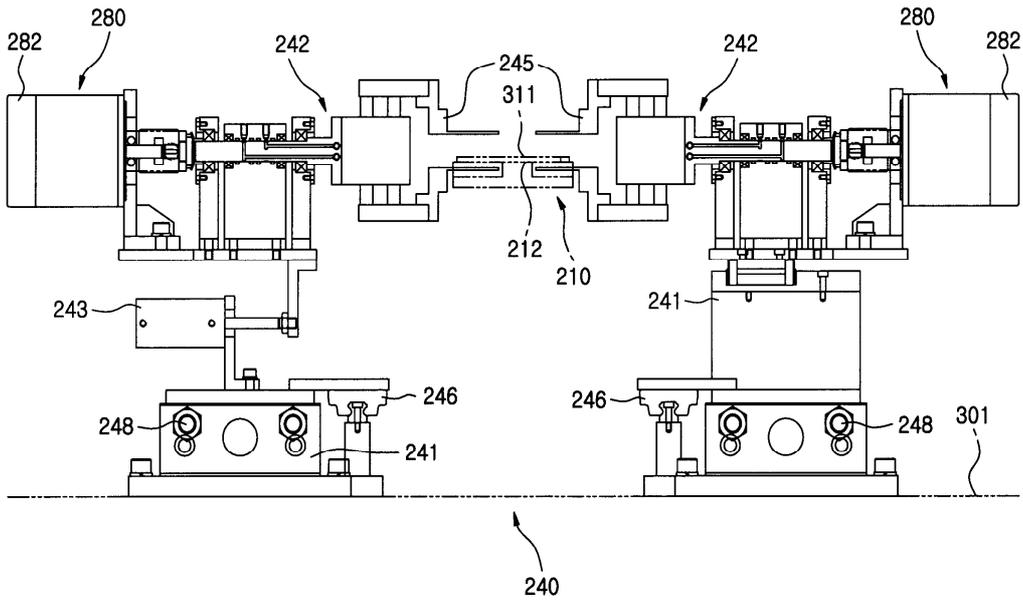
10a



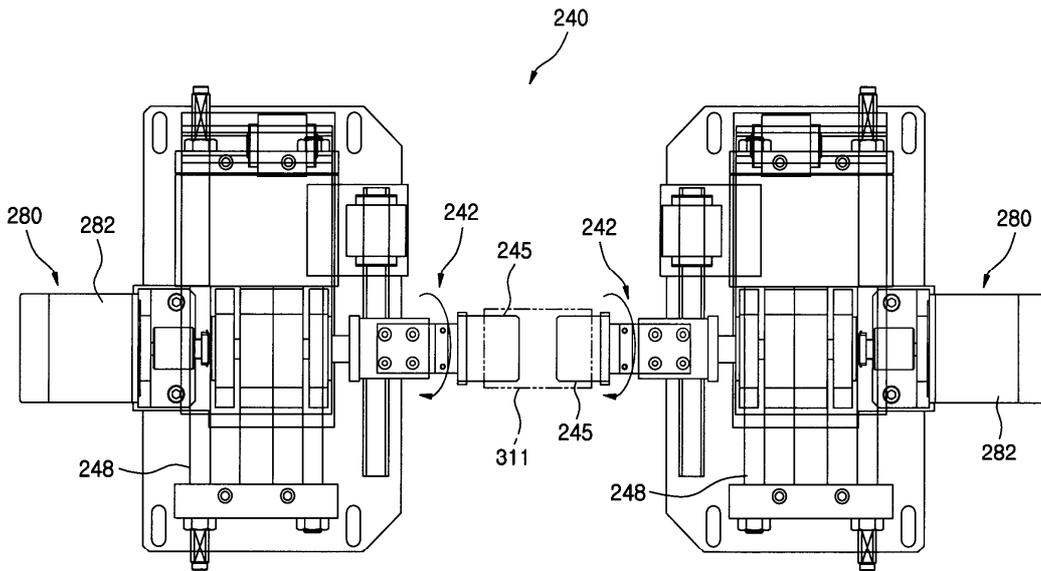
10b



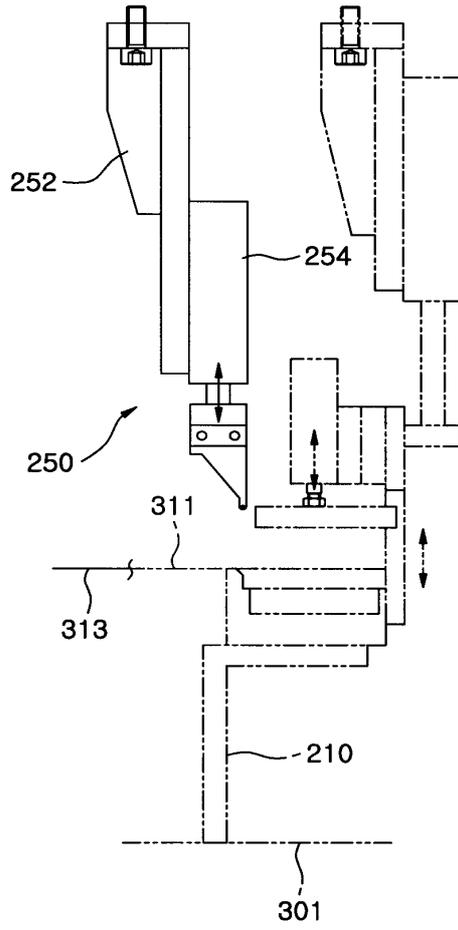
11a



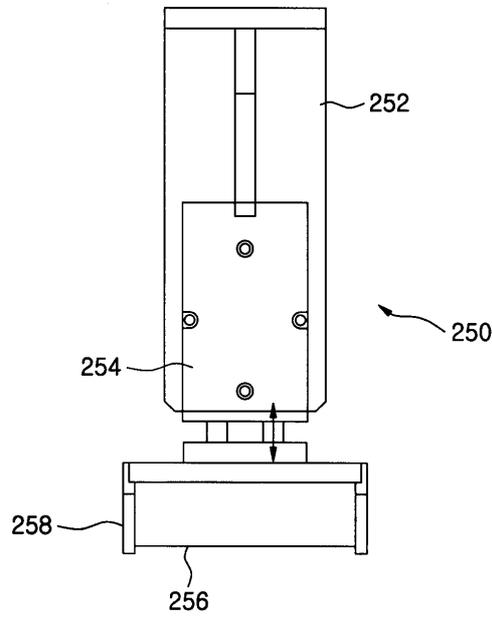
11b



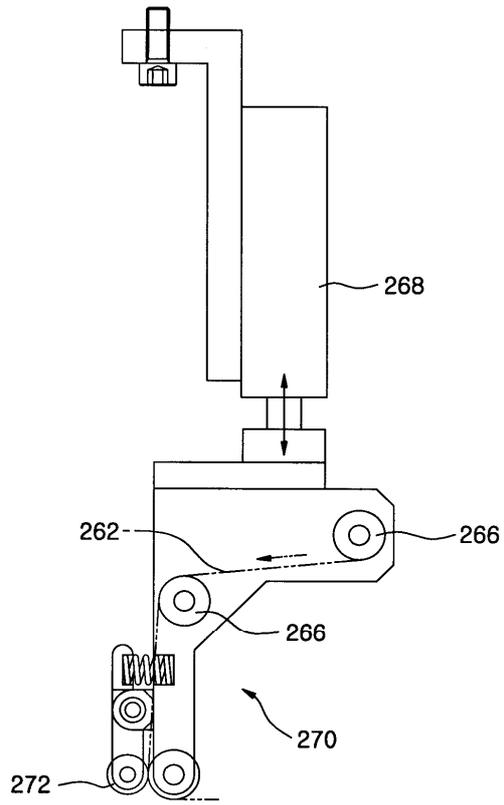
12a



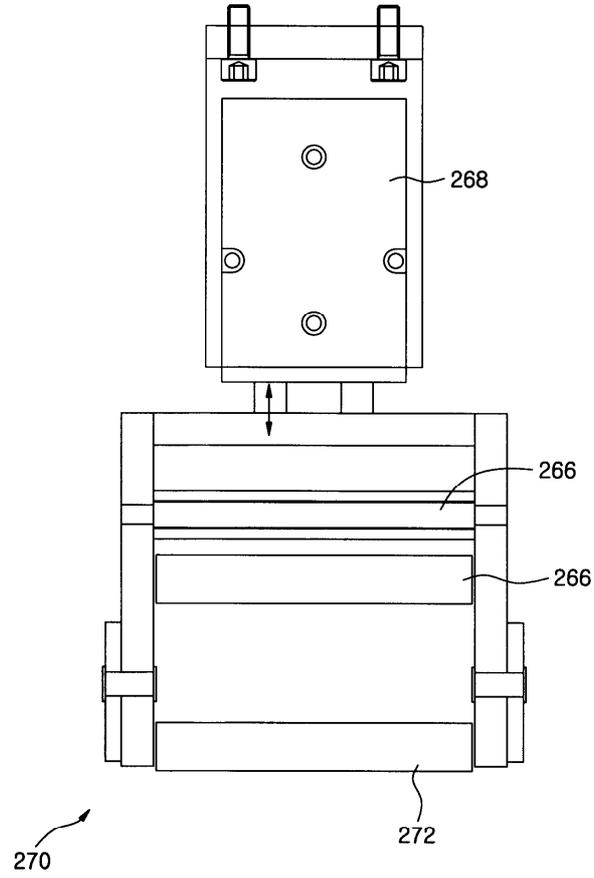
12b



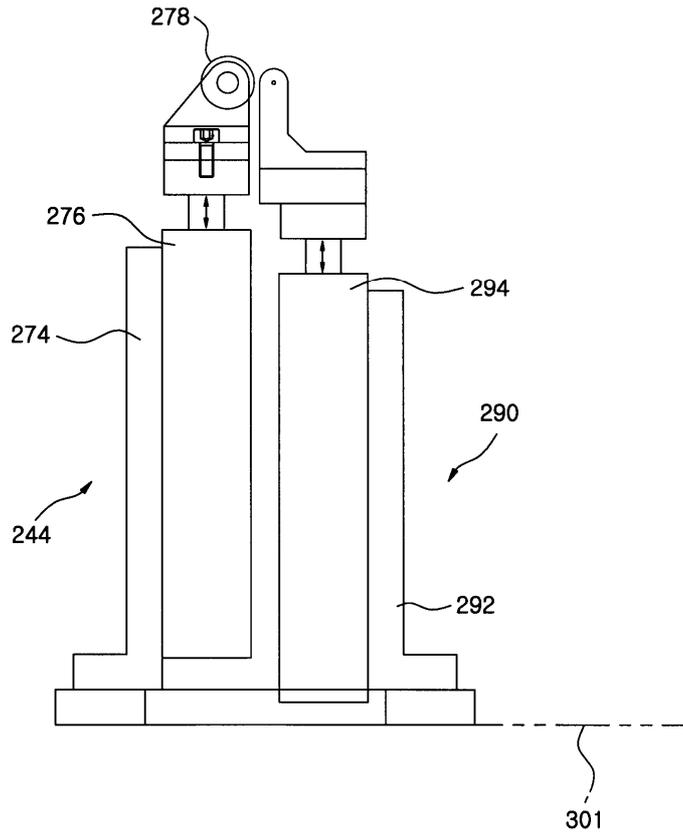
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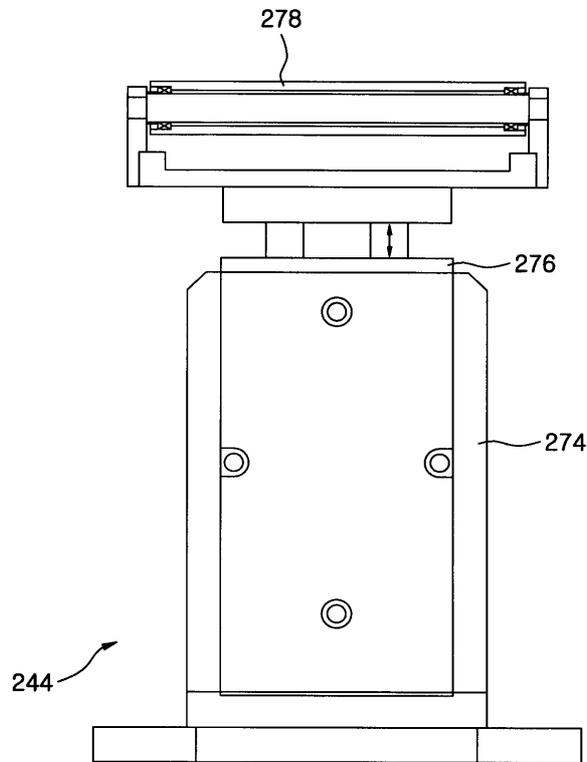
13b



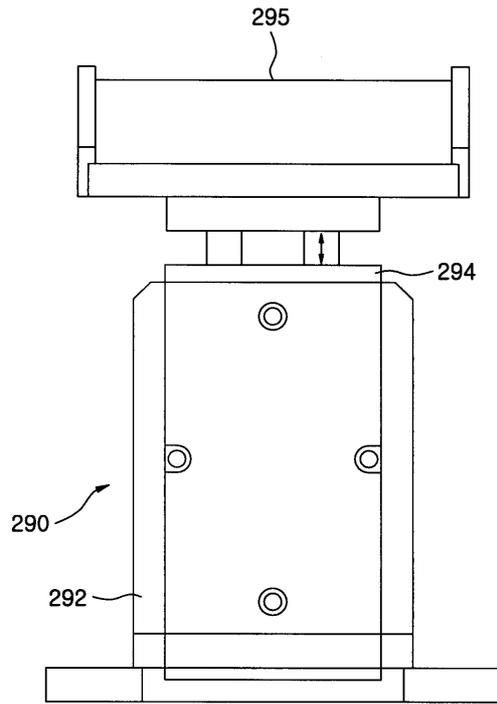
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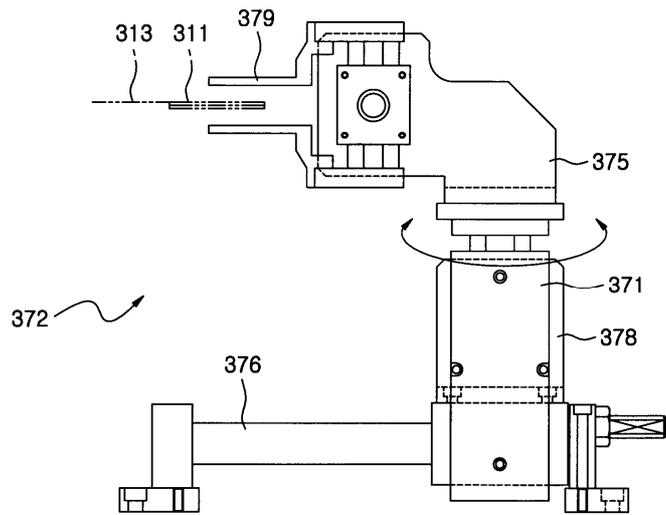
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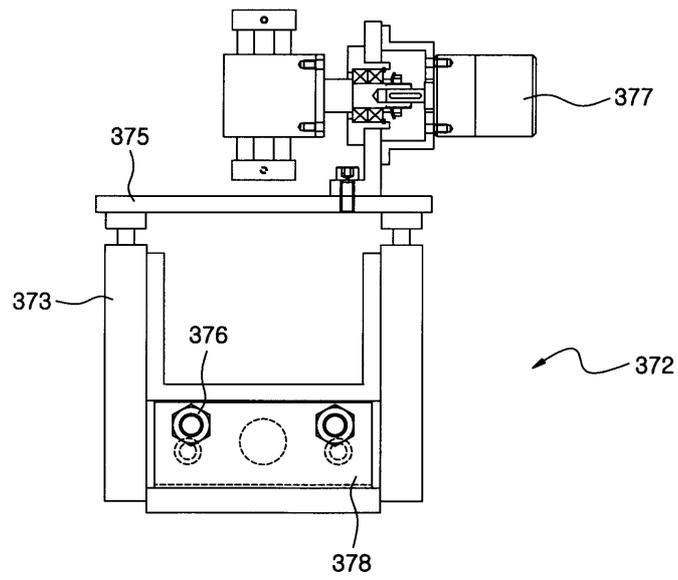
14c



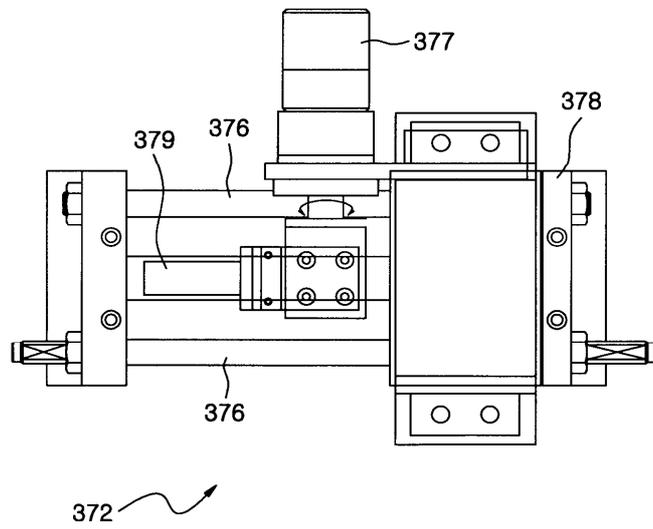
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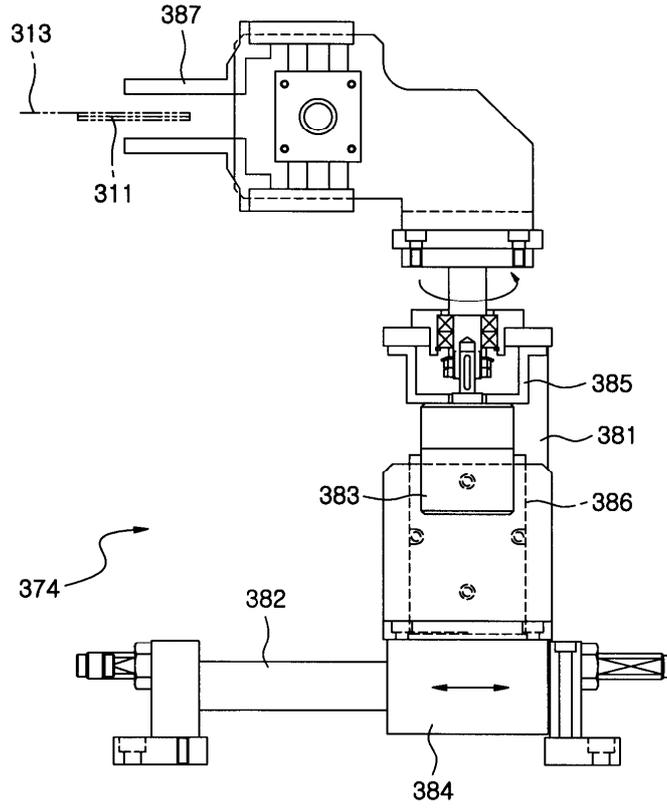
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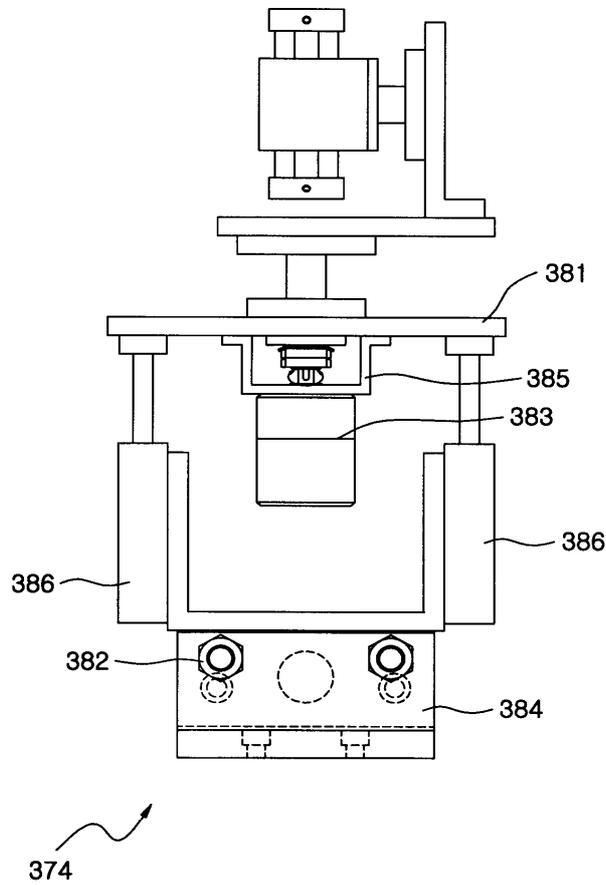
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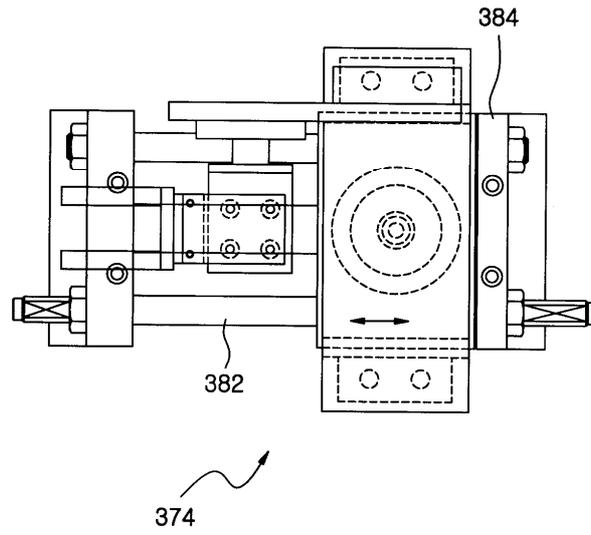
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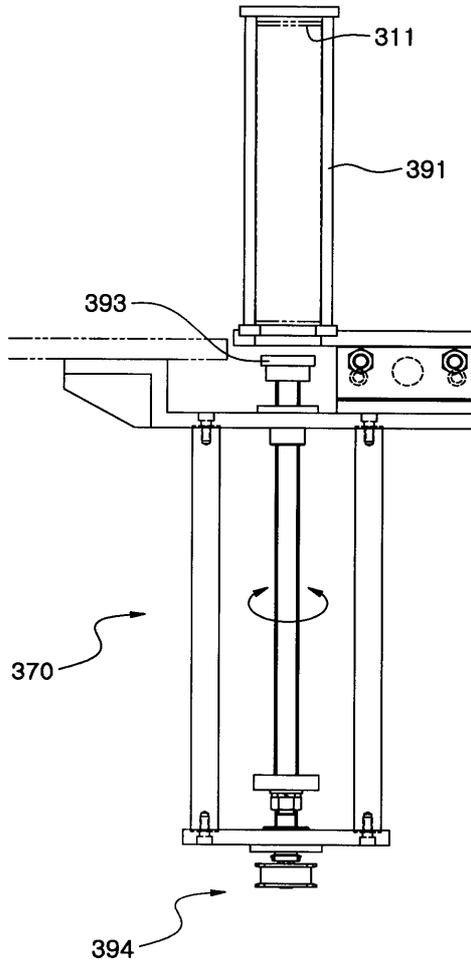
16b



16c



17a



17b

