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가 . , ,

, (tip) .

가 . ,

가 , , 가 ,

가 . , 가 . ,

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, (hydraulic) 1 가 1
1 가 (slave) 가 1 .

(cavity)

1 2 1 2 2 1 2 1

2 2 2 1 1

가

(sleeve)가

(pocket)

가

1

2 (grasp) 2a 2b 2c 2d 2e

3 3a 3b 3d

4 4a 4b 4c 4d- 4e 2가

5a 5b

6a 6b 6c 6d

7a- 7b 7a 7b 7c

8 (tyne)

9 9a 9b 9c 9d

10 10a (cannula) 10b 10c

11a- 11b (restraint)

12 e 가 12a , 12b 12c- 12

13

14

15a- 15b

16a- 16c 15a- 15b

1 (120) (proximal)' (110, 112) 가 (distal)' 가

2) (120) 가 가 (slave portion)' 가 가 (190) (110) (distal end of the device)' (10 (cannula))' (190)

0) (110, 112) 가 2가 1 (12 (110, 112) 가 (perfluorinated) (physiologically compatible fluid)' 가 (112) (115) (117) 가 (112) 가 (117) 가 (120) 가 (117) (3) (310) 가 (117) 가 (117)가 가 (seal) (130) 가 (110) (110) (110) (110)

2a (110) (210) 가 ,
 가 (212) (21) 가 가
 (110) (214, 216, 218, 220) 가
 (210) (212) (22) 2d
 (222) (224)가 (224) (318)
 (214) (312) (318) (320)
 (120) (120)

(110) (130) 2b
 (226) (226) (110) (230)
 (228) (228) 2e (230) (318)
 (220) (312) (318) (320)
 (120) (102)

(210) (110) (232)
 (312) (232) (330) (218) (312) (232)
 (318) (320) (318) (320)
 (120) (120)

(110) 2b (234)
 (236) (238)
 (236)가 (236)가 (238)
 (238) (238)가 (236) 가
 (312) (312) (318) (330) (216)
 (320) (320) (318) (320) (318)
 (320) (120) (120)

(110) (190)
 (120)

(210) 가 ,
 (210) (210) (212)

(214, 216, 218, 220) 3a (310) 가
 가 3b (310) (312) (314)
 (314) 가 (312) (312) (312) ()
 318 (330) (110) (110)
 (312)가 (314)

(318) (320) (314) 2 (322, 324)
 (318) (320) 가 (318) (318)
 (330) 가 가 (320)
 (ratchet) 가 가 (320)
 (320) 가 (314) 가 (320)
 (320) (320)

, (320) (320) (314) (320) .
 , (320) (314) .
 (314) (314) , (318) 가 (316) .
 (314) O- (326) (328) .
 , 3b (310) (320) (316)
 . (320) (314) (110)가
 , (210)가 (312)가 , (318) (320)
 . (324) 가 (314) , (120)
 . (322) (320)
 (110)가 ,
 (310) 3a 가 . (320) , ()
 320) , (320) 2 ,
 .
 (190) , (110) (120) ,
 .
 (120) 가 , , 가
 . , 가 가
 .
 (410) 4a 4b 가 (410) (310)
 , 2가 (110) 가 ,
 (414) (420) (416) (417) ,
 (416) (430) (416) (412)
 . (420) (412)
 (414) (422) (414)
 (428) (414)
 .
 (430) , (431) ,
 가 .
 , 4a
 4e , (110) (210) 가 , 가
 , 가 (190) (110) (432)
 (434) . 4d , (436)가 (434) (43)
 4) (440)가 (442)
 . (442) , (436) 가 ,
 (442) (440) 가 ,
 .
 4e (434)가 (436) (438) (4
 38) (440) (442) (436) (438) (436)
 , (440) (442) , (438) (440)
 (434) (436) (442) , (438) (440)
 .
 5a (510) (410) (410)
 (110) 가 (520)
 가 (518) (524) (518)
 (522) (526)가 ,
 가 (522) (530)
 (528) (528) (522) (528)
 (530) .

가 (532) , (534) ,
 , (110) (210) , 가 , 5b
 가 (190) (542) (544) (110) (540) (546) (548)가 (542)
) (550) (546) (542)
 (610) 6a (226) (110) 가 (620)
 (618) (618) (624) (624) (618) (622) (624)
 (626) (626) (626) (626) (628) (624)
 (628)가 (626) (628) (110) (626)
 (620) (624) 가 (628)
 (626)
 (628) 110° (628) (620)
 110°, 150°, 200°, 250°, 300°
 ° 350°
 가 (630) , (632) ,
) (210) , 가 (190) (110)
 (110) (624) (618) (624) (626)
 (628)가
 6d (640) (642) (644)
 (644) (642) (640) (646) (646) (644)
 (644)가 (646) (646)
 (110) 가 가 가
 가
 7a (710) , 7b (710) 가 ,
 (718) (212)가 (210) 가 ,
 (720) (720) 가
 2- 720- 2 (722) 2 (722) 72
 722가 가 90° 180° (722) (724)
 (210) (212)
 (724)
 (740) , 7c (212) (730)
 (744) (740) (744) (742)
 (210) (212) (724)
 (710) (724) , 8 (724)
) (810) (724) (810)

가 (724) 가 (810)
가 (cauterizing) 가
(710) 1 (710) 가 (710)
(710) 9 () 4
9a 9c 9d 9b , 4
가 (102) , 2
3 가 2 3
(710) 가 4c
(101) (1016) (10a). (1010) (1014) 1 (1012)
b (1018) 10c , 10
(1110) (1112) (190) (1110)
(1110) (190)가 가 (190) (190) 가 가
가 가 가 가 가
가 가 가
(1210)(12) 가 (1210)
4) 가 가 (1214) , (121)
(1214) 12c- 12e
2 (1214) (1214) 가
(1214) 12c (1214)가 (1214)가 (1214)가 (1214)가
1214) 1 (1214) 12d , 2 (1214)가 (1214)가 (1214)가
14) 가 (1214)가 12e , 2 , 2 (1214) 'V' (1214)가
, 2 1 가
(1214) , 2
가

(190)가
 (120) (710)
 (710) 1
 1 1 2 (710) (710) 1
 (190) (140) (1) (140)
 (140) (190)
 (140) (140) (140)
 (140) 가 (110)
 (120)
 가 가
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 (190) 가 15a- 15b 16a- 16c
 (190) 가 (1510) 가 (1510) 가 (pouch)(1520) (152
 0) 가 16c (1520) (1510) (1510) (1520)
 (1520) () (1520) 가 (1520)
 (1520) 가 16b (1520)
 가
 /
 (1320) / 13 (1320)
 (1318) (1310) (1318) 2
 A₁ (1318) A₂ (1320) (1322)
 (1314) 2 (1316) A₃ (1314) A₄ (1310)
 (1316) (1314)
 , 2 가 , 2 가 ,
 가
 (1318) (1320) 가 (1314)
 (1310) 가 (1318)
 (1320) 가 가 (1314) 가
 (1318) (1314) (1310) (1314) 가

(overpressure)
가

가 , 가 , 가
가 가 가
가 가 가

가 , 가
가 ,

13 (1310) (1312) (1310) (1314)
(1316) (1314) (1316) A₄ (1314) A₃ A₄ A₃ (1316)
) A₃ |₂ |₂ (1314) (1314) A₄ |₂ 가

1314 (1312) (1318) (1320) 1318

$$A_1 |_1 = A_3 |_2$$

$$A_2 |_1 = A_4 |_2$$

, |₁ 가

$$l_2 = \frac{A_1 l_1}{A_3} = \frac{A_2 l_1}{A_4}$$

:

$$\frac{A_1}{A_3} = \frac{A_2}{A_4}$$

가
13 , 1312가 1312가 1310
, 1312가 1310

(1410) 1414 1412 (14)
(1418) (1418) 1412가 (1410) 1414가 가 가
(1422) 가 (1410) (1418)

(1416)가 (dump)' (1416) 가 (1418) (1422) .
 (1420)가 (1418) ,
 가 (1418) , (1422)

()

가
 가
 가

comprising)', '(consisting essentially of)' , '(consisting of)' , ()
 가
 가

(57)

1.

가
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 가
 1 1 2 1 2
 1 ; 2

1 1 1 ; ,
2 2 1

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7 13. ,

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13 14. ,

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13 15. ,

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7 16. ,

가

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17.

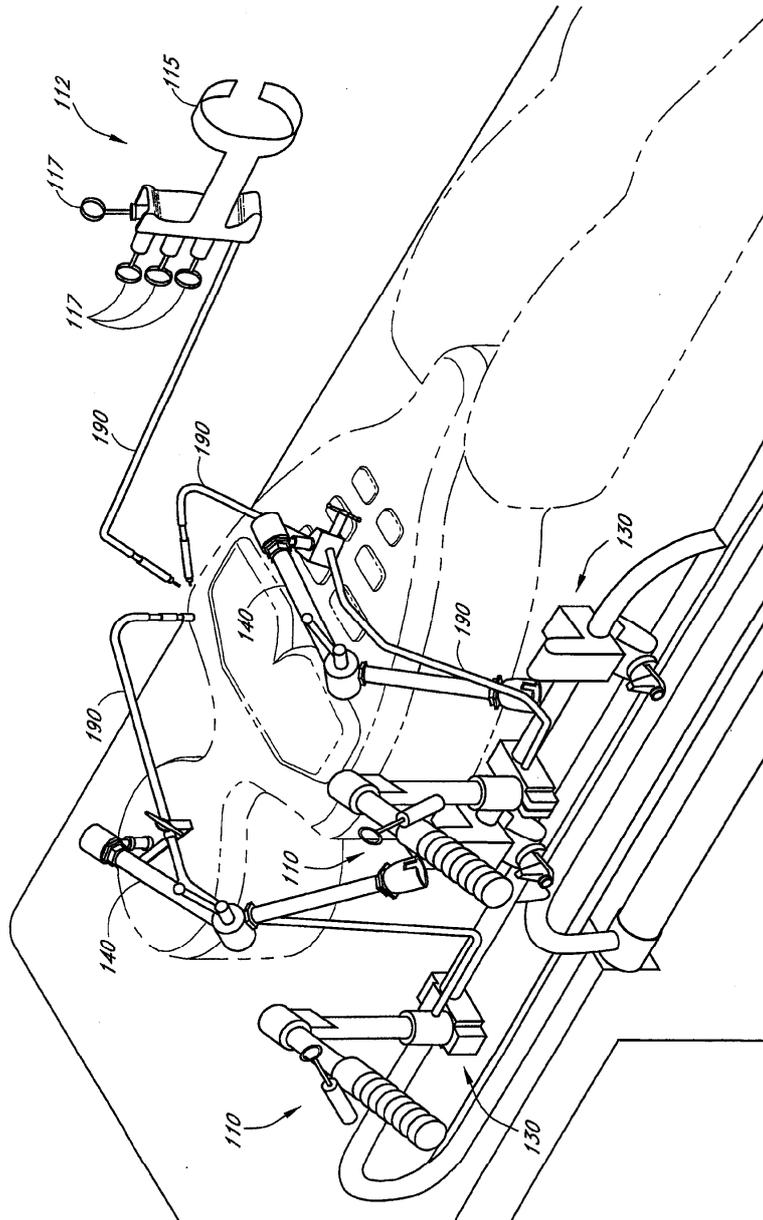
1 가

18.

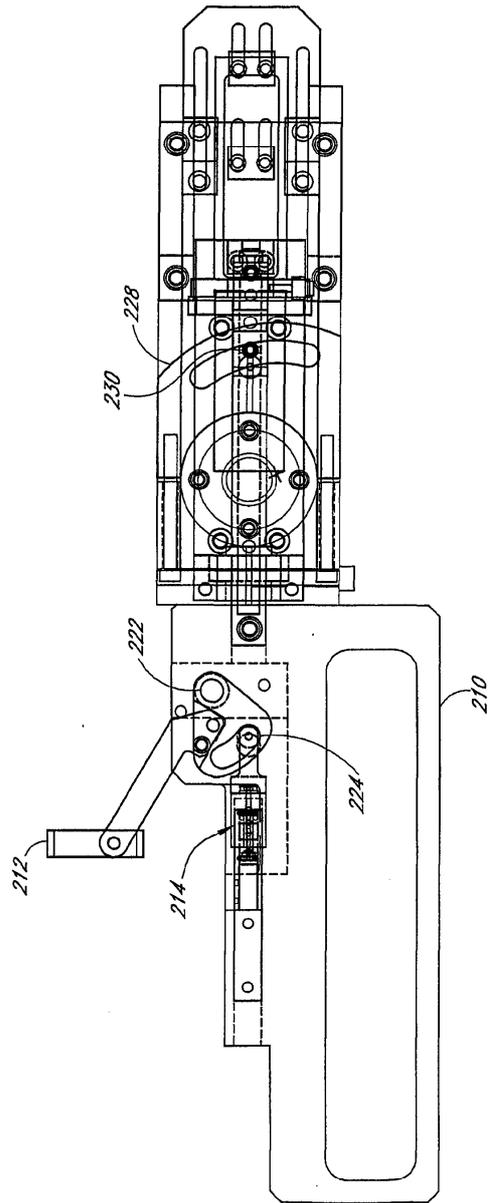
17 ,
1 가

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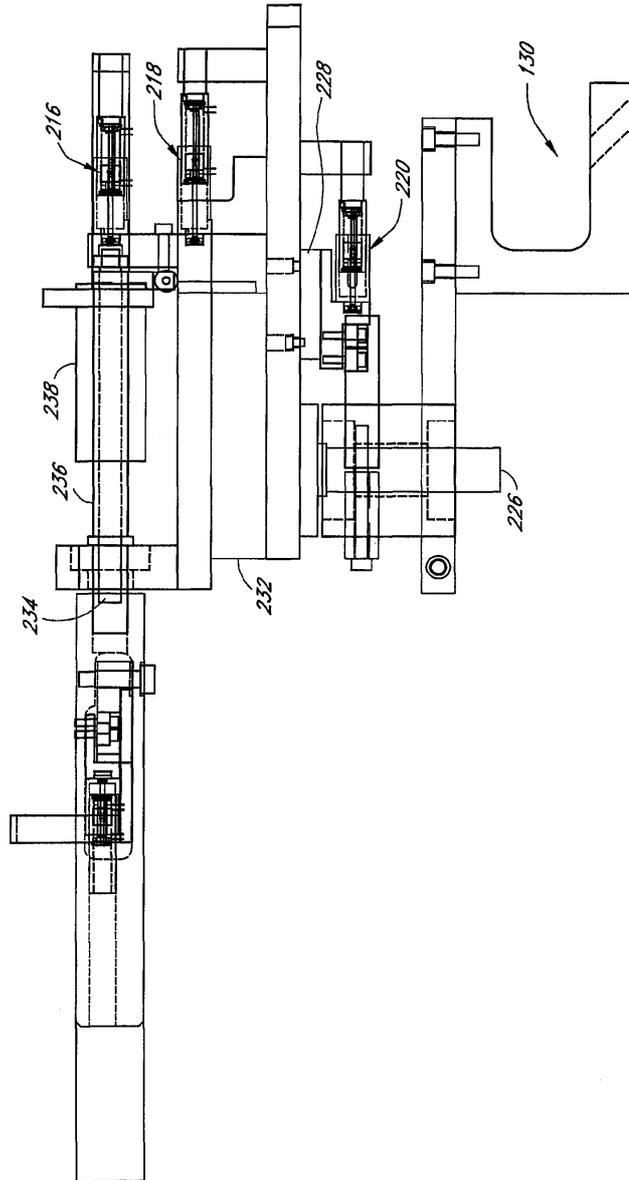
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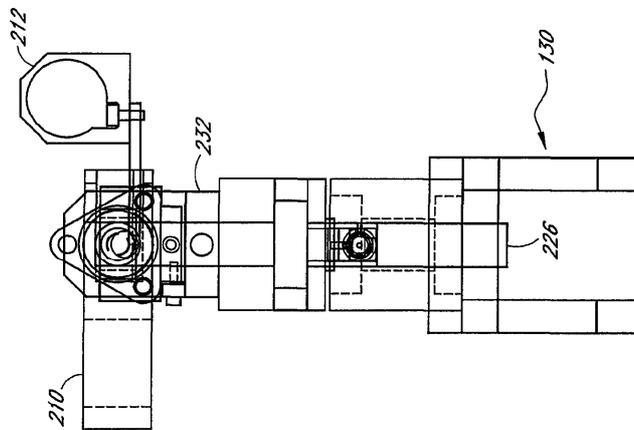
2a



2b



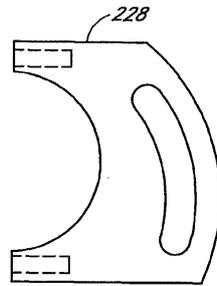
2c



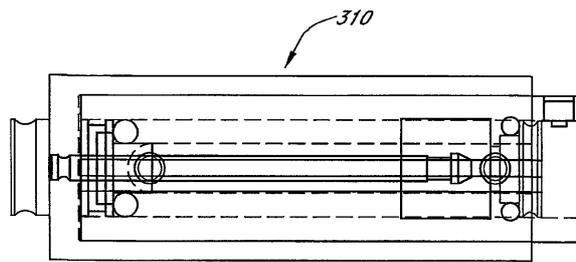
2d



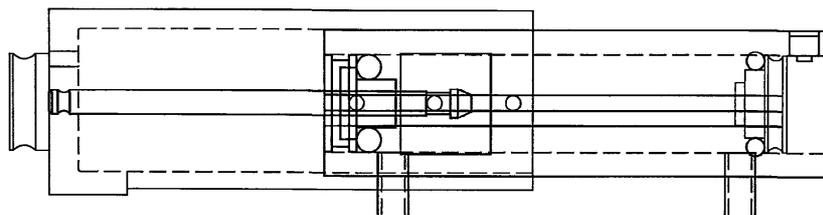
2e



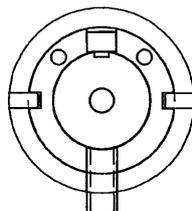
3a

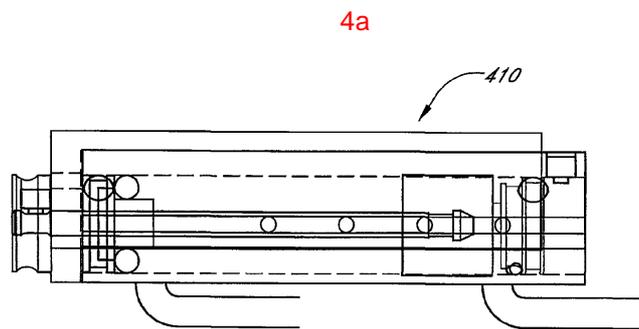
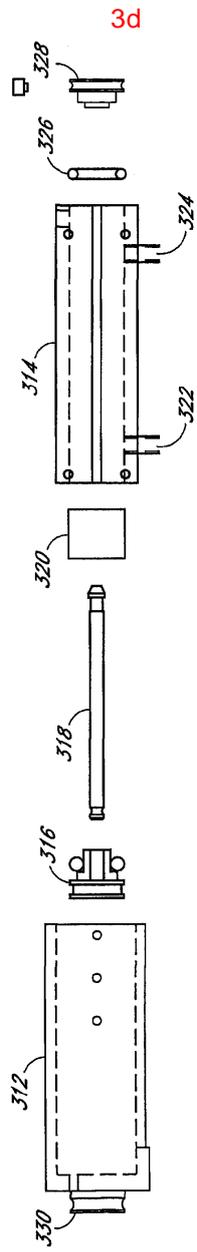


3b

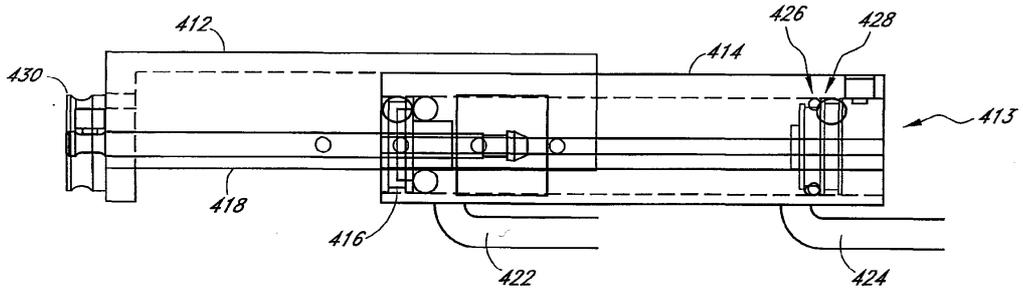


3c

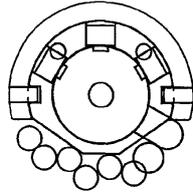




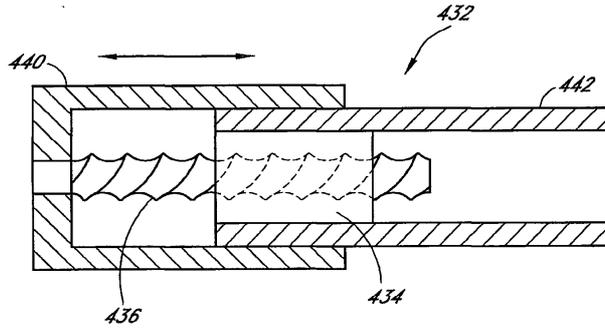
4b



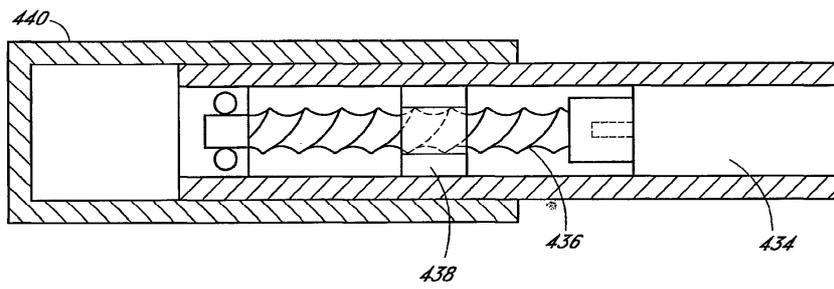
4c

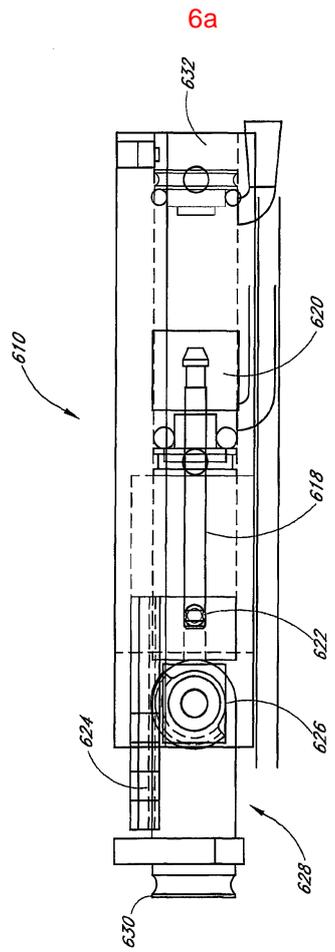
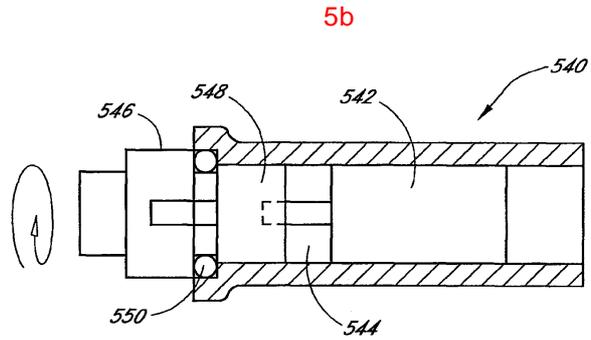
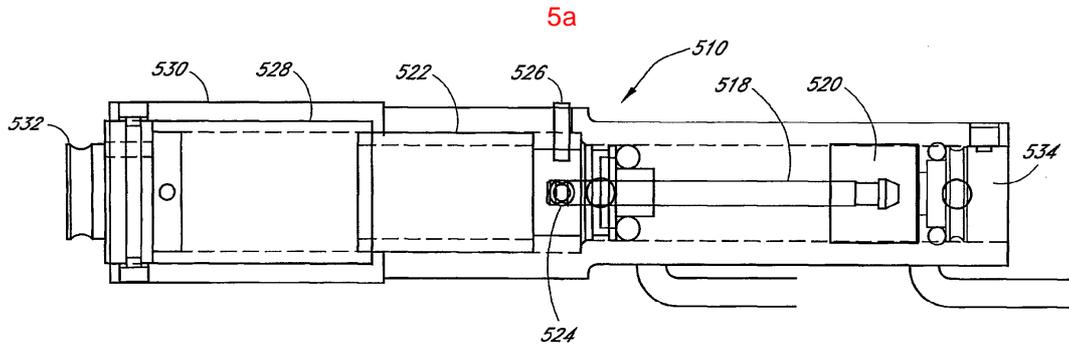


4d

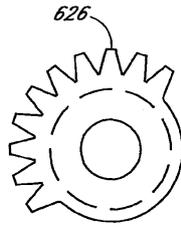


4e

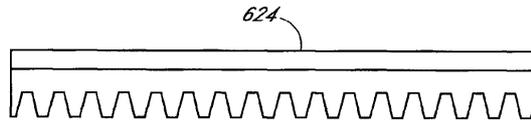




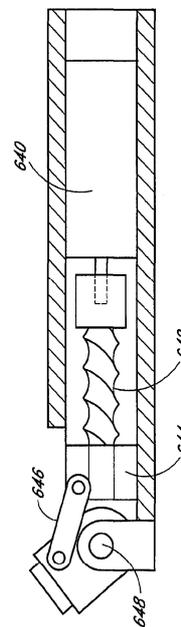
6b



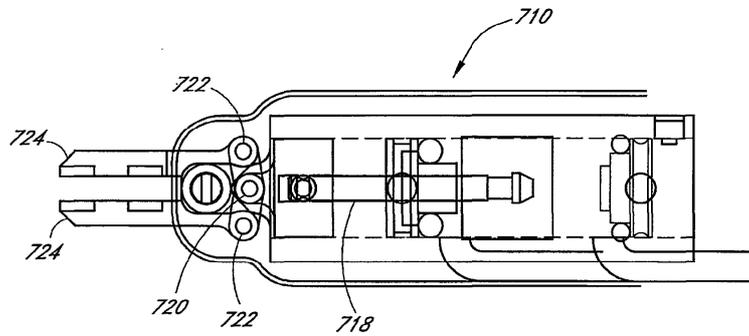
6c

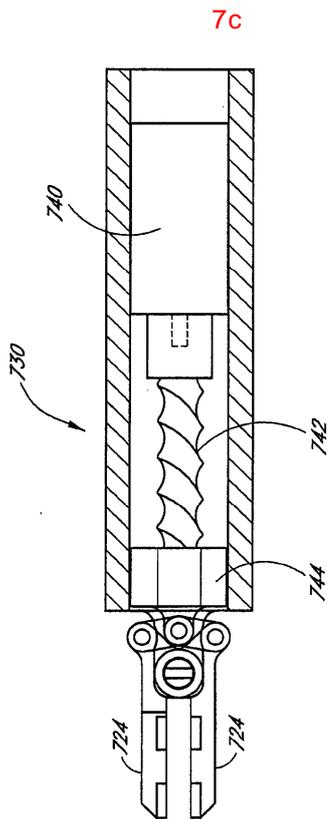
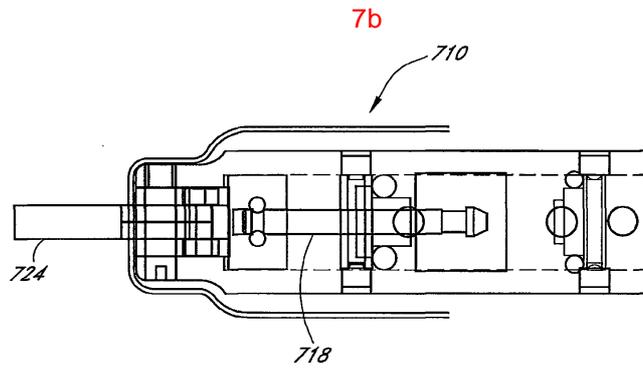


6d

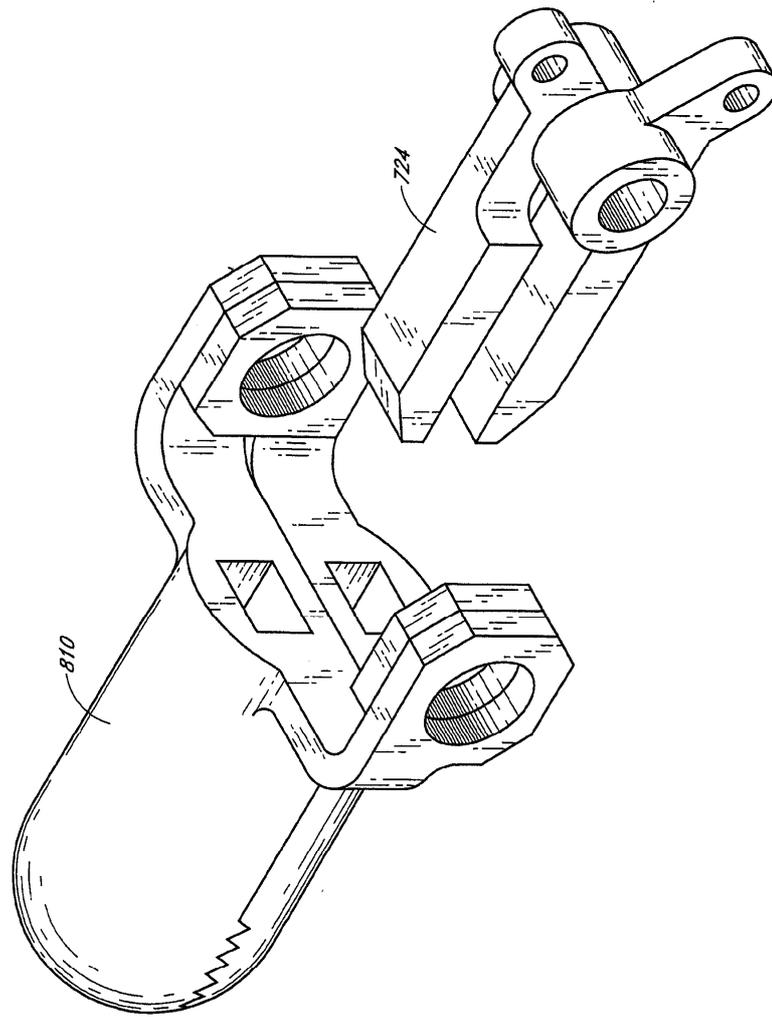


7a

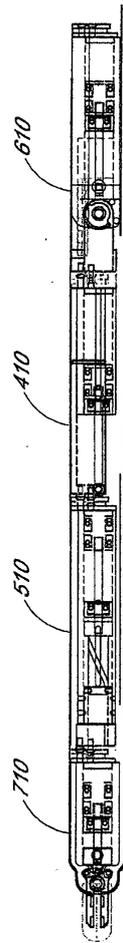




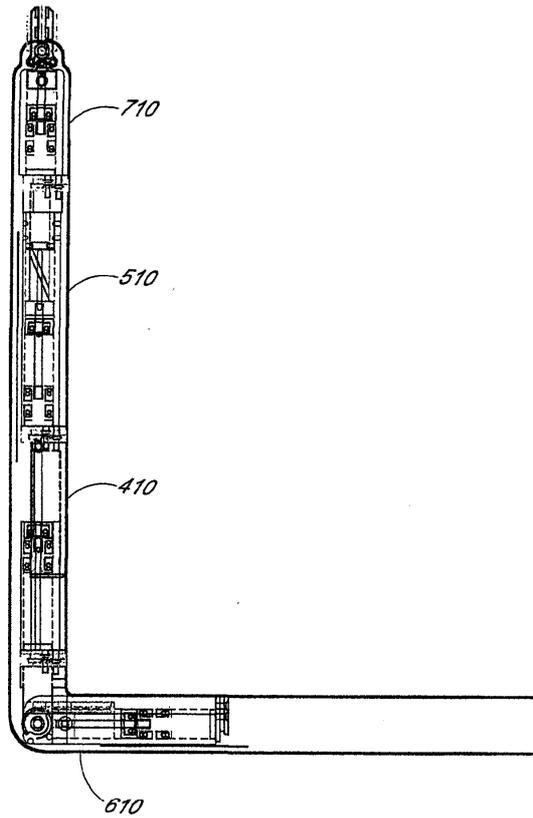
8



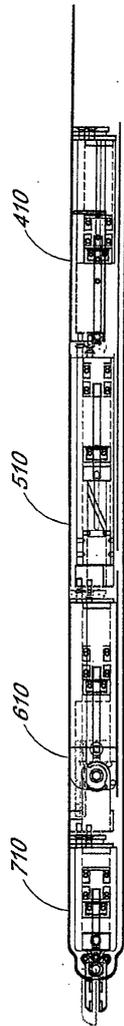
9a



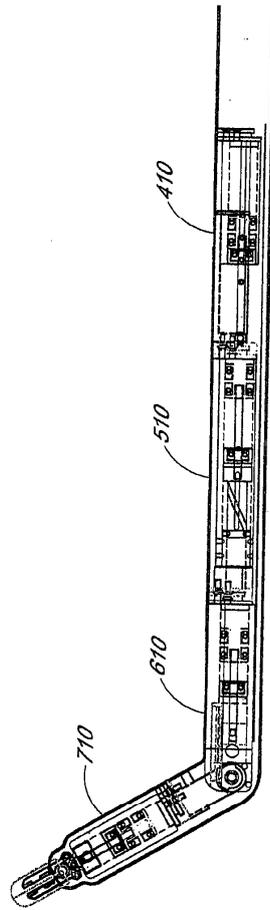
9b



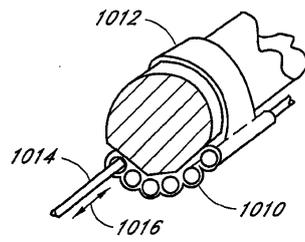
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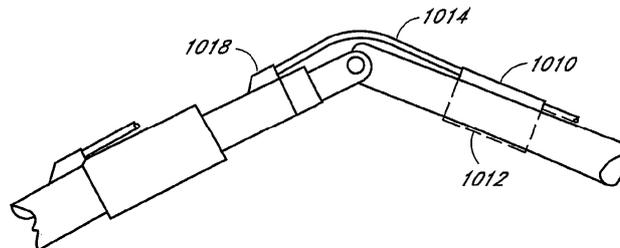
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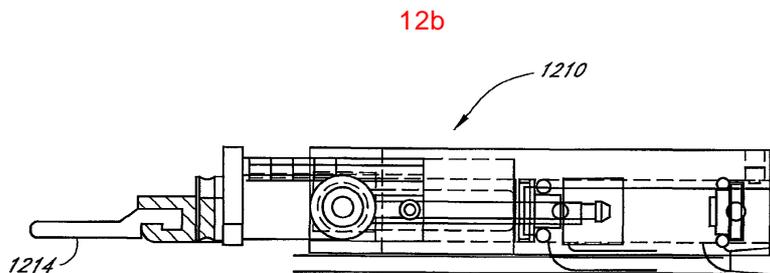
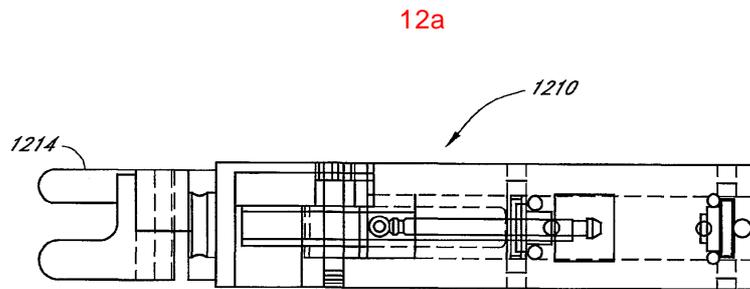
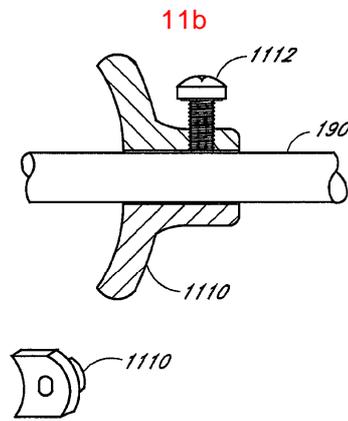
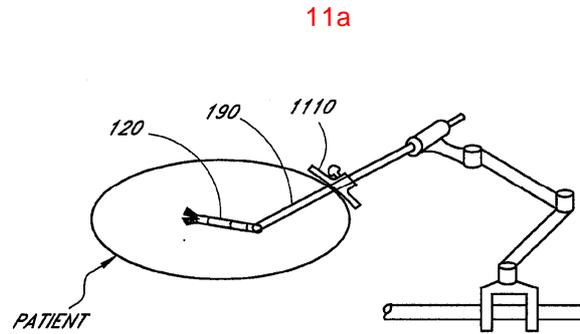
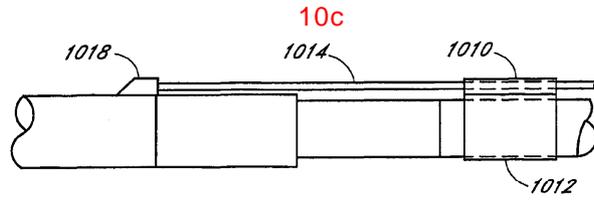


10a

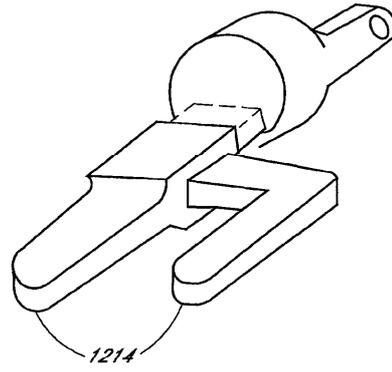


10b

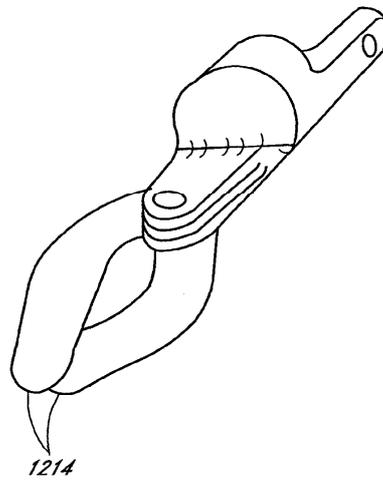




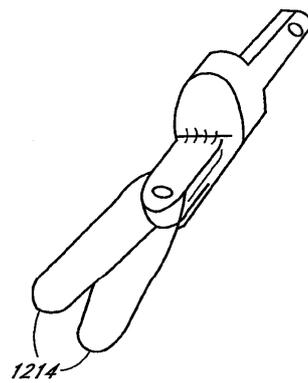
12c



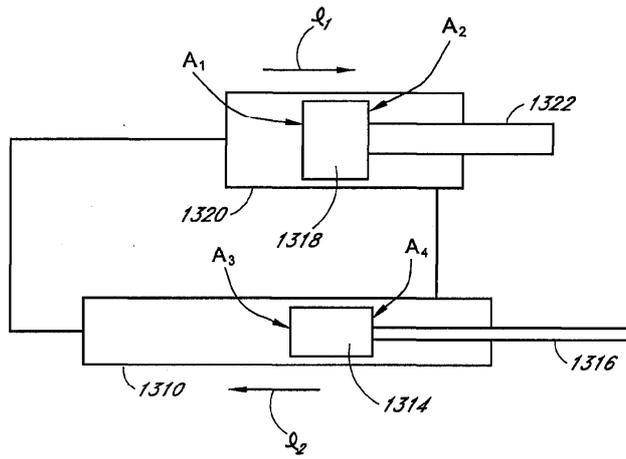
12d



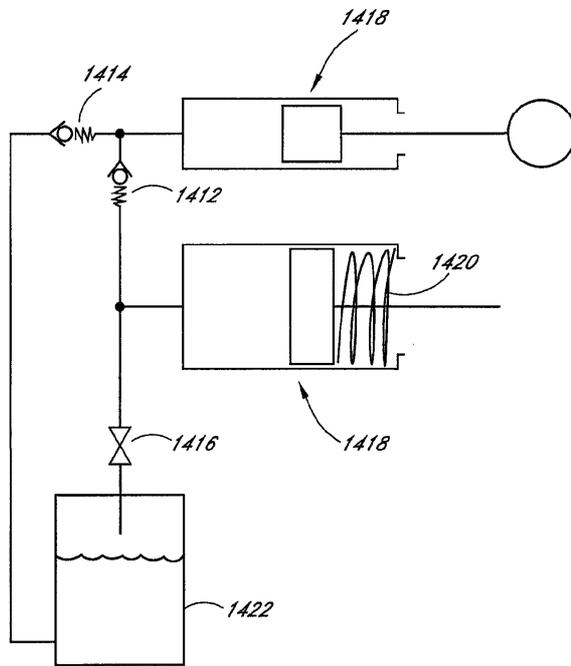
12e



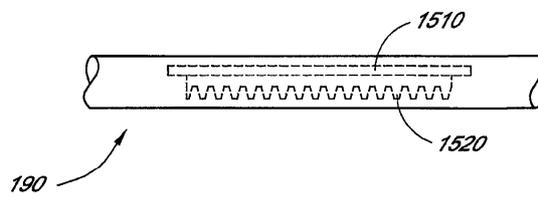
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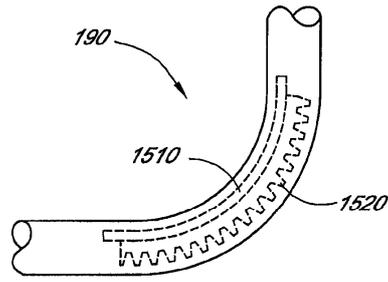
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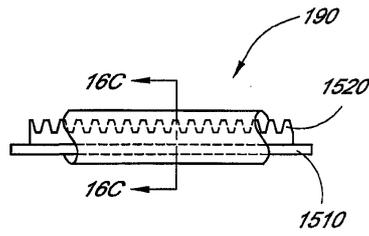
15a



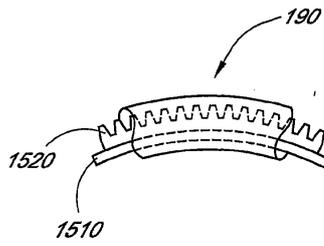
15b



16a



16b



16c



专利名称(译)	手动多臂手术器械		
公开(公告)号	KR1020030040365A	公开(公告)日	2003-05-22
申请号	KR1020037000692	申请日	2001-07-18
[标]申请(专利权)人(译)	KINETIC手术		
申请(专利权)人(译)	运动的参与的埃尔埃尔先生		
当前申请(专利权)人(译)	运动的参与的埃尔埃尔先生		
[标]发明人	DOYLE MARK CHRISTOPHER 도일마크크리스토퍼 CAPUTO JIMMY C 카푸토지미씨		
发明人	도일,마크,크리스토퍼 카푸토,지미,씨.		
IPC分类号	A61B19/00 A61B17/00		
CPC分类号	A61B2019/306 A61B2017/00539 A61B19/22 A61B34/35 A61B34/37 A61B34/70 A61B2017/00398 A61B2017/2829 A61B2017/2908 A61B2017/2927 A61B2017/2931 A61B2017/2932 A61B2017/2944 A61B2017/2948 A61B2090/036		
代理人(译)	LEE, 韩师弟		
优先权	60/219593 2000-07-20 US		
其他公开文献	KR100834843B1		
外部链接	Espacenet		

摘要(译)

和液压控制信号，至少一个从设备到至少一个控制器，并且其中在流体连通的控制器和配置成传递并且被配置为向由所述控制器，所述控制器和所述从设备之间的液压连通发送的液压控制信号作出响应的状态下公开了一种具有至少一个控制线提供所述双圆筒体系。此外，所述至少一个控制器被配置放置在基部侧端部和通过该外科手术设备的压力控制信号，它是由人的手放置在所述至少一个操纵器的控制，并且被配置成驱动所述控制器的外科装置的远端侧的端部以及至少一个控制线外科装置响应于由所述控制器流体连通发送的液压控制信号，所述控制器和从属提供所述控制器和被配置为将至少一个从设备和一个状态之间的液压连通也被公开。 1 指数方面 手术器械，腹腔镜手术，关节，一个控制器，一个下属单位，指南

