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(B1)

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(43)

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(73) 174-1

(72) 148 307 203

(74)  
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(54)

, , 가 , , , , 가 .

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2 ,  
3 ,  
4 , , ,

5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16a,16b 가 .  
 < >  
 100: 200:  
 300: 400:

, , 가  
 가 , 가  
 , 가 , ,  
 , 가  
 , 가 8m  
 , 가  
 , 가 1~2  
 , 가 10 , 1  
 , 33% , 2000RPM , , IRIS9000  
 1 1 , 가 B-SCAN  
 , 30mm  
 , B-SCAN 1000 가 , 가  
 , 가 가 (probe set)가  
 , 가 3 가 2  
 , 가 1 가  
 , 가  
 , FREND , 가  
 , 가

가

2400RPM

IRIS900

가

가

가

( )

가 가

가 가

가

가

가

가

, 2

2

가

가

가

가

1

, 100

(T)

(T)

(190)

200

가

(100)

(190)

(190)

(100)

(191)

(190)

가

(191)

(400)

300

(190)

(100)

400

(100)

(100)

/ (410) ,

/ (410)

(420) ,

(420)

가

(430) ,

(430)

(440) ,

(430)

(450) ,

(430)

(460)

(430)

(400) (430), (440), (450) (460)  
가  
2 (100)  
20) (130)가 (T) (100) (110), (130) (140) (180)  
(190)가 (130) (190) (180)  
(191) (180)  
(110), (120) (130) (T) (T) (193)  
(100) 가 ( ) ( : )  
가 (192)가 (193)  
(193) (192)  
(T) (110), (120) (130) 3 90°  
(193) (110a) 가 (110b) (T)  
가 (193)가 가 (192)가 가 (193)가 가 (T)가  
(193)가 가 (100) 가  
( )  
(110) 4 (170) (111)  
(120) (112)가  
(110) 5 가 (150)가 (150)  
(151) 가 (152) (158)  
2 (112) (150)가 (110) (155) ( : 6 )  
(150) (153) (154)  
(156)가 (160) 가 (150) (150) (156)  
(150) 가 (112) 가 (150) (156)  
(150)가 (B) (150) ( )  
151) 가 (157) (152) (150) (157)  
(154) (B) (B) 가 ( ) (157)  
(T) 가 (152)(154) 가  
가 (150) 가 가 가 가  
(150) 45° 가 (157)  
(B) 90° (157)  
6 (157b) , 45° 가 (157b) 45° (157b) 90°  
(157) 가 (B) (T)  
(150) 가  
(B) (T) 90° 가 가 가  
(157) (157a) 가 가  
7 (170) (170) (110)  
(111) 가 (0.5mm, ) (170) (110)  
90° 가 (157) 가 (171)  
(110) 가 (111) (150)  
(170) (110) (111)

8 (120) (110) (11  
 2) (121)가 (130) (122)가 (160)  
 3 (161)가 (160)가 (161)  
 가 (160) 가 (150)  
 (180)가 (100) (180) (B) (T) 90°가  
 (120) (180) 10  
 (121)(122) (121)(122) , 180° (123)  
 (160) (180)  
 11 (130) (120) (141)가  
 (140) (132)가 (130)  
 (191) (180)  
 12 (140) (140) (140) (190) (1)  
 00) (190) (130) (141) (190)  
 (142)가 (142) (143) (190)  
 (T) (100) ( ) 가  
 (143) 가  
 (190) (160)  
 (161) ( 3kfg/cm<sup>2</sup> ) 가 (150) (156) (160)  
 (150)가 (112) (156) (191)  
 (400) (190) (180) (180)가 (B)  
 (100) (B) 가 45° (156) (T) (B)  
 (B)  
 2 , L1 (T) , L2 (T1)  
 / 10,000 (150) (112) (1  
 10) (150) (5000RPM) (T) (171)가 (171)  
 (100) (190) (T)  
 (110) (170)  
 13 (200) (205) (190) (190)  
 (200) (201)  
 (191) (201) 가 (19)  
 (203) (204)  
 14 (300) (300)  
 (B)  
 가 (307) (309)  
 (301) (301) (302)가 (307)  
 (302) (306) (200)  
 (301) (304) (309) (311) 가 (303)  
 (308) (304) (305) (312) 가  
 (302) 가 가 (309) (3)  
 (304) (311) 가 가  
 08) (300) 가  
 (306) (100)  
 (300) (301)

(302)가 (304)(309) (302) (304)(309) 가 (301) (311) ,  
 , 15 (100) , 15 16a,b  
 (T) (b) (150) (a) (100) (190)  
 : 25.4mm, :19.46mm, :2.77mm 가 ,  
 (150) RPM:5,200(86.6RPS)  
 : 6,200Hz(PRF)  
 : 100m/sec

1) (a)  
 $= (RPS \ R)/PRF = (86.6 \times 19.46 \times 3.14) / 6200 = 0.853mm$   
 100%(1point 1mm )

2) (b)  
 $= /RPS = (100mm/sec) / 86.6RPS = 1.154$   
 $= 1 / 1.154 = 86.6\%$  ( 1mm )

) 가 , / 가 (150) (150) (5000RPM / )  
 , 10,000 가 / 가 , 100m  
 m , 가 가 100% , 100m  
 16a,b (100) (100) (150) , (B)  
 (a) (b)

, 가 (V) (400) (440) (170) (15-1) (170) ,  
 (15-2) (150) 가 (15-2) ( )  
 100) 가  
 (T)

16a , 0mm(15-3) 가 ,  
 (15-4) (T)  
 , 15-3 15-5가 (T) , 15-3 15-4 가 (170) (15-1) (15-  
 (170) (15-6) (T) , 1  
 1) 가

, 가  
 / , ,  
 가 , , ,  
 , , ,  
 , 가

1.

(100) , 가 (100)  
 , (100)  
 (200) , (300) , (100)  
 ) (100) (400)  
 , (100) , (111) (111) , (120)  
 (112) , (170) (110);  
 가 (152) , (152)  
 (157) , 2 (112) (158) 2 (153) (112)  
 (154) , (156)  
 (110) (150); 가  
 (110) , (190) (160);  
 (161) (110) (130) (121)(122) ,  
 (160) (180) , (123)가  
 (120); (140)  
 (120) 가 , (190) (130) , (180)  
 가 (191) (130) (130);  
 (110), (120) (130) , (192)  
 (193);

2.

3.

1 (110), (120) (130) 90°  
 (110a) , (110b)

4.

5.

6.

7.

8.

1 (157) 45° (157b) ,  
 (157a)

9.

1 (170) 90° 가 (157) (171)

10.

1 (170) (110) (111) (150)

11.

12.

13.

1 ,

(130)  
(143)

(190)

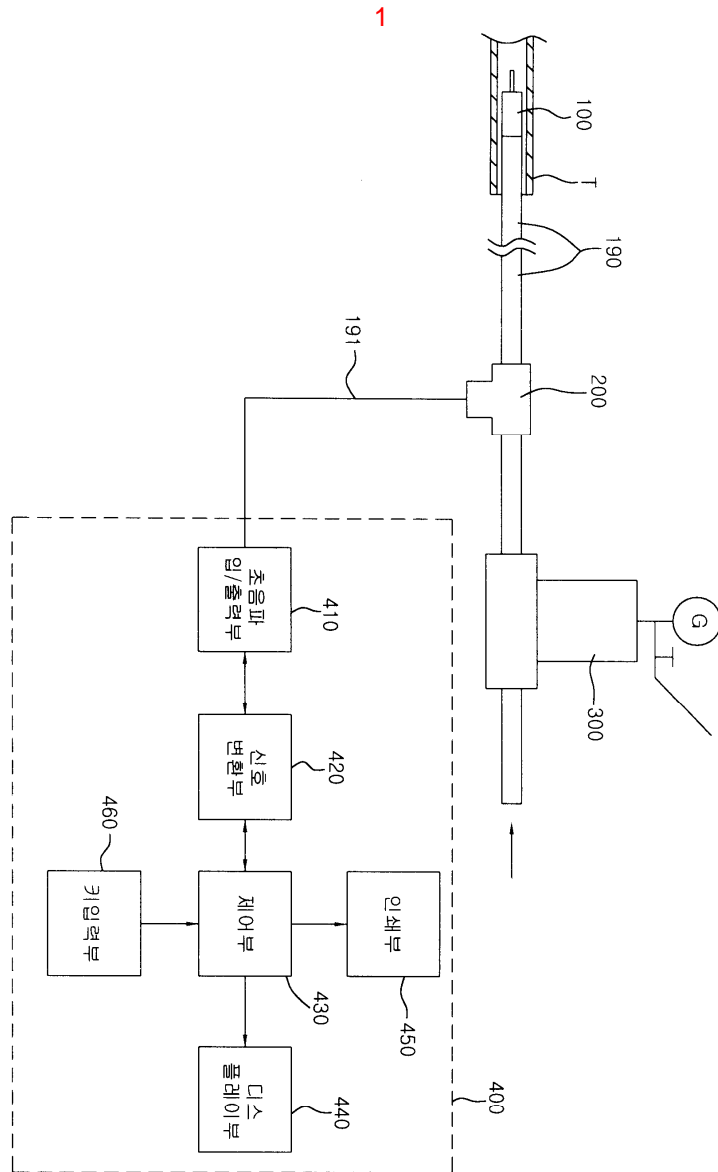
(140)

(130)  
(142)

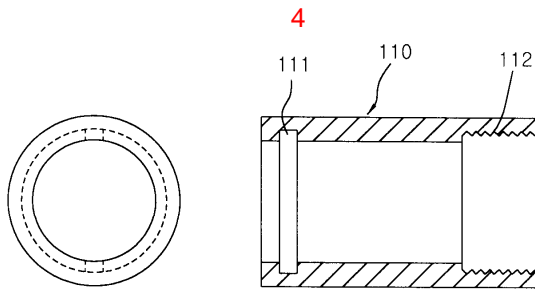
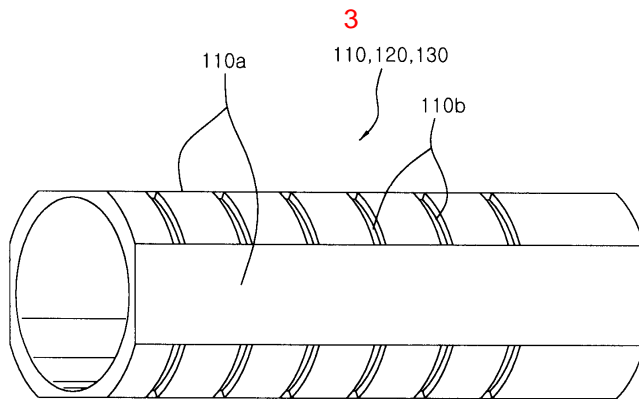
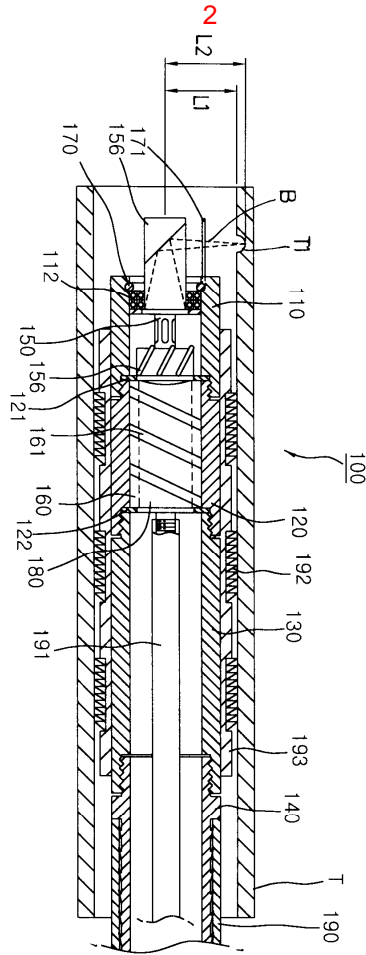
(141) ,

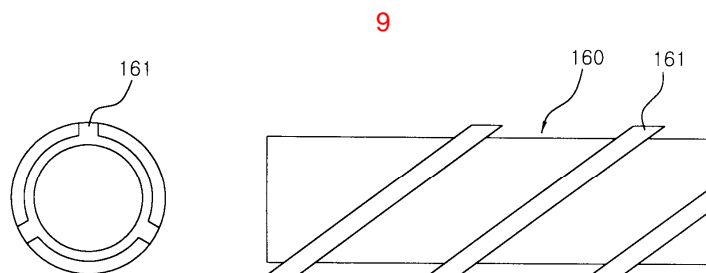
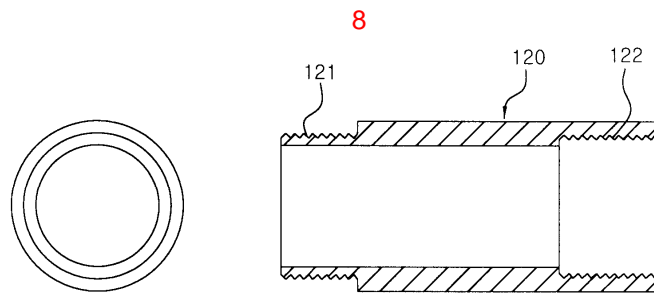
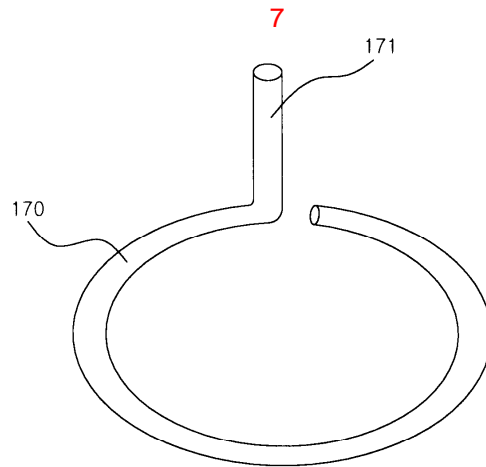
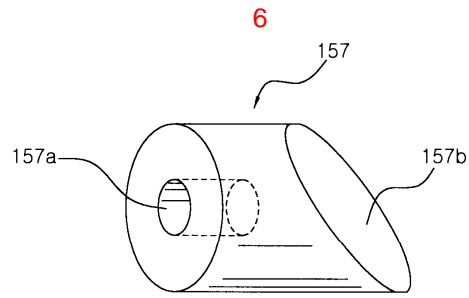
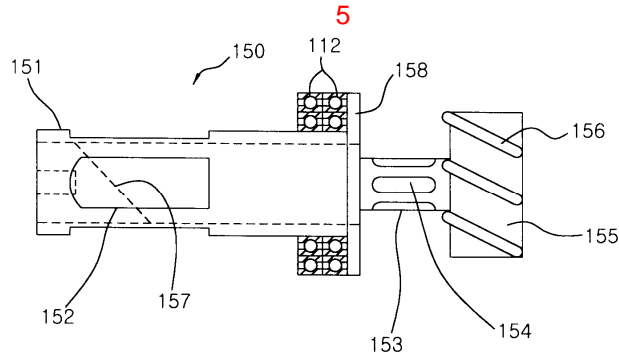
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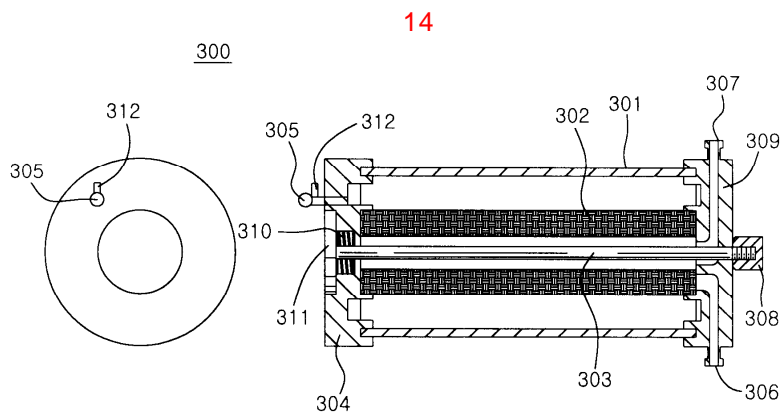
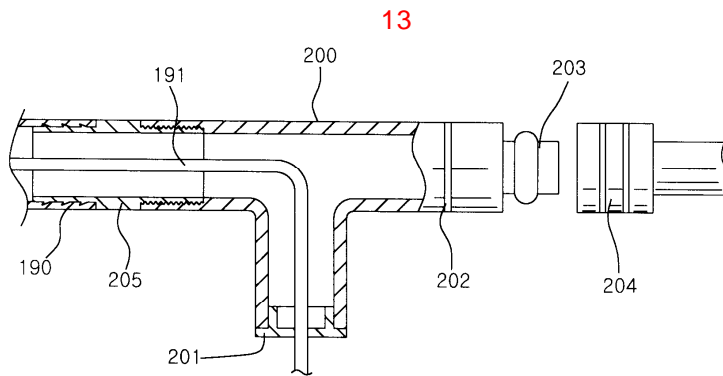
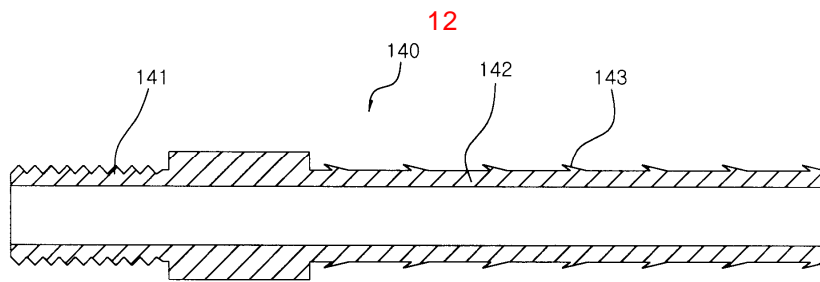
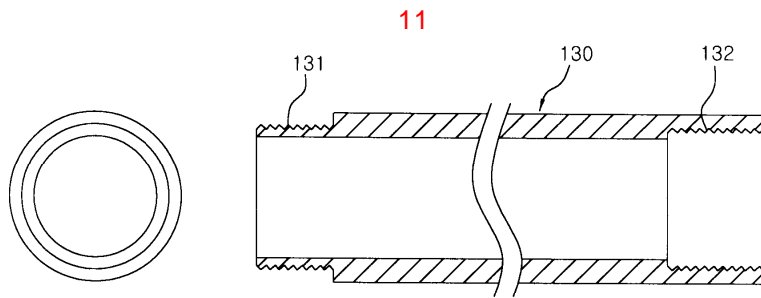
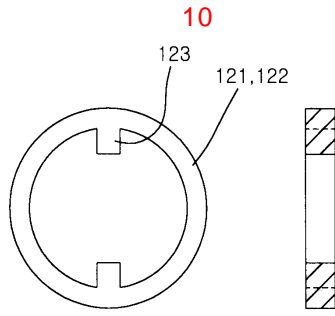
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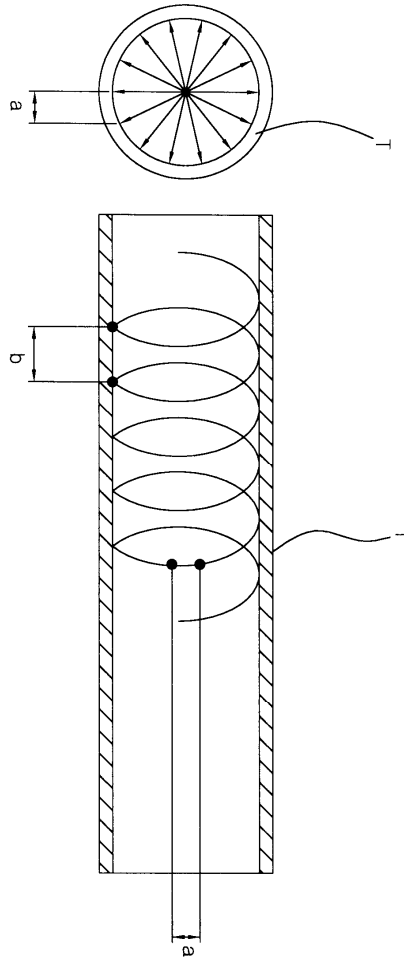




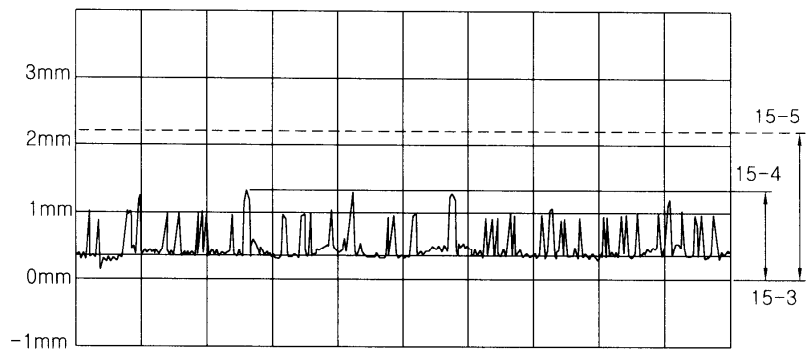




15



16a



16b

