

(19) (KR)
(12) (A)

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A61B 17/04

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(43)

2003-0068390
2003 08 21

(21) 10-2002-7006451
(22) 2002 05 20
 2002 05 20
(86) PCT/US2000/31727 (87) WO 2001/35833
(86) 2000 11 20 (87) 2001 05 25

EA : , , , , , , , , ,

(30) 60/166,338 1999 11 19 (US)

$$(71) \quad 14564, \quad , \quad 7796$$

(72) 451 , , 14534

1900 28, , 14424

(74)

(54)

$$\begin{array}{ccccccccc}
& & & 1 & (10) & & & & \\
& & 2 & (100) & . & & & & \\
1 & (12) & & (14) , & & 1 & (10) & (12) , & 1 & 2 \\
& (14) & & (16) & & (14) & 2 & & 1 & 2 \\
) & . & & , & & (16) & (16) & & (20)(21) \\
& & & , & & , & 1 & 2 & \\
& & & (156) & & (140) & (140) & (100) & (15)
\end{array}$$

1999 11 19 가 09/166,338
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(dilator) (seath)가

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(blood thinning agent)

74

74

(毛獻)

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(seath)

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 3A 3 ;
 4 1 ;
 4A 4 ;
 4B 4C 4 ;
 5 1 ;
 6 1 ;
 7A 1 , , ;
 7B 7A 가 1 ;
 7C 1 ;
 7D 7C ;
 7E 7C , 1 ;
 , 가 ;
 7F 7E ;
 7G 1 ;
 8 1 (engazing) ;
 9A 8 9A-9A ;
 9B 9A 9B-9B ;
 9C 9F 8 9A-9A ;
 ;

10A	10D		8	9A - 9A
		;		
10E	1	(tip)		;
11			;	
11A		11	.	.
12		11		;
13		11		;
13A	13	(distal end)		;
14	11			;
15	13		;	
15A	15	15A - 15A		;
16A	가	11A 16A - 16A		;
16B		11A 16A - 16A		;
16C	16A 11A 16A - 16A	(attachment)		;
16D	16A	11A 16A - 16A		;
16E	16A ;	가	11A 16A - 16	
16F 16A	11 ;	16A		11A 16A -
16G	16C			;
17A	17M ;	11	1	
18		1 11	.	.
1	10D	(10)	.	가 (10)
100)	가	' 1' ' 2'	11 16F	(10) (100)
1	4 (16) (12) (20)(21)	, (10) (14), (12), (10)	(16), (16), (14)	(18) (16) 가 (20a),(21)

(16) (16a) (14), (56) (14) . .
 (16) (58) (58a)(60a) (60) (64)(66) (50) (58a)(60a)
 (58a)(60a) . . 5,431,666 5,766,183
 , , (58a)(60a) (20),(21)
 , (58a)(60a) (58a)(60a) (44)(2)
 (62) (62) (58)(60) (58b)(60b) ,
 (62) 가 (58a)(60a) .
 (16) 1 (68) 2 (70) 1 (68) (16) 1
 , 2 (60) (16) 1 , (50) 72 , (50) (71)
 (68) (71)(72) (58) (64) (50) 72 , (50) (71)
 , (70) (74) (74)(76) (60) (66) (54) (76) , (54) 2
 74)) 가 가 (74) (16) 1
 (72) 2 (72)(74) (68)(70) (72)(74) (57) (44) (61) (61)(9B)
 a) (20) (tip) 9A (62) 가 (21) (60a)(58a)
 16a)(16b) , (16) () (18)
 (16) (16b) 9A (16) (10)
 (58a)(60a) (62) 가 가 (16) (57)
 , (12)(2) (44) (43)(2A) (43c)(43b) (44a)
 ,
 (16) (biocompatible)
 (16)
 9A-9A
 (22), (34) (28) (12)
 .
 9C 9D (58a) (78) (68)
 9E 9F (20) (48) (58a) (82)
) 10A 10B (21) (21a) 80 (60a) (82)
 60a) , 10C 10D (21) (52) 84 (20),(21)
 , 17A- 17H (22)
 ,
 (20) 21 (20b)(21b) 가 10E , 10E
 (196) (20),(21) (20b)(21b) (198) (58a)(60a) , (19
 6) (202) (200) 가 (200) (204) 가
 , (196) (206) , (205) (202) (200) (206)
 . (196) (206) , (208)) (198) (200) (206)
) 0.002-0.004 , 0.14-0.18 (207)
 . (20b)(21b) , 9A, 9C-9F, 10A-10D (20b)(21b)
 (200) (204)

(18) 가 (16) (18d) (16b)(9) (18b) 3 (18) (18d)
 (18c) (18c) (18a) (18a) (18b) (biocompatible)

11 14 (10) (12) (104), (102), (100) 가 , (100) (104),
 04) (106) (106) (106) (103) (102) (102) (1) (110) (110) (110)
) (110) (112) (114) (108) (108a) (102) (110) (112)
 (102) (102) (116) (114) (113) (102) (110) (112)
 (110) 가 (104) (102) (102) (114) (110) , (112) (110)
 (108) (108a) (120) (122) (109) , (120) (120) (1) (110)
 20a) (122) (122b) (122a) (123) (124) (122) (122b) (1) (102)
 , (109) (122b) (102) (124) , , , , ,
 (124) (122b) 가 (108) (109) (109) (108) 가 (109) (102)
 , (102) (108) 가 (113) (113) (123a) (120) (110)
 , (120) 가 (110) (113) (108) 가 (120) (110)
 (108) (118) (32) (104) (104) (108) (126) (126)
 (10) (125) (108) (108) (108) (10) (36) - (42)
 (126) (118) , (108) (108) (120), , , ,
 , (106) (106) 가 (116) (128) (128) (128) (108b) (128)
 (108) (108) (108) 가 (108) (127) , (128) (108) (108b)
 (106) (106) (106) (106) (106) (106) (106) (106)
 13A, 15, 16A (108a) 가 , (106) (108) (108a) (108)
 (108a) (108a) (108b) (108b) (108b) (108b) (108b) (108b)
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 132) (108) (108) (108) (108) (108) (108) (108) (108)
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 16A 16A 16A 16A 16A 16A 16A 16A
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 (136) (136) (136) (136) (136) (136) (136) (136)
 (compartment) (stop)(141) (134) (134) (134)
 (135) (135) (135) (135) (135) (135) (135) (135)

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$$34 \quad , \quad \begin{matrix} 1 & 2 \\ 1 & \end{matrix} \quad , \quad \begin{matrix} 1 & 2 & 1 & 2 \\ 1 & 2 & 1 & 2 \end{matrix} \quad , \quad \begin{matrix} 1 & 2 \\ 1 & 1 & 2 \end{matrix}$$

36.

33 , 가 , 1 2

37. 33 , 1 2 2 , 1 2 , 1

38. 1 , 1 ; 1 , 2 , 2

40. 39 , 1 2 가

41. 39 , 2 가

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43. 가 39 ,

44. 43 , 가 ,

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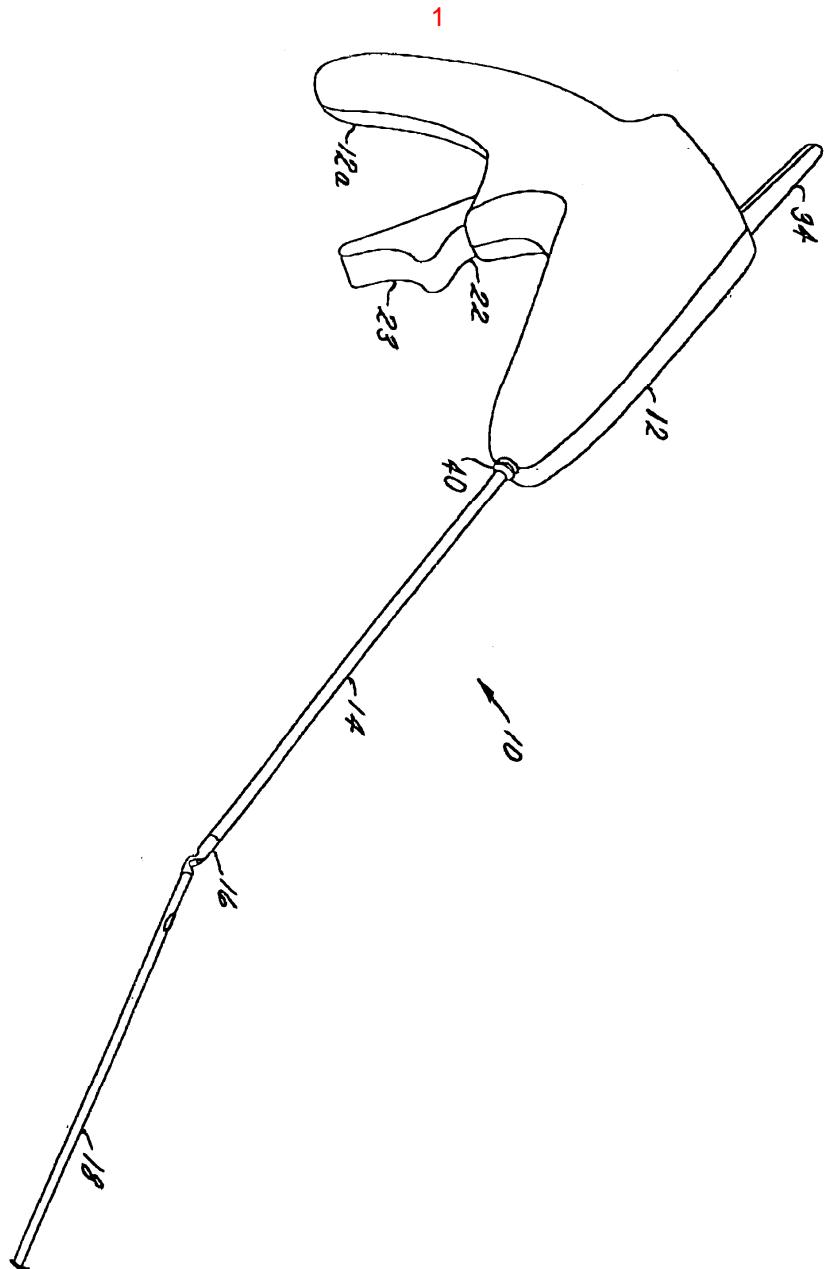
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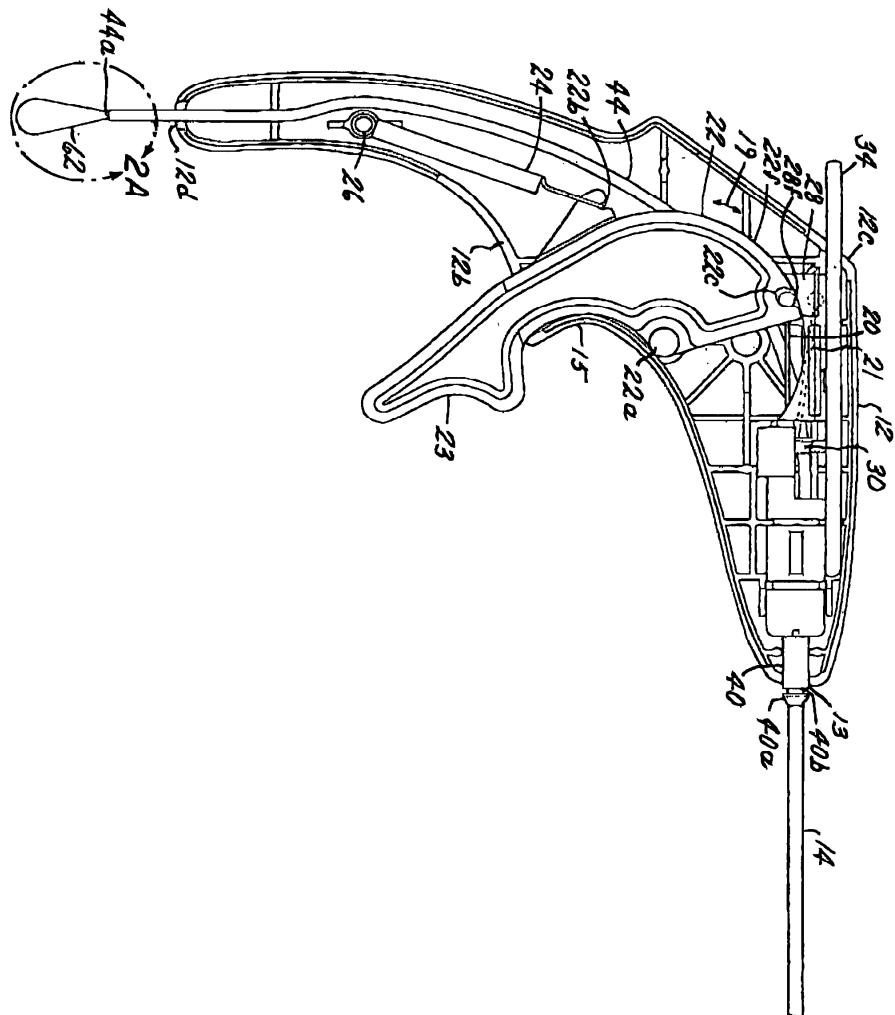
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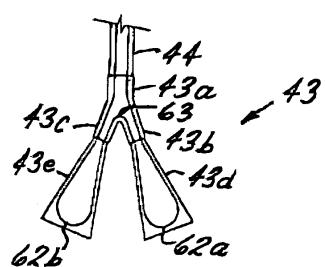
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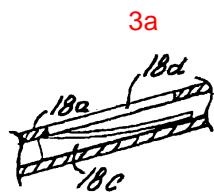
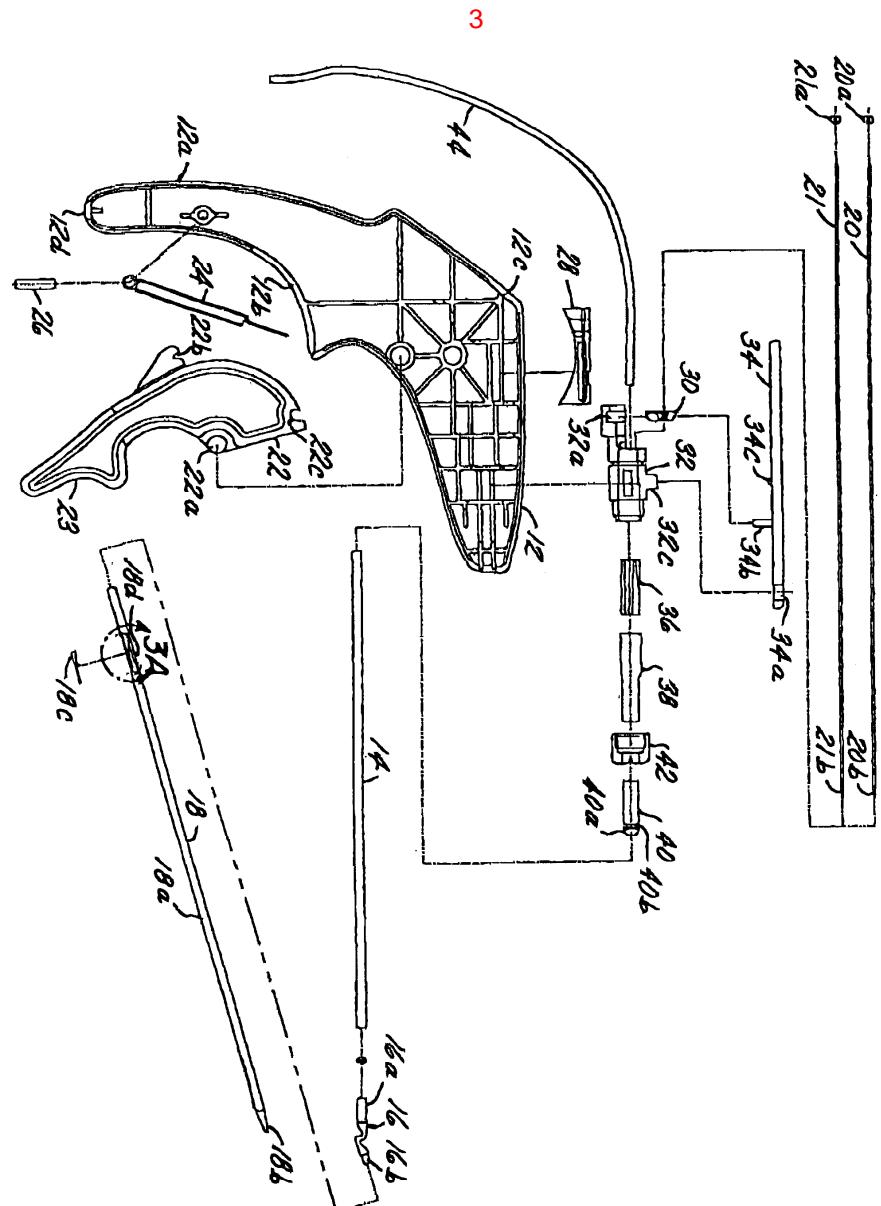


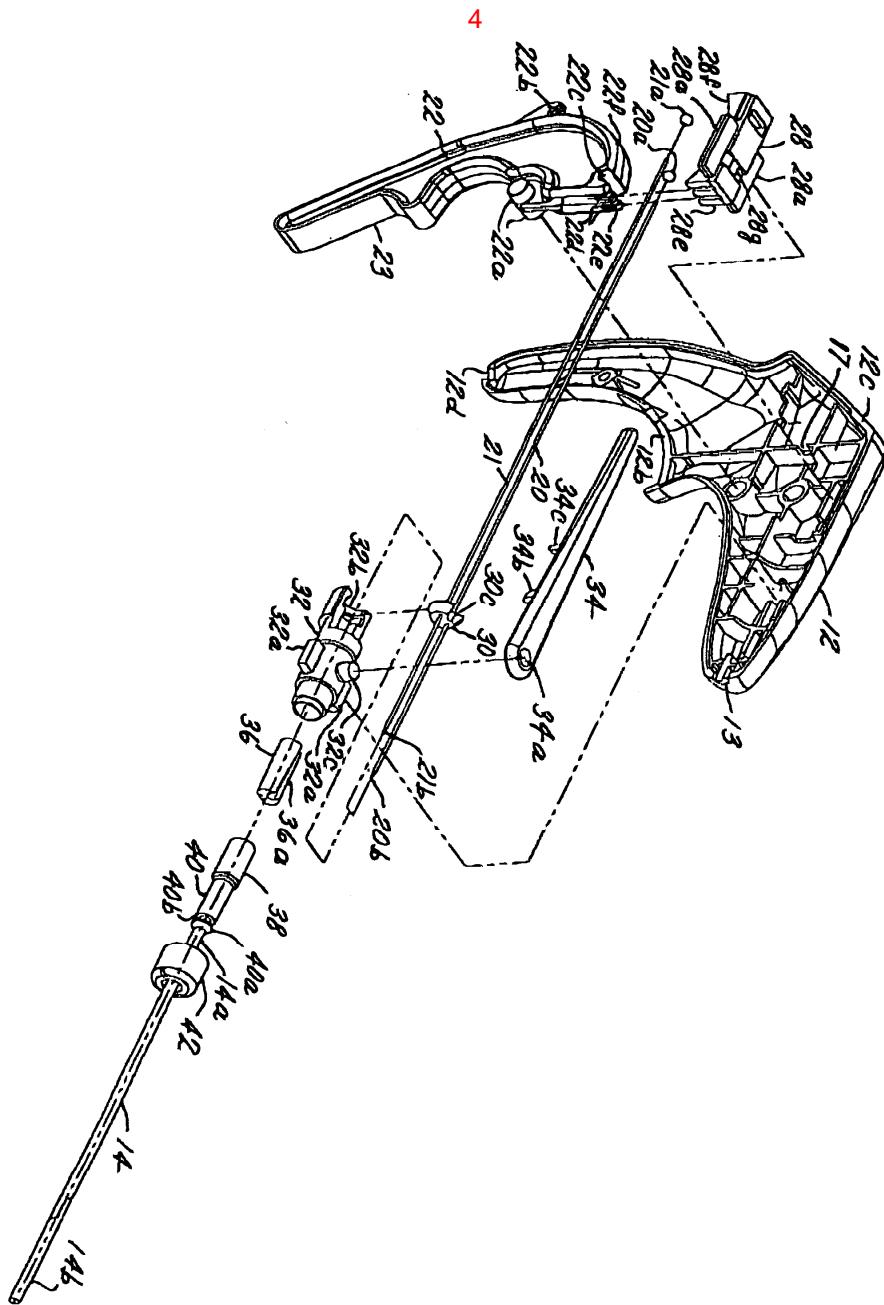
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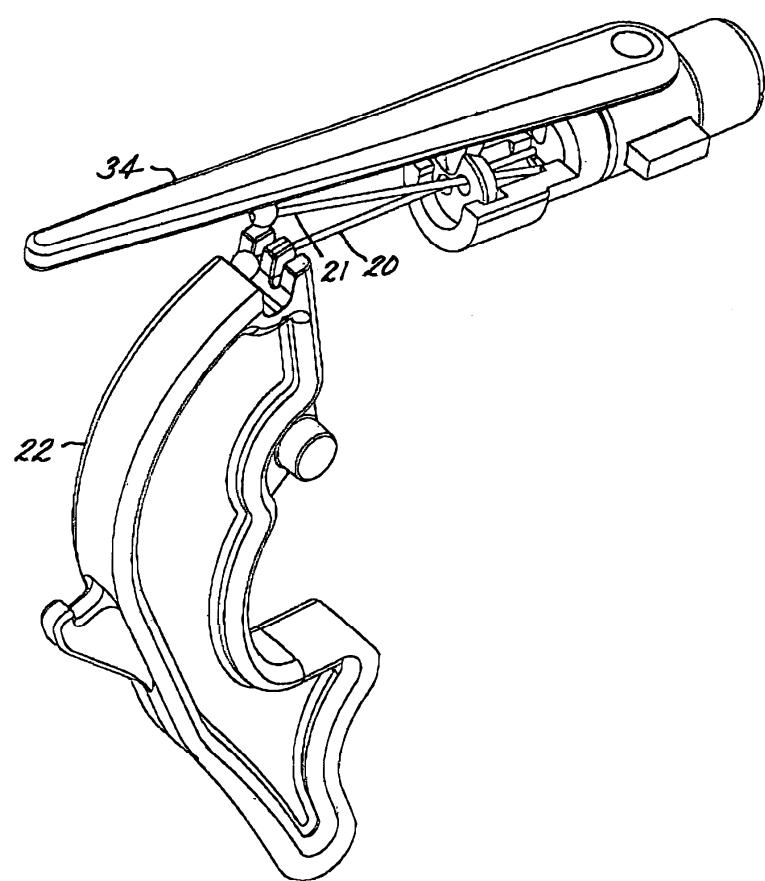
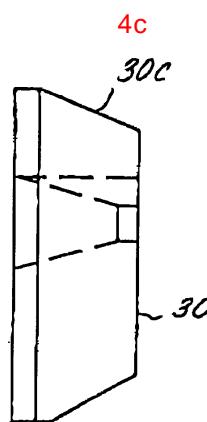
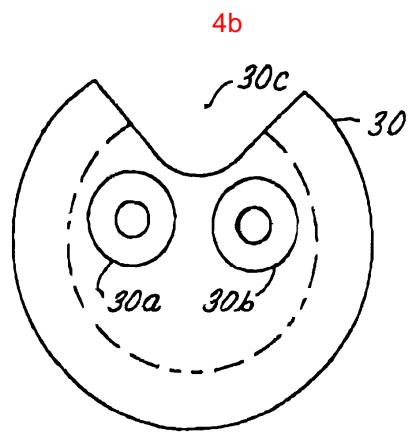


2a

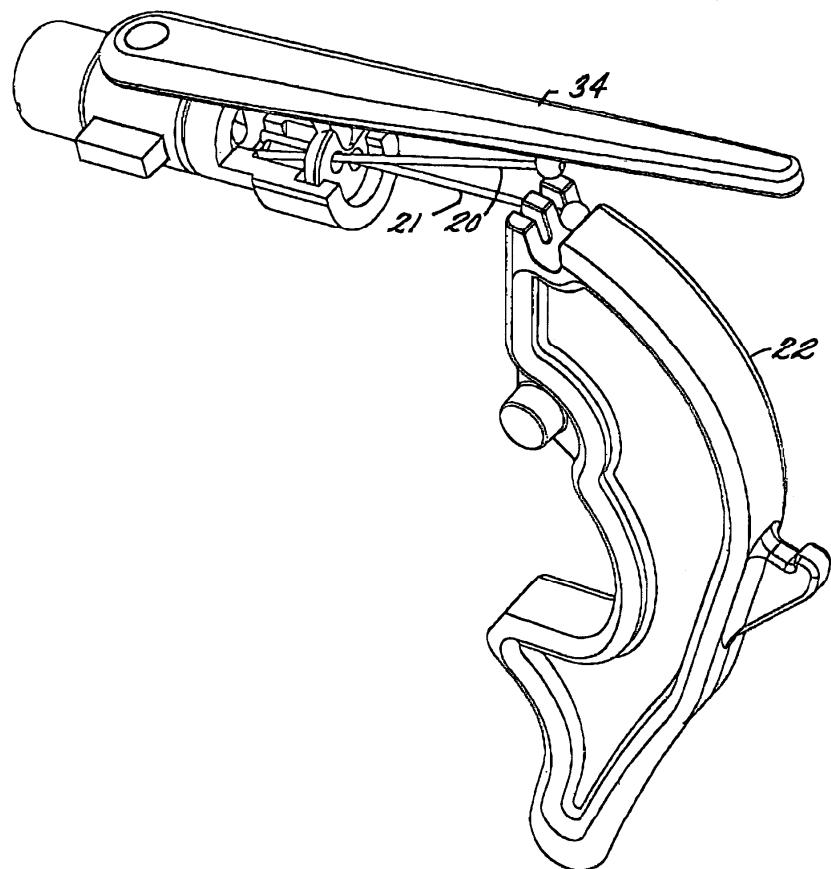




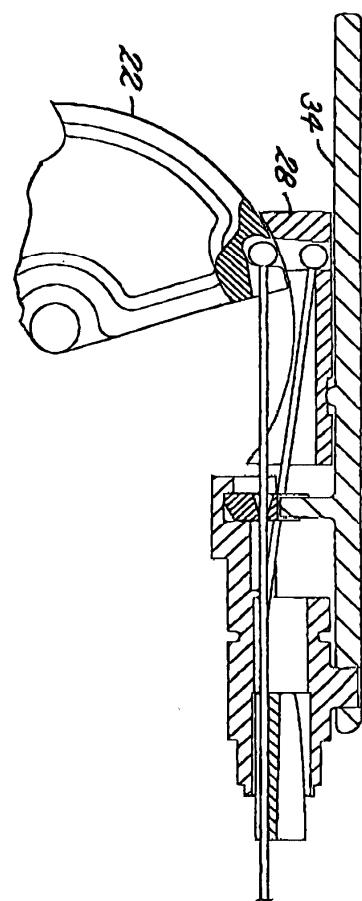




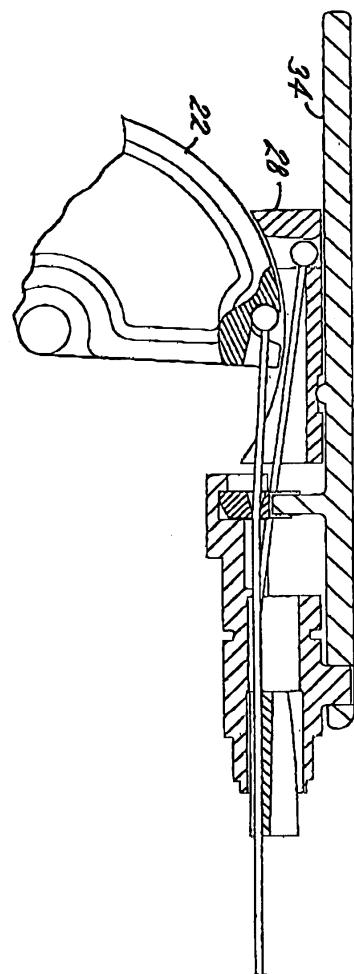
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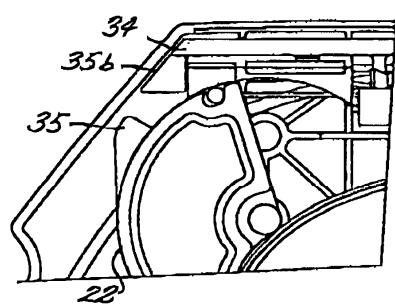
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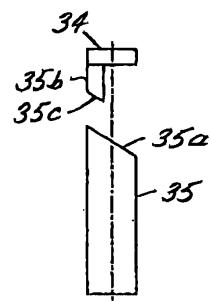
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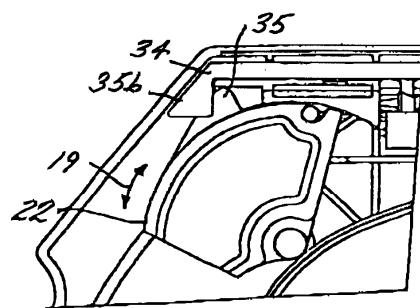
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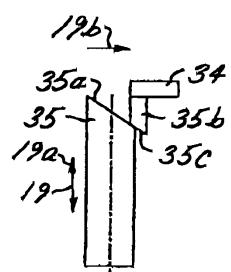
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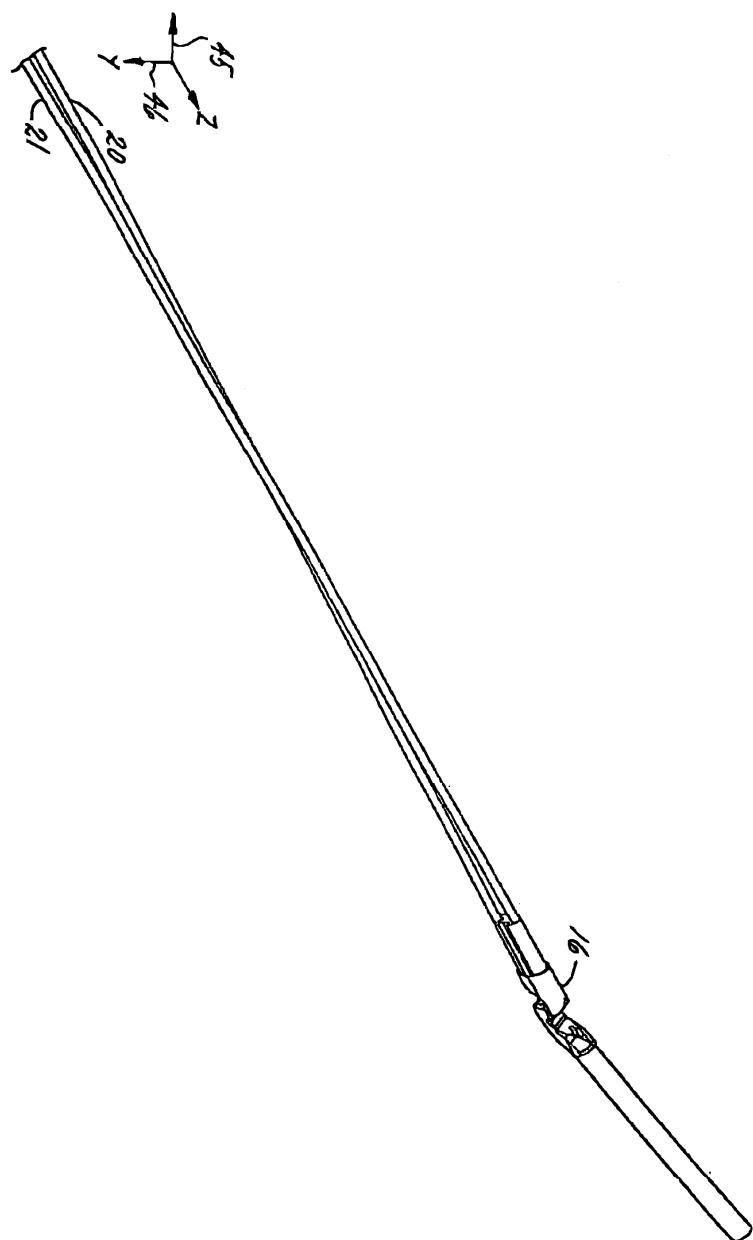
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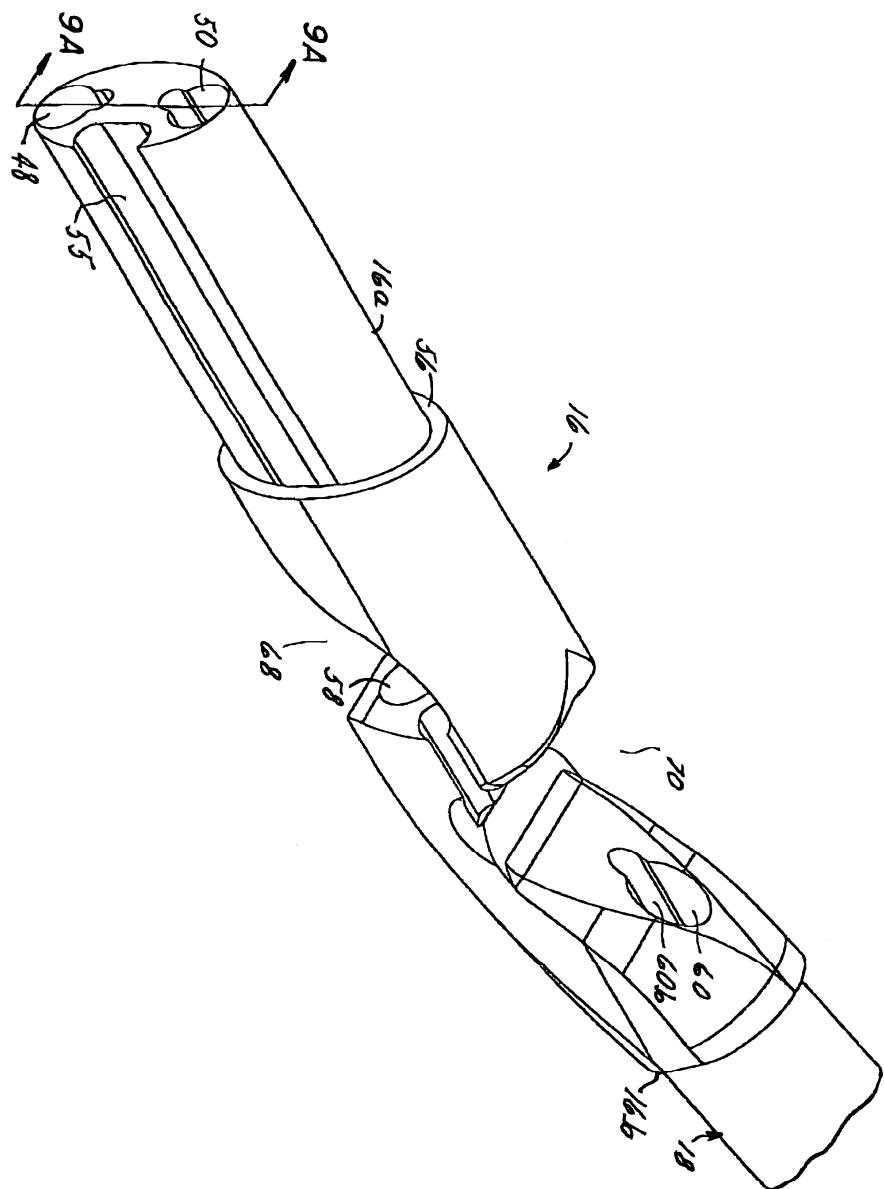


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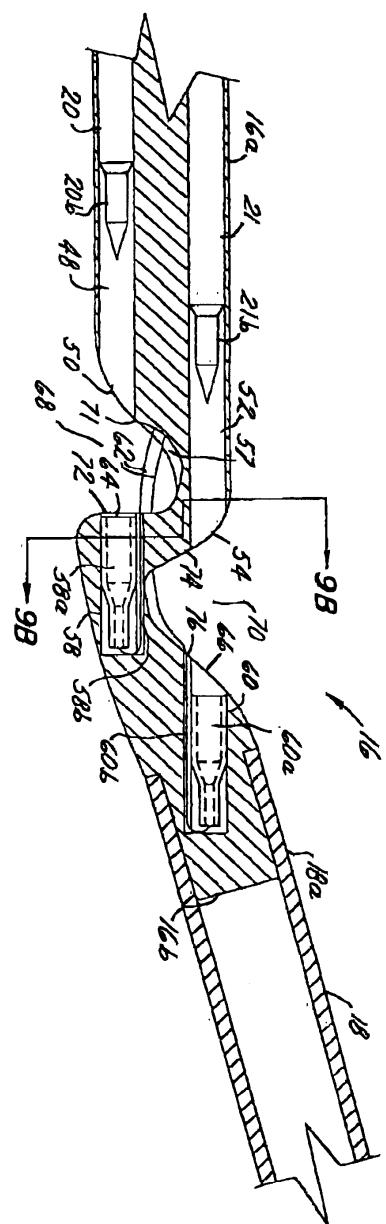


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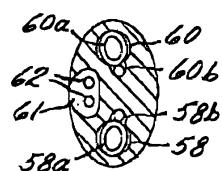


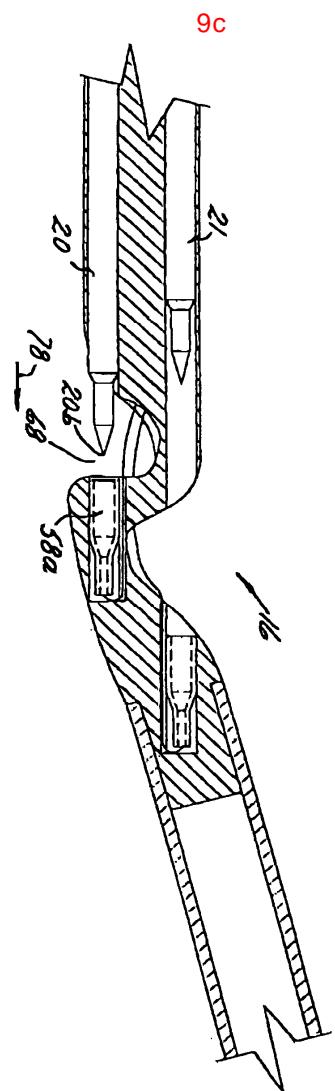


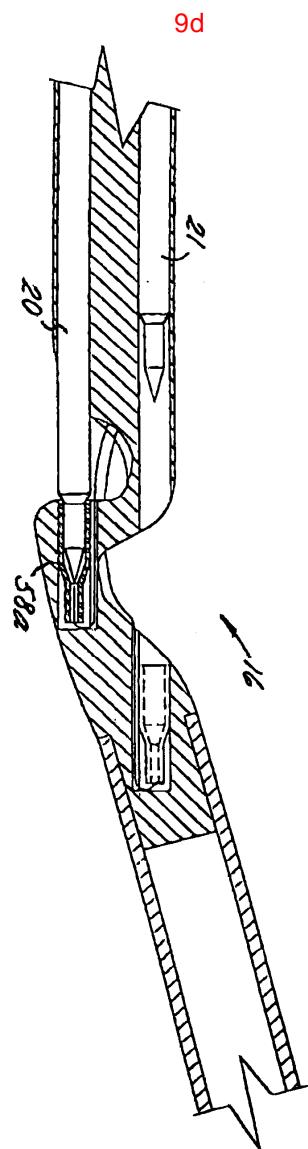
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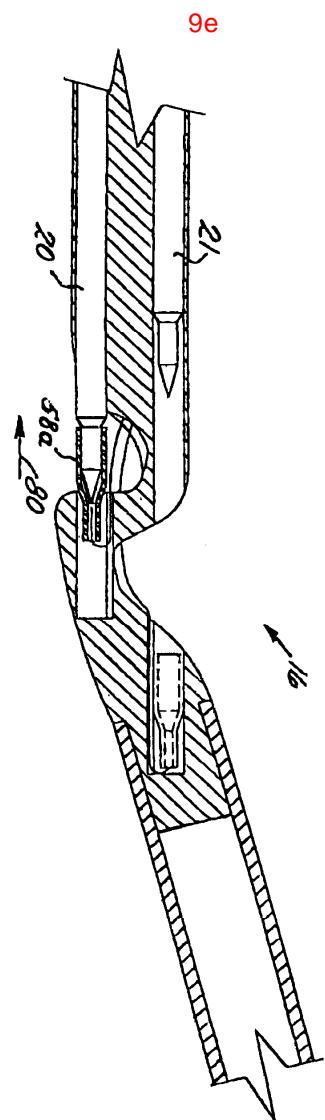


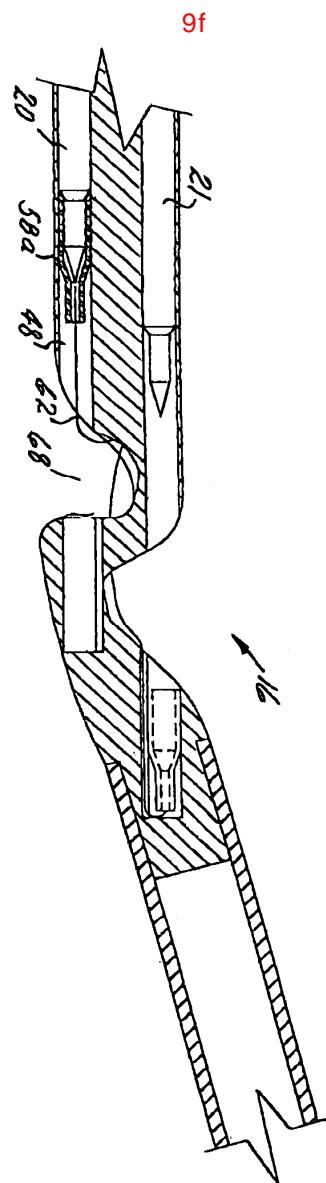
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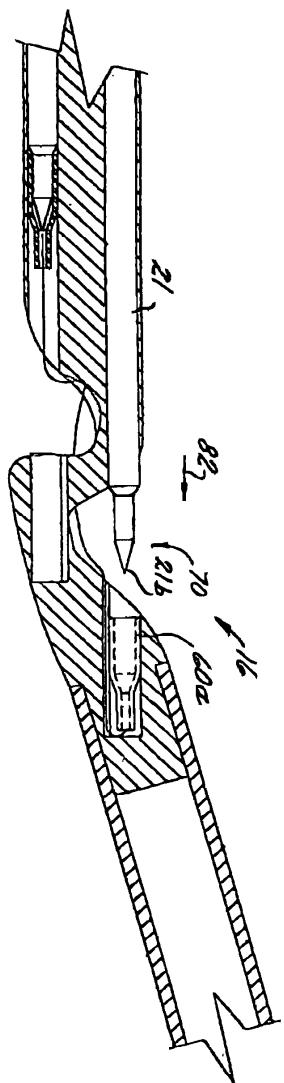




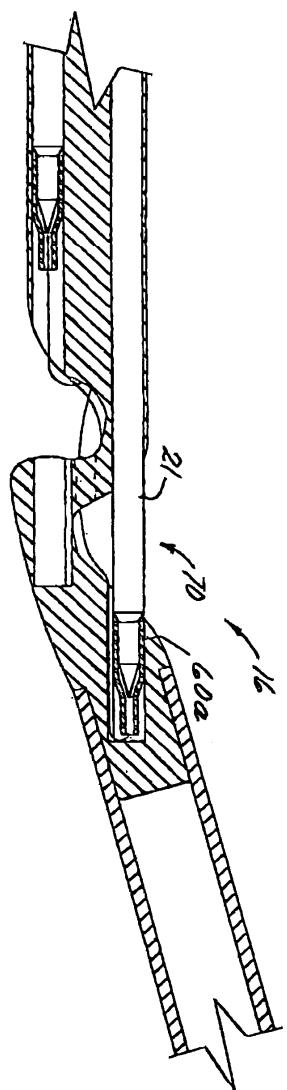




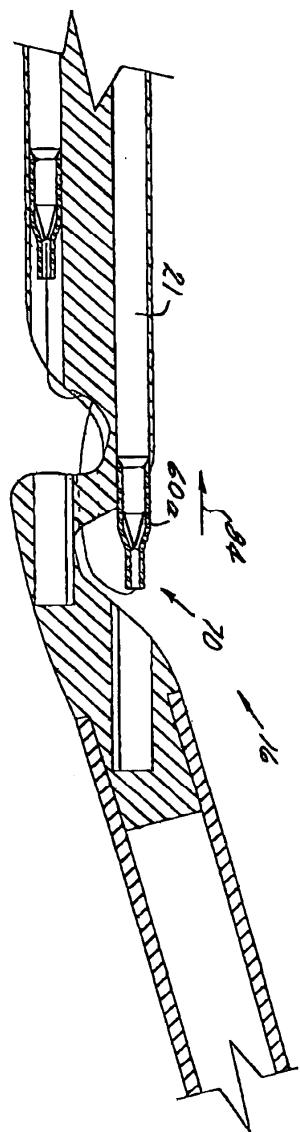
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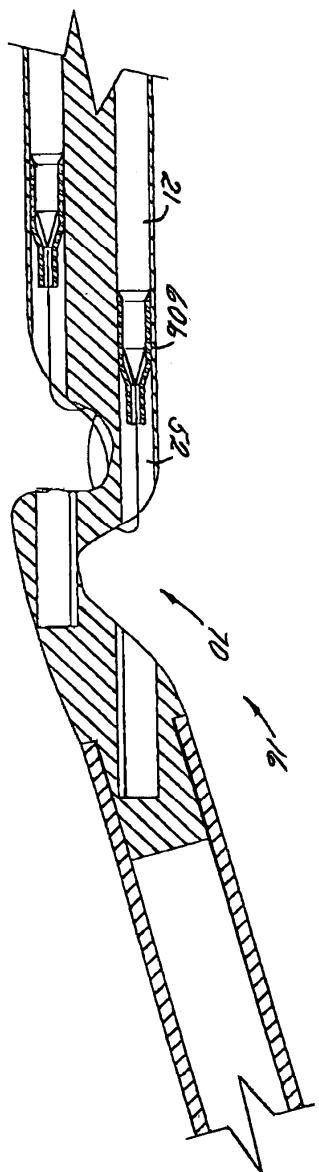
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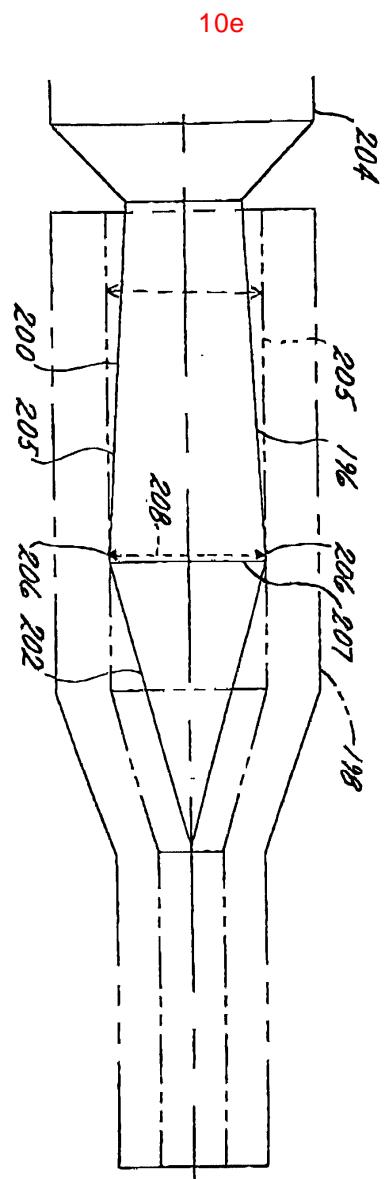


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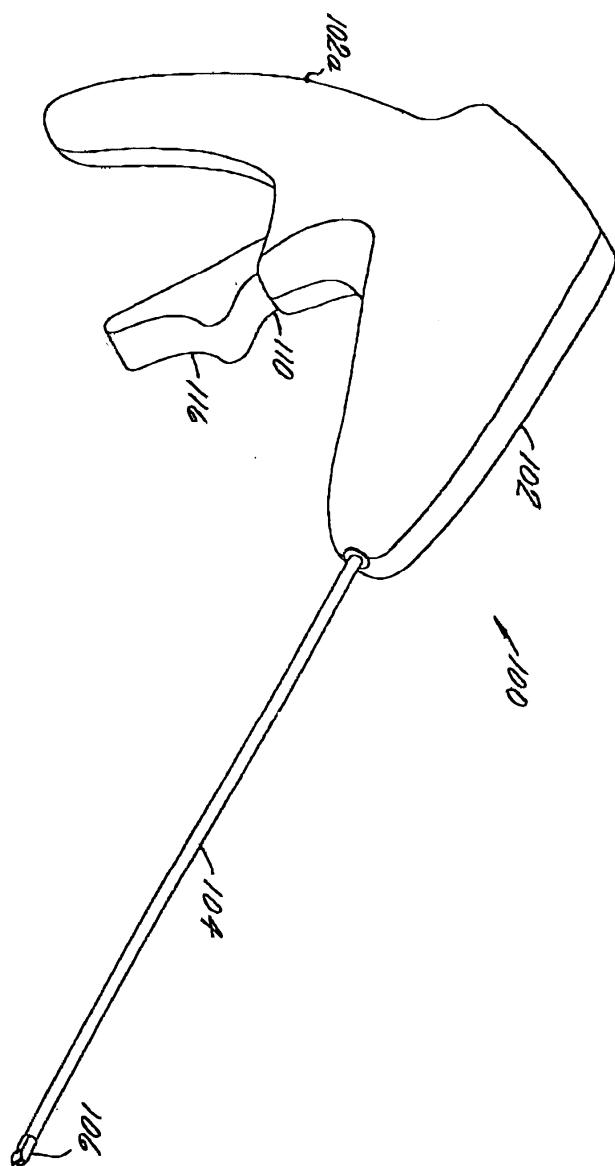


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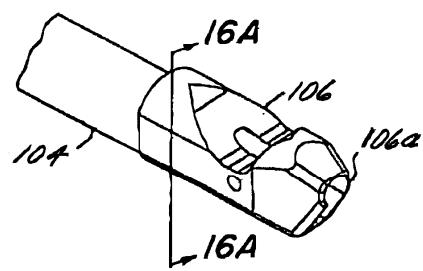




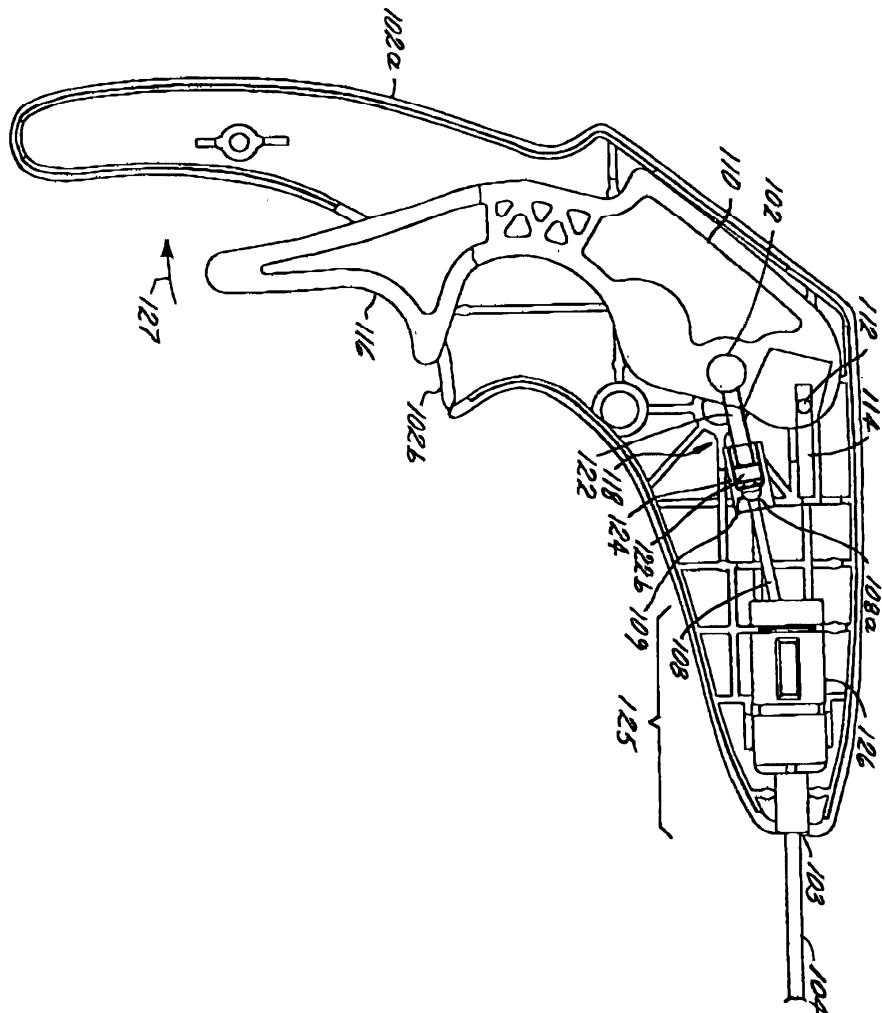
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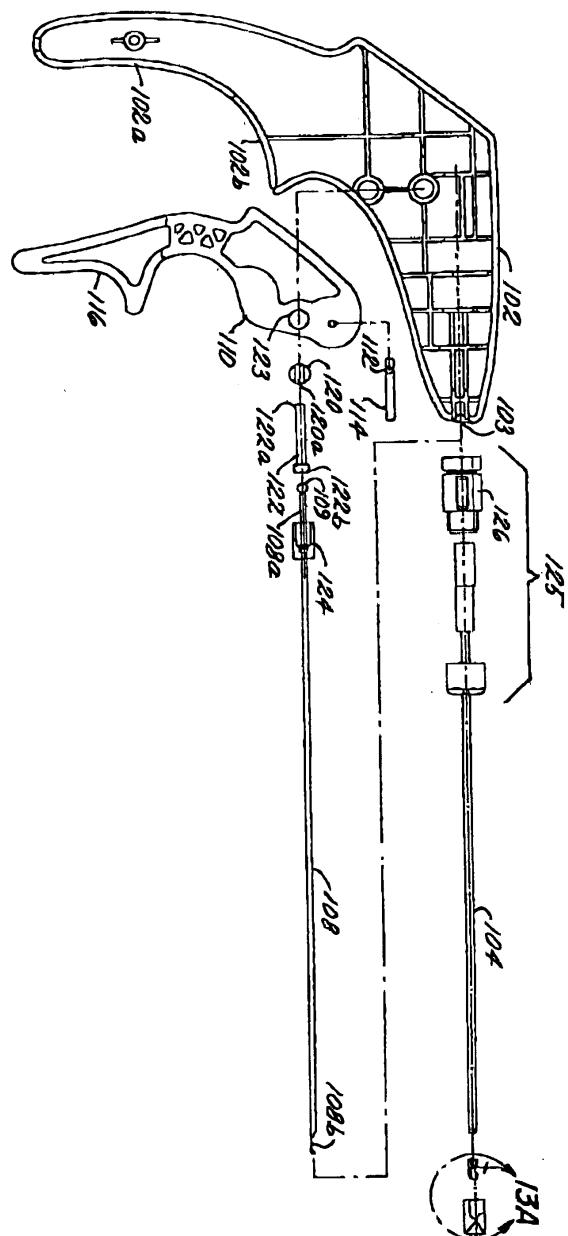
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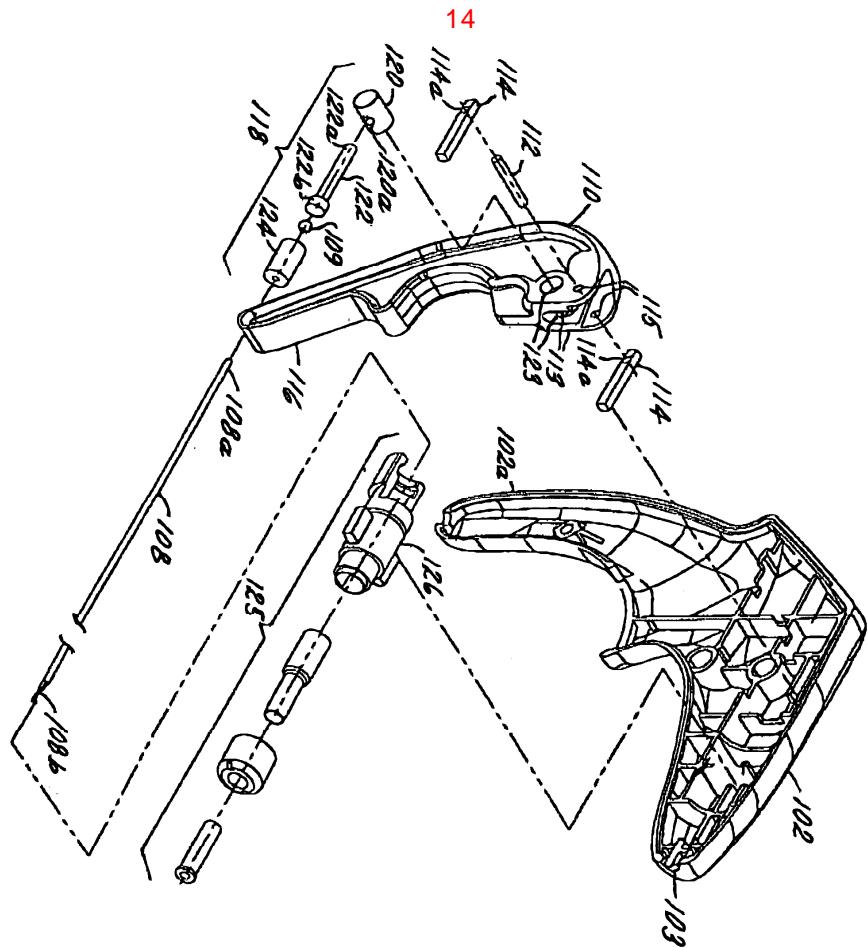


12

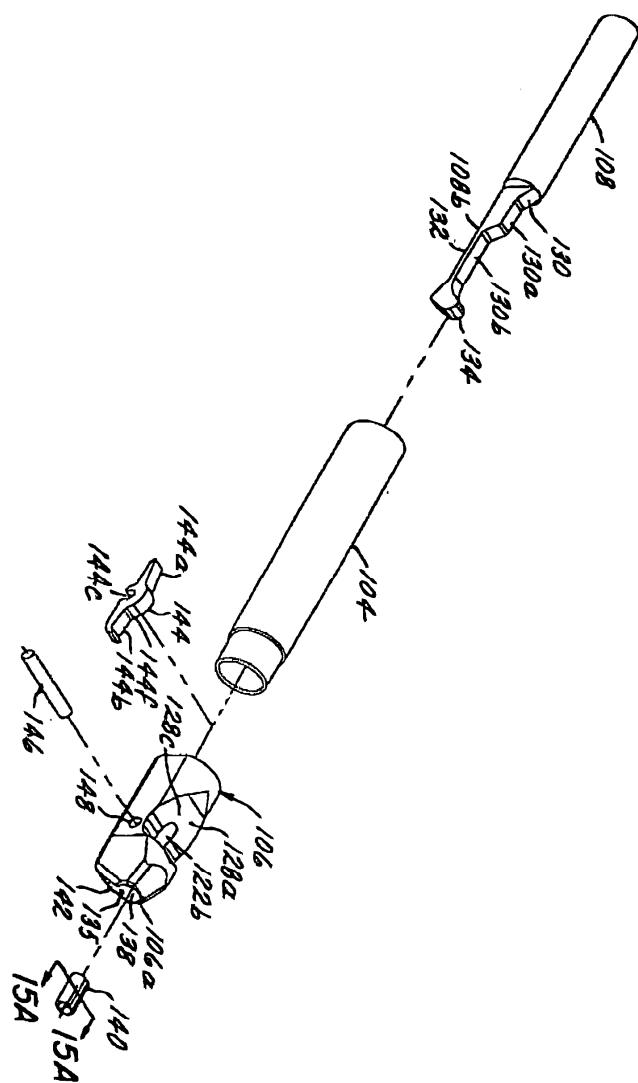


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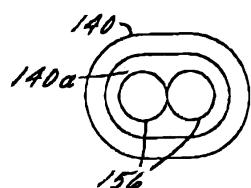


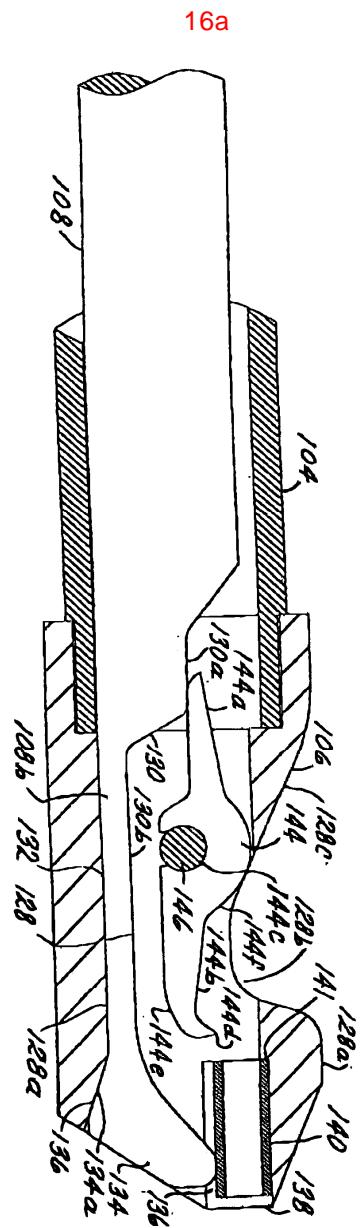


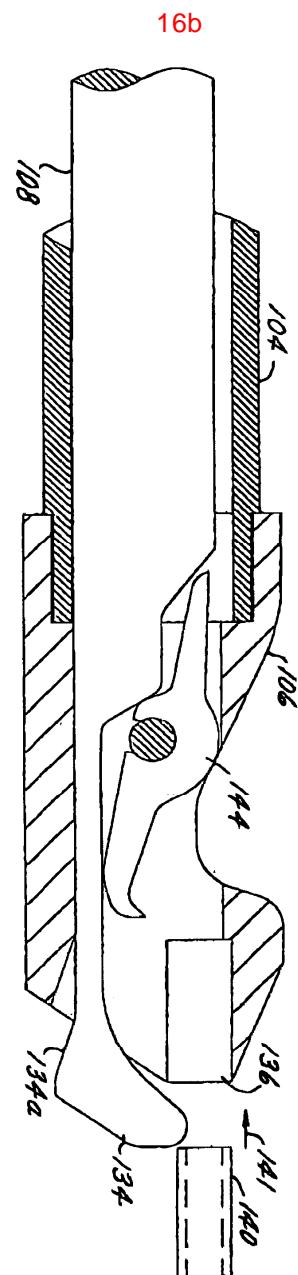
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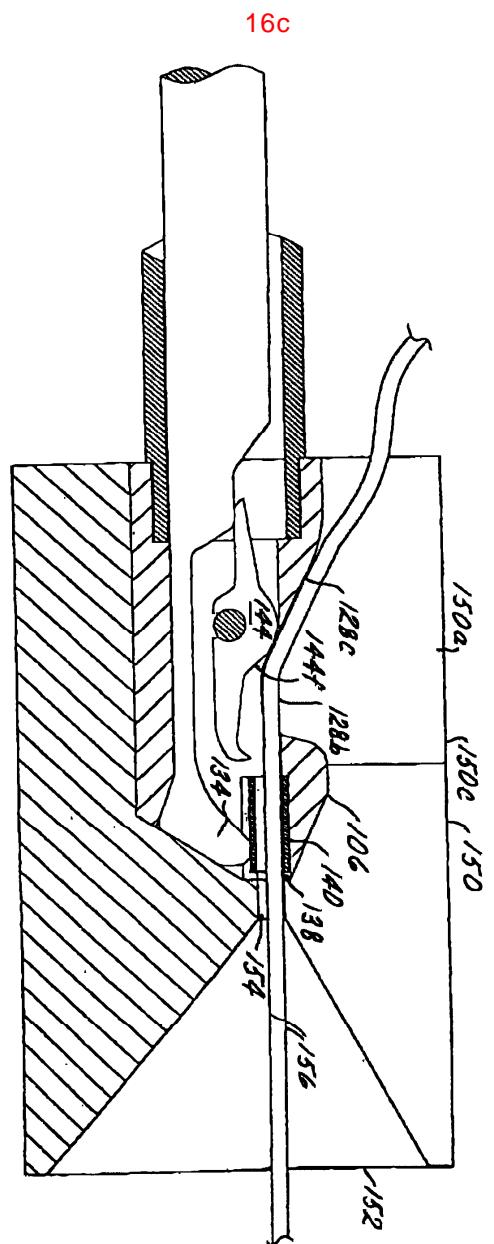


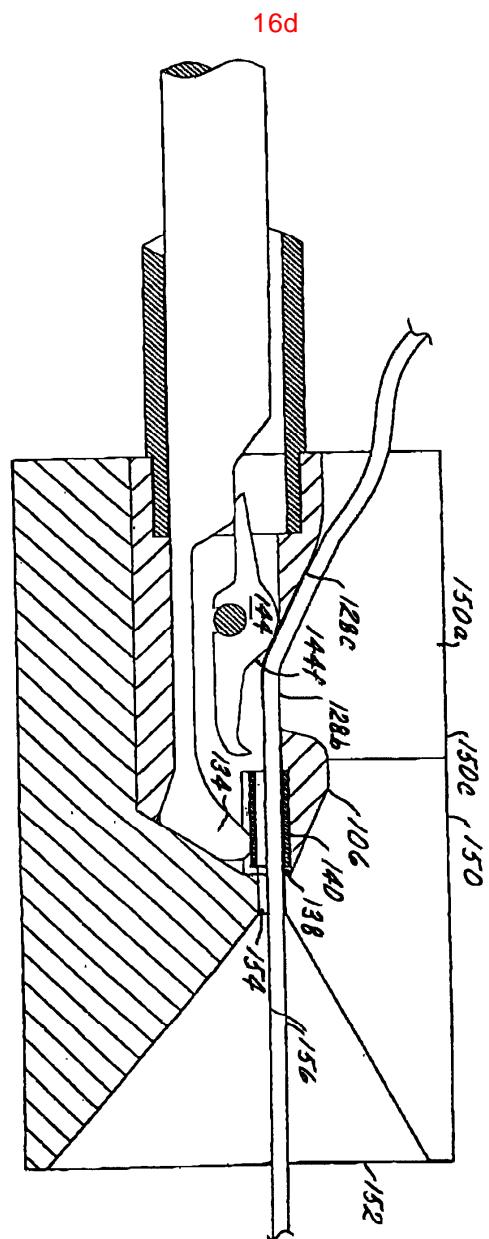
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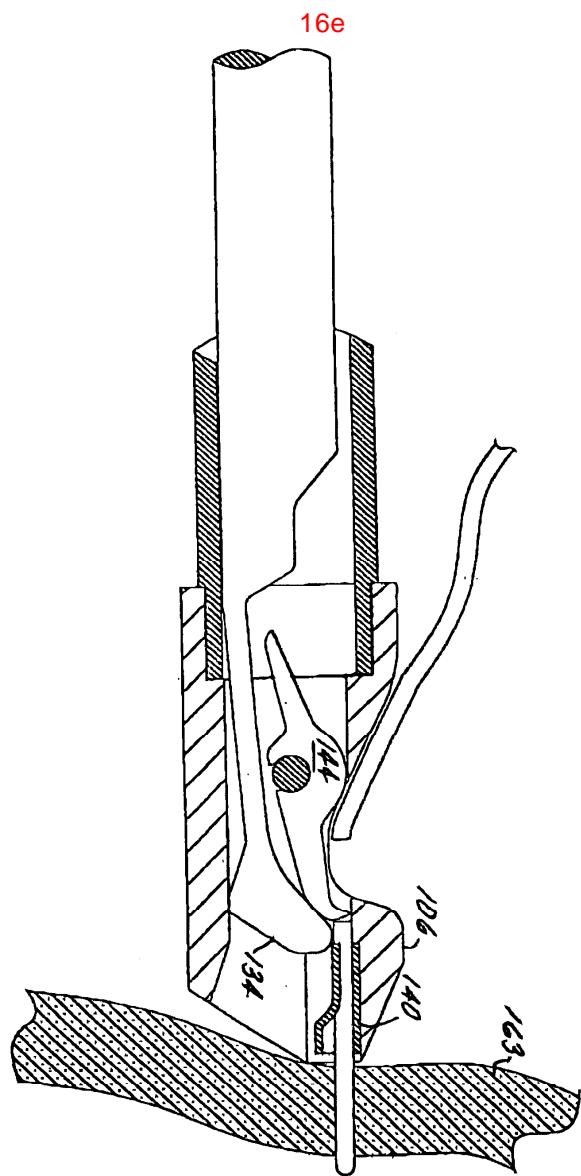


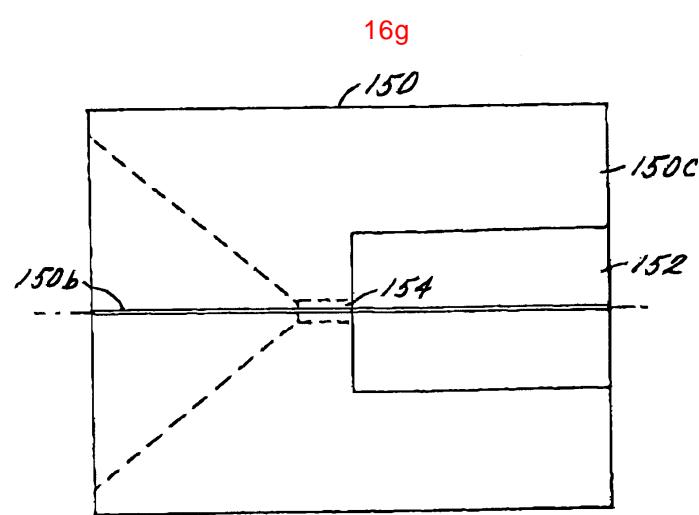
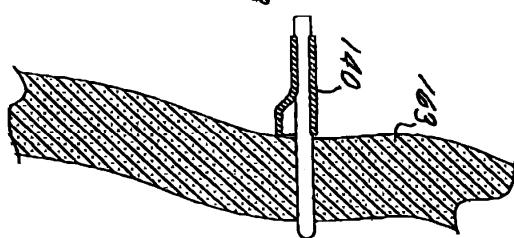
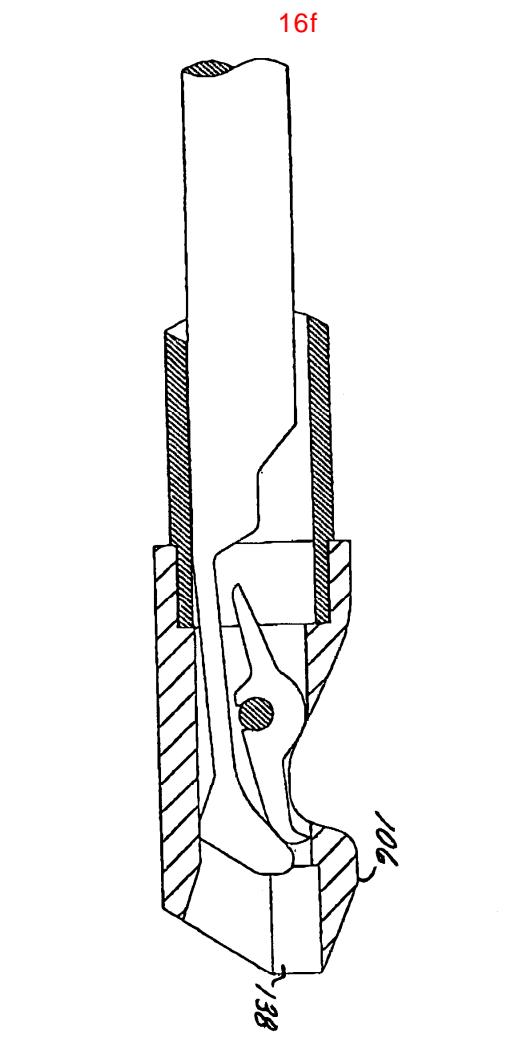




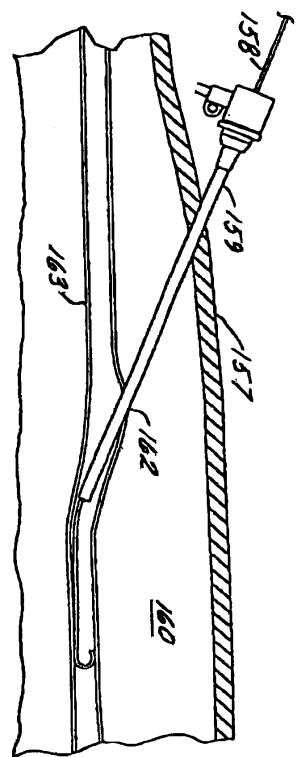




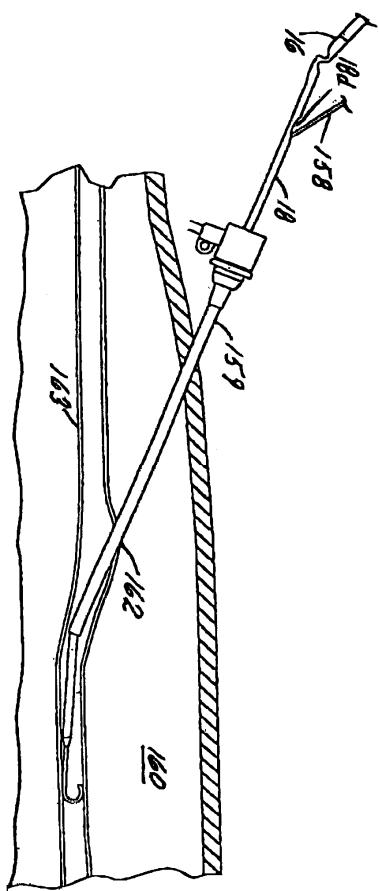




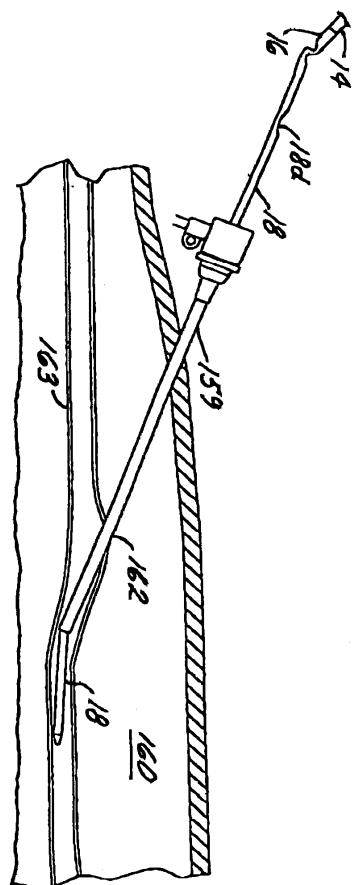
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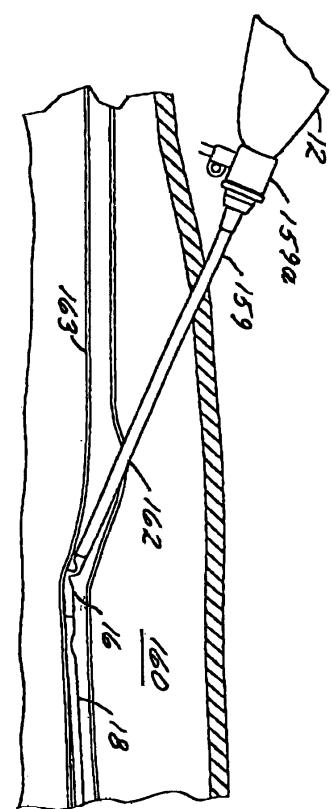
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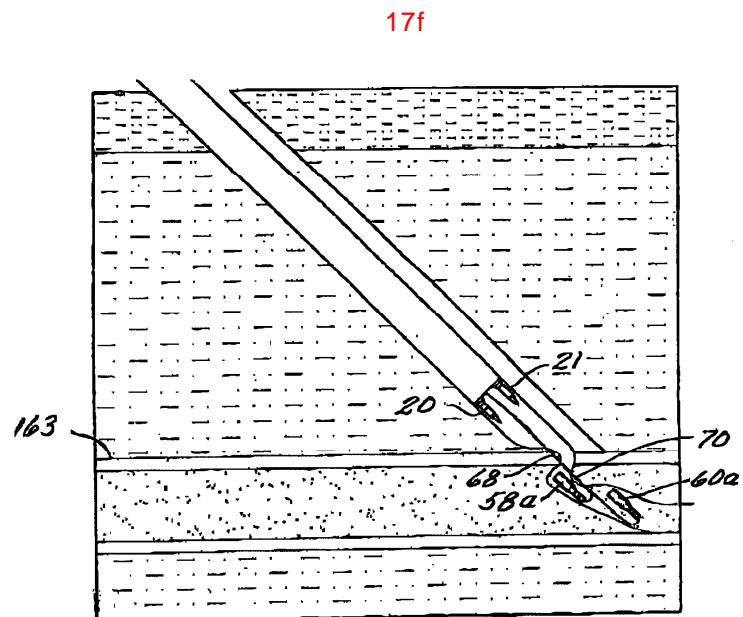
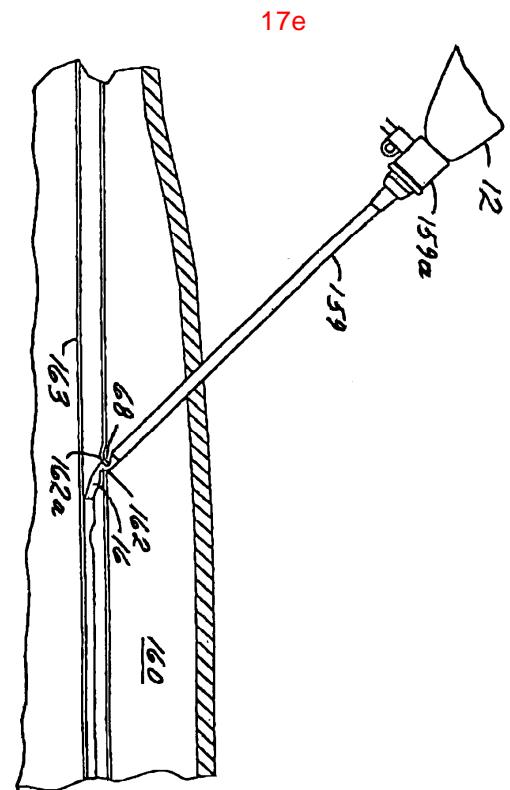


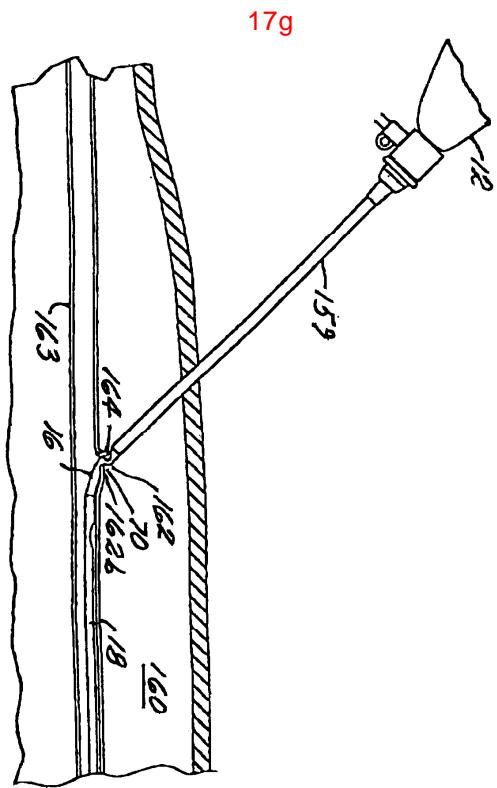
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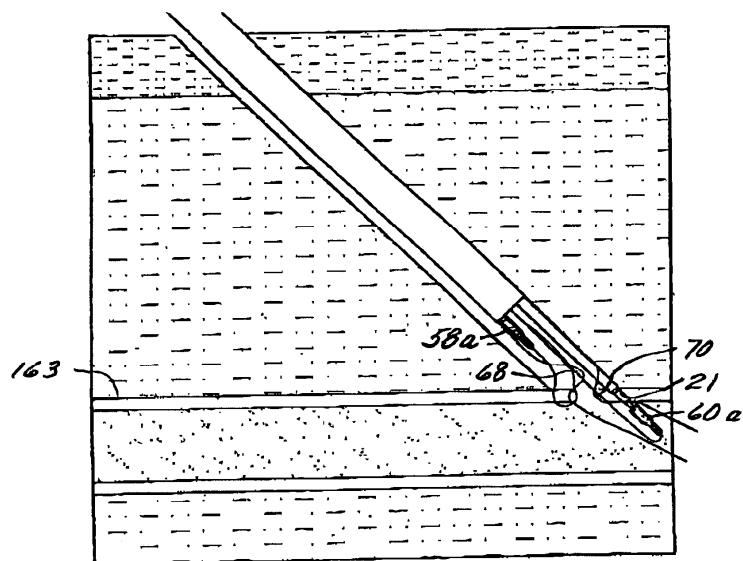
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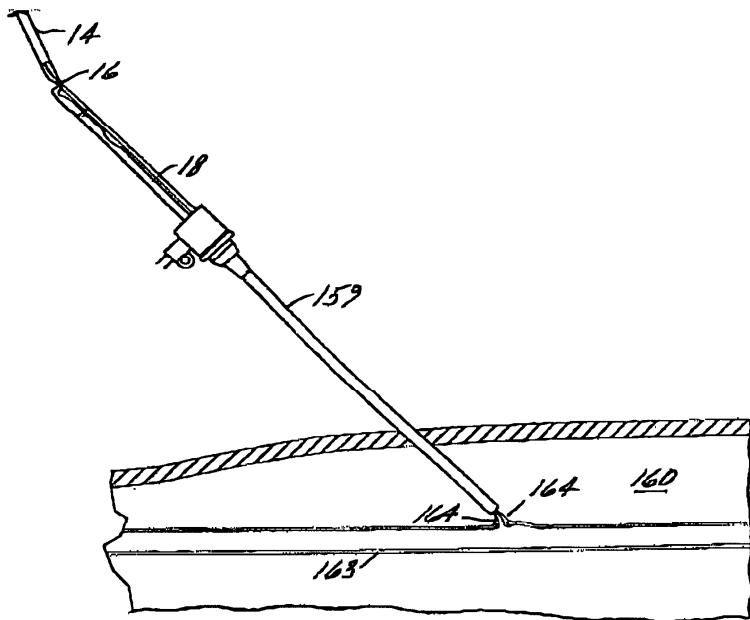




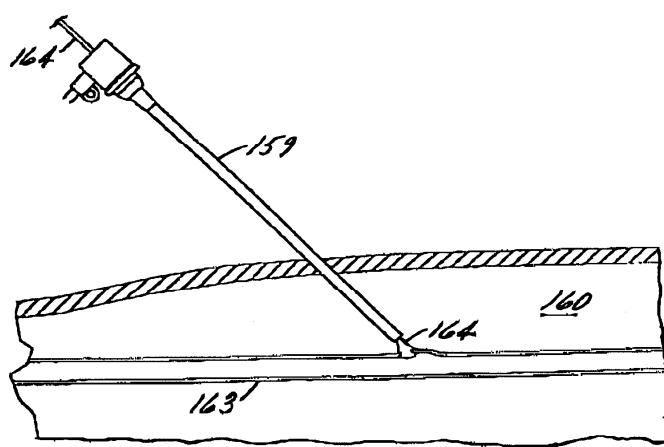
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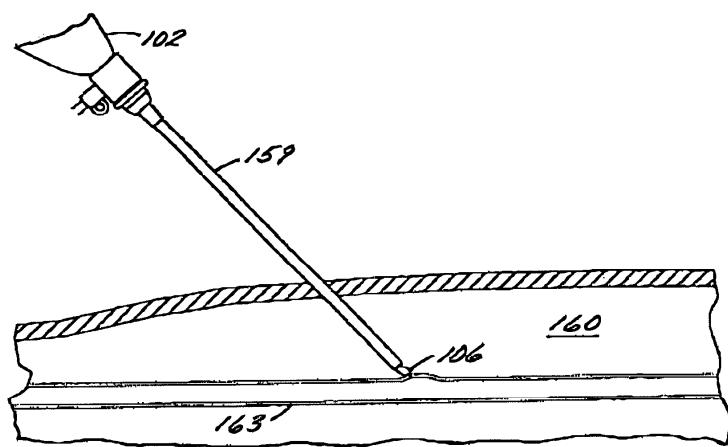
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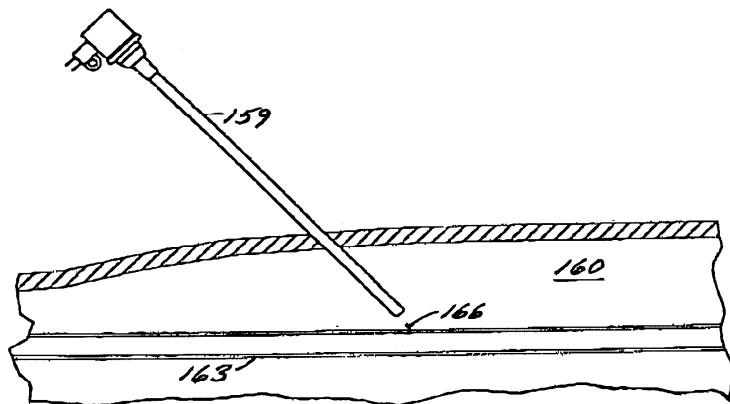
17j



17k



17l



17m

