

## SEARCH HISTORY

<b>Application Number</b>	PCT/US 19/64030
<b>Search Conducted By</b>	AAY
<b>Search Approved By</b>	SCL

<b>CPC/IPC Classifications Searched</b>	IPC (8) A61B 17/12 (2020.01) CPC: A61B 17/12009
<b>Date Conducted</b>	29 January 2020 (29.01.2020)

<b>Documentation Searched</b>	IPC (8) A61B 17/00 (2020.01) CPC: A61B 17/0485, A61B 2017/06052, A61B 2017/06052
<b>Search Terms Used</b>	tension loop around organ suture tumor curved needle pass volumetric tissue fibroid receive tensioning device wire target passer surround penetration inner flexible cannula mass necrosis arc bend flex turn twist coil wire cable string pass deliver passing elastic mass pressure force growth foreign outer first second body tube tip distal end
<b>Date Conducted</b>	29 January 2020 (29.01.2020)

<b>Electronic Database Searched</b>	PatBase
<b>Files Searched</b>	Full-text: AU BE BR CA CH CN DE DK EP ES FI FR GB IN JP KR SE TH TW US WO Bibliographic: (European) AT BA BE BG CH CS CY CZ DD DK EE ES FI GE GR HR HU IE IS IT LT LU LV MC MD MT NL NO PL PT RO RS SE SI SK SM TR UA YU (Asia) EA GC HK ID IL IN KZ MN MY PH RU SG SU TH TJ TW UZ VN (North America) CA CR CU DO GT HN MX NI PA SV TT (South America) AR BR CL CO EC PE UY (Australasia) AU NZ (Africa) AP DZ EG KE MA MW OA ZA ZM ZW
<b>Date Conducted</b>	29 January 2020 (29.01.2020)

**Search Logic:**

- Search 1: PN=(US20110245850) (Results 1)
- Search 2: ctf 1 OR ctb 1 (Results 159)
- Search 3: 2 AND FT=(curve# NEAR (needle# OR cannula#)) (Results 45)
- Search 4: PN=(US2010198235) (Results 1)
- Search 5: ctf 4 OR ctb 4 (Results 30)
- Search 6: 5 AND FT=((curv\* OR arc\* OR bend# OR flex OR turn# OR twist# OR coil#) NEAR (needle# OR cannula#)) (Results 12)
- Search 7: CPC=(A61B2017/06052) (Results 691)
- Search 8: FT=((suture# OR wire# OR cable# OR string#) NEAR (needle# OR cannula#)) (Results 31164)
- Search 9: 8 AND FT=((pass# OR tension# OR deliver#) NEAR (suture# OR wire# OR cable# OR string#)) (Results 8849)
- Search 10: 9 AND FT=((curv\* OR arc\* OR bend# OR flex OR turn# OR twist# OR coil#) NEAR (needle# OR cannula#)) (Results 2763)
- Search 11: 10 AND FT=((suture# OR wire# OR cable# OR string#) NEAR (passer OR passing)) (Results 1056)
- Search 12: 11 AND FT=((flex\* OR elastic\*) NEAR (needle# OR cannula#)) (Results 310)
- Search 13: 12 AND ft=((suture# OR wire# OR cable# OR string#) near (target OR tissue OR mass OR tumor OR fibroid)) (Results 244)
- Search 14: 7 AND 11 (Results 120)
- Search 15: 8 AND FT=((suture# OR wire# OR cable# OR string#) NEAR (tension# OR pressure# OR force#)) (Results 5360)
- Search 16: 15 AND FT=((tension# OR pressure# OR force#) NEAR (fibroid OR tumor)) (Results 9)
- Search 17: 7 AND 15 (Results 236)
- Search 18: 7 AND FT=((suture# OR wire# OR cable# OR string#) near (mass OR tumor OR fibroid)) (Results 11)
- Search 19: CPC=(A61B17/0485) (Results 630)
- Search 20: 19 AND 15 (Results 188)
- Search 21: 20 AND FT=((curv\* OR arc\* OR bend# OR flex# OR turn# OR twist# OR coil#) NEAR (needle# OR cannula#)) (Results 100)
- Search 22: FT=(pass# NEAR suture#) (Results 7870)
- Search 23: 22 AND FT=(suture# NEAR tension#) (Results 2225)
- Search 24: 23 AND FT=((curv\* OR arc\* OR bend# OR flex# OR turn# OR twist# OR coil#) NEAR (needle# OR cannula#)) (Results 598)
- Search 25: 24 AND FT=((suture# OR wire# OR cable# OR string#) near (mass OR tumor OR fibroid) OR organ OR target OR growth OR foreign) (Results 149)
- Search CPC=(A61B2017/06052) (Results 691)

26:

Search 26 AND FT=((curv\* OR arc\* OR bend# OR flex# OR turn# OR twist# OR coil#)  
27: NEAR (needle# OR cannula#)) (Results 332)

Search 27 AND FT=(((inner AND outer) OR (first AND second)) NEAR (needle# OR  
28: cannula#)) (Results 95)

Search PN=(US2006178679) (Results 1)  
29:

Search ctf 29 OR ctb 29 (Results 36)  
30:

Search 30 AND FT=((suture# OR wire# OR cable# OR string#) near (mass OR tumor OR  
31: fibroid) OR organ OR target OR growth OR foreign) (Results 1)

Search 30 AND FT=((suture# OR wire# OR cable# OR string#) near (mass OR tumor OR  
31: fibroid OR organ OR target OR growth OR foreign)) (Results 1)

Search ic=(A61B17/12) (Results 17400)  
32:

Search 32 and ft=(((inner AND outer) OR (first AND second)) NEAR (needle# OR cannula#))  
33: (Results 215)

Search 33 AND FT=(((inner AND outer) OR (first AND second)) NEAR (needle# OR  
34: cannula#)) (Results 215)

Search 33 AND FT=((curv\* OR arc\* OR bend# OR flex# OR turn# OR twist# OR coil#)  
34: NEAR (needle# OR cannula# OR body or tube# or tip or distal# or end)) (Results 174)

Search 34 AND FT=((suture# OR wire# OR cable# OR string#) near (mass OR tumor OR  
35: fibroid OR organ OR target OR growth OR foreign)) (Results 37)

Search FT=((suture# OR wire# OR cable# OR string#) NEAR (ligat\* AND (mass OR tumor  
36: OR fibroid OR organ OR target OR growth OR foreign))) (Results 33)

Search 32 AND FT=((curv\* OR arc\* OR bend# OR flex# OR turn# OR twist# OR coil#)  
37: NEAR (needle# OR cannula# OR body or tube# or tip or distal# or end)) (Results 4723)

Search 37 AND FT=(ligat\* NEAR (mass OR tumor OR fibroid OR organ OR target OR  
38: growth OR foreign)) (Results 90)

Search PN=(US2007260112) (Results 1)  
39:

Search ctf 39 or CTB 39 (Results 147)  
40:

Search 40 AND FT=((suture# OR wire# OR cable# OR string# OR ligat\*) NEAR (mass OR  
41: tumor OR fibroid OR organ OR target OR growth OR foreign)) (Results 11)

Search PN=(US8808313) (Results 1)  
42:

Search ctf 42 OR ctb 42 (Results 41)  
43:

Search CPC=(A61B17/12009) (Results 679)  
44:

Search 44 AND FT=((curv\* OR arc\* OR bend# OR flex# OR turn# OR twist# OR coil#)  
45: NEAR (needle# OR cannula# OR body or tube# or tip or distal# or end)) (Results 206)

Search 45 AND FT=((needle# OR cannula# OR tube# OR tip# OR distal#) NEAR (suture# OR  
46: wire# OR cable# OR string# OR ligat\*)) (Results 90)

Search 47: PN=(US20170128062) (Results 1)

Search 48: ctf 47 OR ctb 47 (Results 6)

Search 49: IC=(A61B17/00) (Results 68856)

Search 50: 49 AND FT=((suture# OR wire# OR cable# OR string# OR ligat\*) NEAR (mass OR tumor OR fibroid OR organ OR target OR growth OR foreign)) (Results 1420)

Search 51: 50 AND FT=((suture# OR wire# OR cable# OR string#) NEAR (ligat\* AND (mass OR tumor OR fibroid OR organ OR target OR growth OR foreign))) (Results 14)

Search 52: 50 AND FT=((curv\* OR arc\* OR bend# OR flex# OR turn# OR twist# OR coil#) NEAR (needle# OR cannula#)) (Results 329)

Search 53: 52 AND FT=((tension# OR pressure# OR force#) NEAR (fibroid OR tumor)) (Results 1)

Search 54: 52 AND FT=(ligat\*) (Results 74)

<b>Electronic Database Searched</b>	Google
<b>Files Searched</b>	Google Web
<b>Date Conducted</b>	29 January 2020 (29.01.2020)
<b>Search Logic:</b>	

tension loop around organ  
About 8,050,000 results (0.59 seconds)

tension suture around tumor  
About 689,000 results (0.50 seconds)

curved needle pass tension suture around target  
About 571,000 results (0.72 seconds)

curved needle pass tension member around volumetric tissue  
About 5,000,000 results (0.88 seconds)

curved needle tension around fibroid  
About 327,000 results (0.68 seconds)

curved needle pass tension wire around fibroid  
About 7 results (0.76 seconds)

curved needle pass wire around tissue  
About 7,270,000 results (0.64 seconds)

needle receive curved needle for tensioning tissue  
About 488,000 results (0.77 seconds)

needle receive curved needle pass needle around tissue  
About 9,550,000 results (0.67 seconds)

<b>Electronic Database Searched</b>	Google
<b>Files Searched</b>	Google Scholar
<b>Date Conducted</b>	29 January 2020 (29.01.2020)
<b>Search Logic:</b>	
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device pass tension wire around tissue  
About 31,000 results (0.11 sec)

curved needle pass tension wire around tissue  
About 19,900 results (0.10 sec)

curved needle pass tension wire around target fibroid  
About 890 results (0.13 sec)

curved needle tension wire passer  
About 3,450 results (0.10 sec)

curved needle surround target tissue tension wire passer  
About 346 results (0.06 sec)

<b>Electronic Database Searched</b>	Google
<b>Files Searched</b>	Google Patents
<b>Date Conducted</b>	29 January 2020 (29.01.2020)
<b>Search Logic:</b>	
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penetration needle inner curved needle wire passer  
About 3,330 results (0.44 seconds)

curved needle wire passer  
About 5,660 results (0.43 seconds)

flexible curved needle tension suture passer  
About 6,130 results (0.38 seconds)

cannula receive flexible curved needle  
About 46,900 results (0.34 seconds)

flexible curved needle pass wire around tissue target  
About 41,000 results (0.48 seconds)

flexible curved needle pass suture around fibroid  
About 1,670 results (0.31 seconds)

flexible curved needle tension member passer  
About 4,300 results (0.66 seconds)

curved needle surround tissue target pass tension member  
About 27,800 results (0.52 seconds)

curved needle surround tissue mass tension wire cause necrosis  
About 6,750 results (0.48 seconds)

fibroid necrosis tension wire needle passer  
About 17 results (0.39 seconds)

curved needle surround target tension ligature  
About 3,440 results (0.51 seconds)