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(12) **United States Design Patent** (10) **Patent No.:** **US D773,664 S**  
**DeNeui** (45) **Date of Patent:** **\*\* Dec. 6, 2016**

(54) **TROCAR**  
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(73) Assignee: **BioTE Medical, LLC**, Irving, TX (US)  
(\*\*) Term: **14 Years**

5,957,947 A 9/1999 Wattiez et al.  
D426,305 S \* 6/2000 Hein ..... D24/142  
D443,360 S \* 6/2001 Haberland ..... D24/146  
D444,691 S \* 7/2001 Ray ..... D8/91  
6,447,477 B2 9/2002 Burney et al.  
6,569,119 B1 5/2003 Haberland et al.  
D496,728 S 9/2004 Holsinger  
D582,552 S \* 12/2008 Berberich ..... D24/133  
D599,015 S \* 8/2009 Petersen ..... D24/133  
D603,043 S \* 10/2009 Kreidler ..... D24/130  
7,708,751 B2 5/2010 Hughes et al.

(Continued)

(21) Appl. No.: **29/486,144**  
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(51) **LOC (10) Cl.** ..... **24-02**  
(52) **U.S. Cl.**  
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(58) **Field of Classification Search**  
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D19/110, 115; D24/127, 130, 133, 146,  
D24/147, 148  
CPC ..... B26B 3/00; B26B 1/10; B26B 5/005;  
A61B 17/809; A61B 17/1617; A61B  
17/3211; A61B 5/1411; A61B 17/3417  
See application file for complete search history.

FOREIGN PATENT DOCUMENTS

EP 2179700 B1 7/2013  
GB 2486497 B 6/2013

(Continued)

*Primary Examiner* — Robert M Spear  
*Assistant Examiner* — Marissa J Cash

(57) **CLAIM**

The ornamental design for a trocar, as shown and described.

**DESCRIPTION**

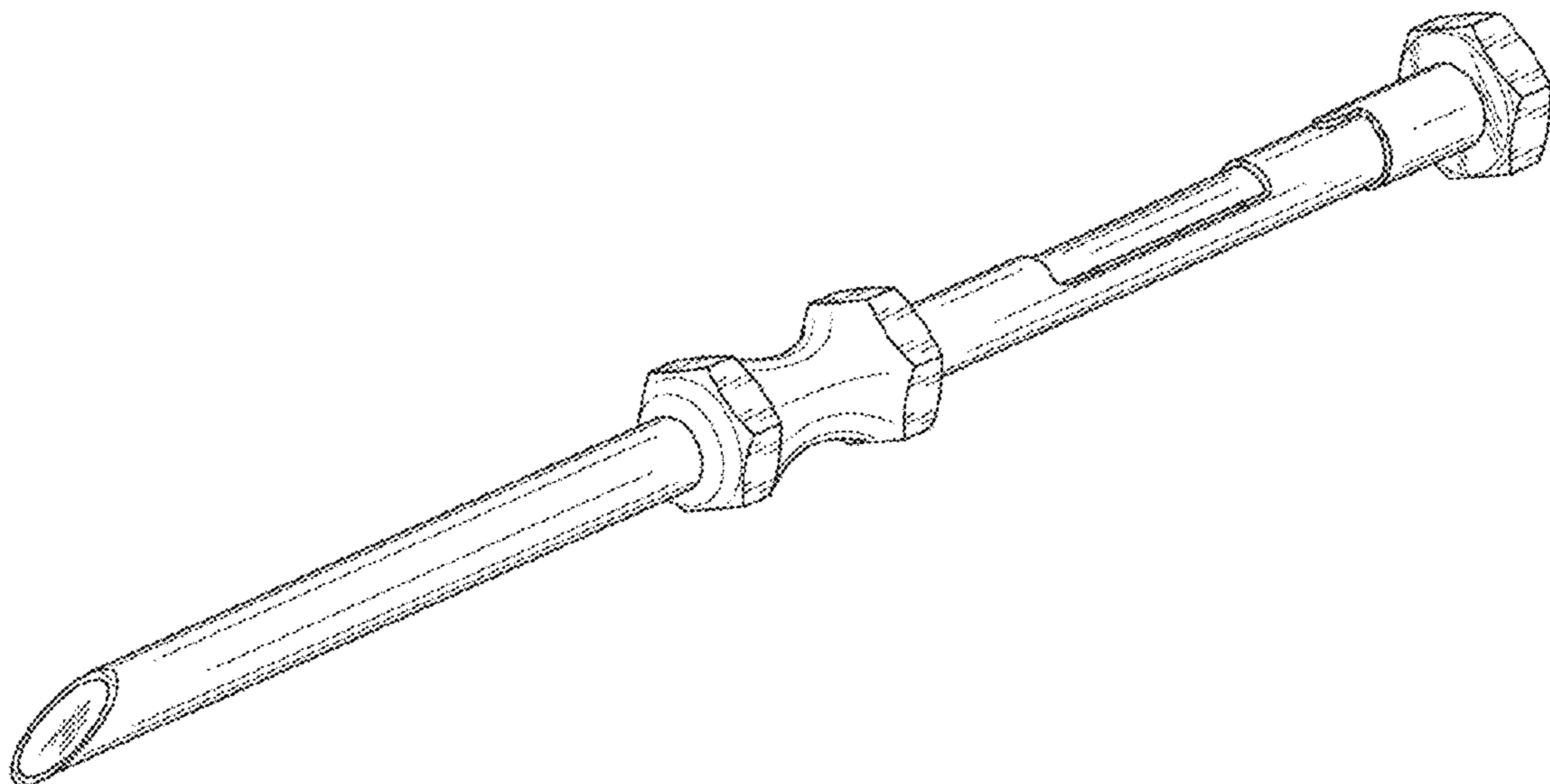
FIG. 1 is a perspective view of an embodiment of a trocar of the present application, showing a trocar and an insert; FIG. 2 is a right side elevational view of the trocar of FIG. 1; FIG. 3 is a left side elevational view of the trocar of FIG. 1; FIG. 4 is a top elevational view of the trocar of FIG. 1; FIG. 5 is a bottom elevational view of the trocar of FIG. 1; FIG. 6 is a rear elevational view of the trocar of FIG. 1; and, FIG. 7 is a front elevational view of the trocar of FIG. 1. The broken lines shown in FIGS. 1 and 6 depict environmental subject matter only and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,867,624 A 7/1932 Joseph  
3,994,287 A \* 11/1976 Turp ..... A61B 17/3498  
277/577  
D295,317 S \* 4/1988 Gazale ..... 606/84  
4,900,309 A 2/1990 Netherton et al.  
5,301,684 A 4/1994 Ogirala  
5,334,150 A 8/1994 Kaali  
5,387,197 A 2/1995 Smith et al.  
D373,827 S \* 9/1996 Polaniec ..... D24/112  
D397,437 S \* 8/1998 Hlavicska ..... D24/146

**1 Claim, 4 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

8,029,474	B2	10/2011	Chung	
8,469,987	B2	6/2013	Delsman	
2008/0200915	A1*	8/2008	Globerman	..... A61B 17/1637 606/80
2009/0192444	A1*	7/2009	Albrecht	..... A61B 17/3474 604/26
2010/0249750	A1	9/2010	Racz	
2013/0031735	A1	2/2013	Brand et al.	
2014/0257296	A1*	9/2014		Morgenstern Lopez ..... A61B 17/1671 606/80

FOREIGN PATENT DOCUMENTS

WO	WO 9507663	A1	3/1995
WO	WO 2009057117	A2	5/2009
WO	WO 2013158163	A1	10/2013

\* cited by examiner

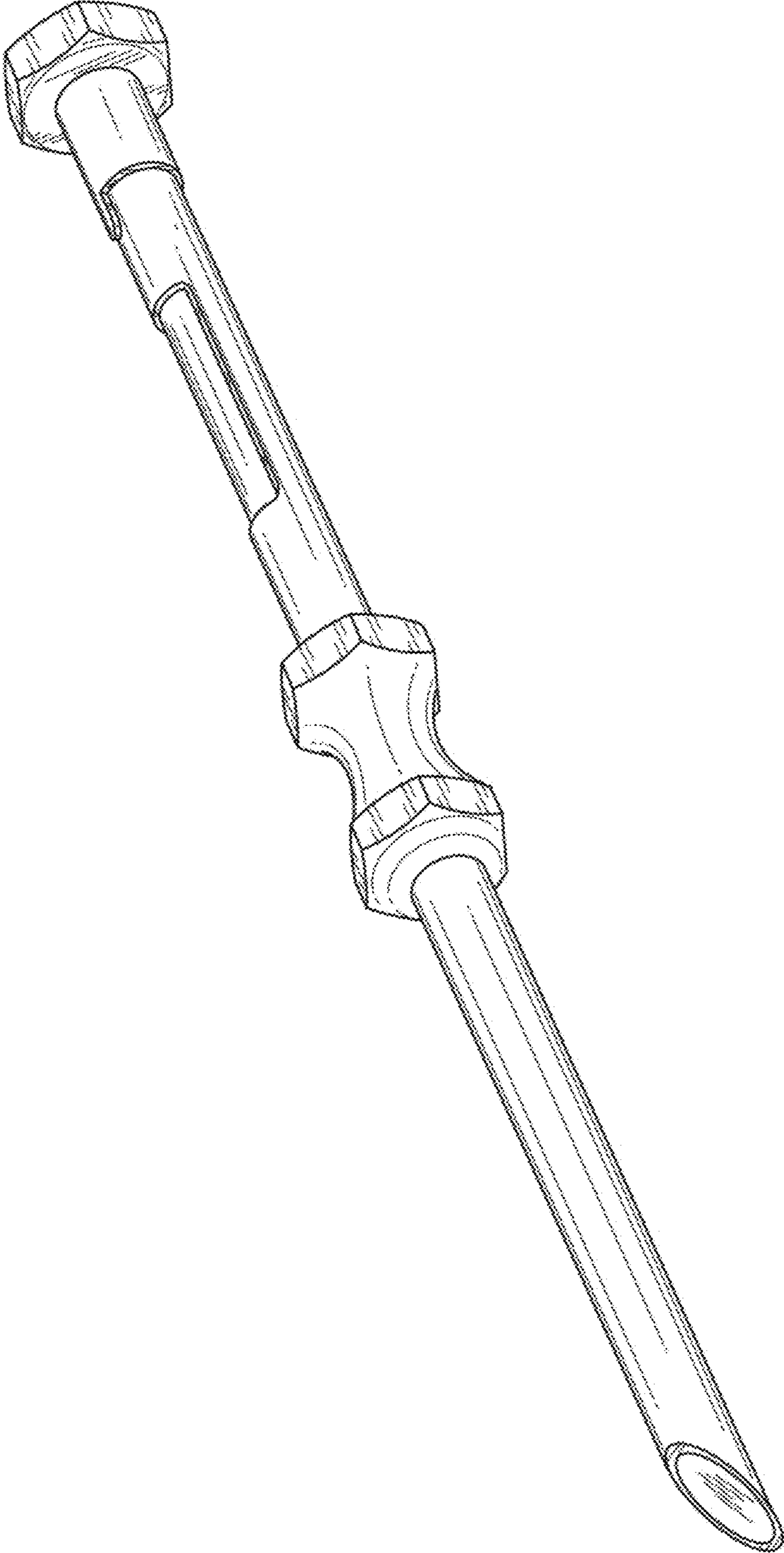


FIG. 1

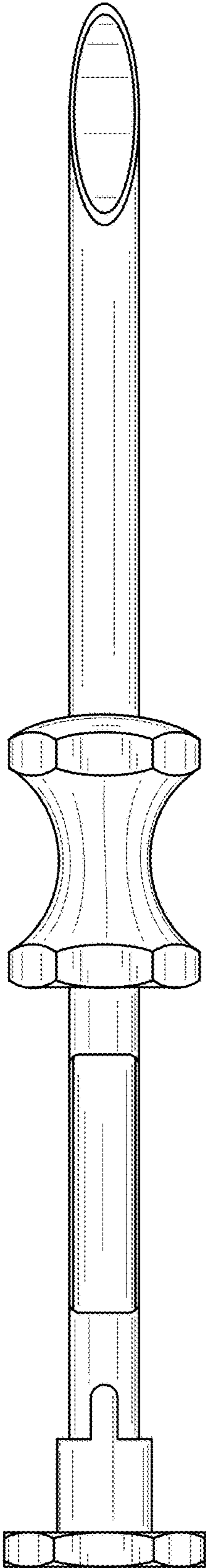


FIG. 2

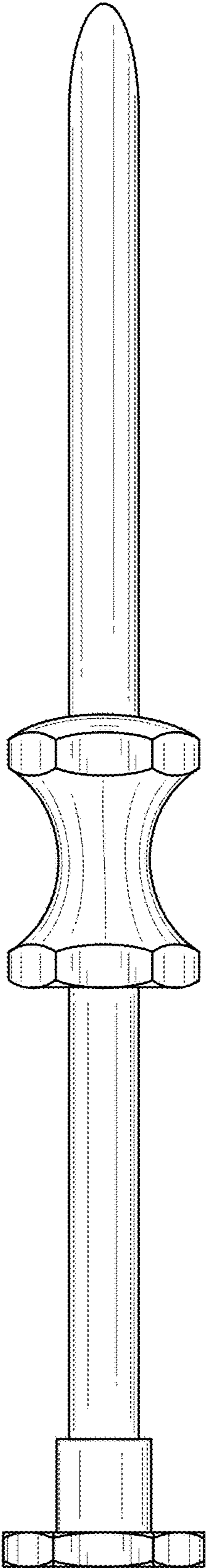


FIG. 3



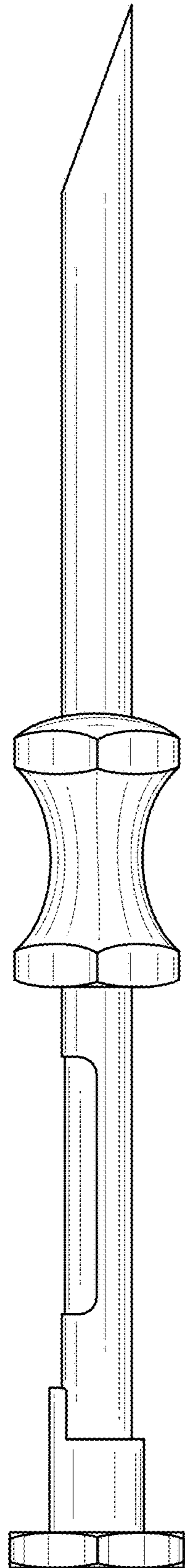


FIG. 4

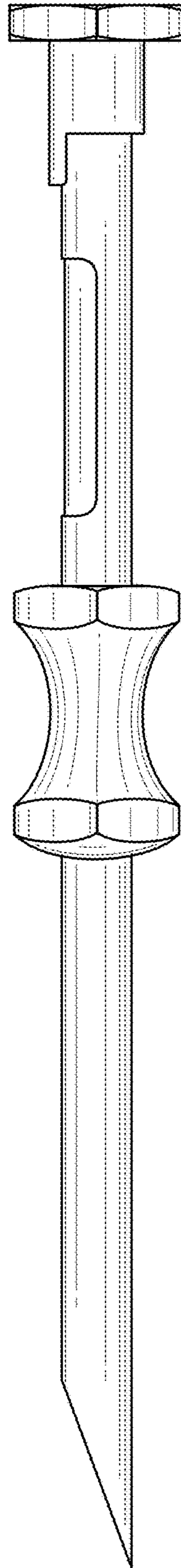


FIG. 5

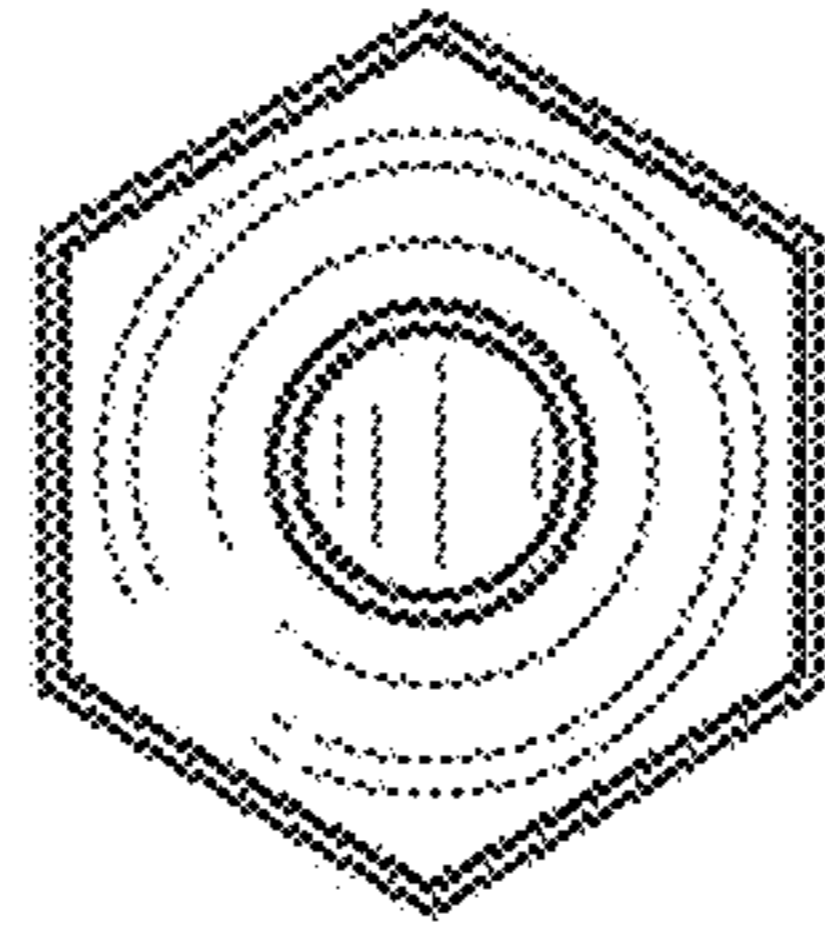


FIG. 7

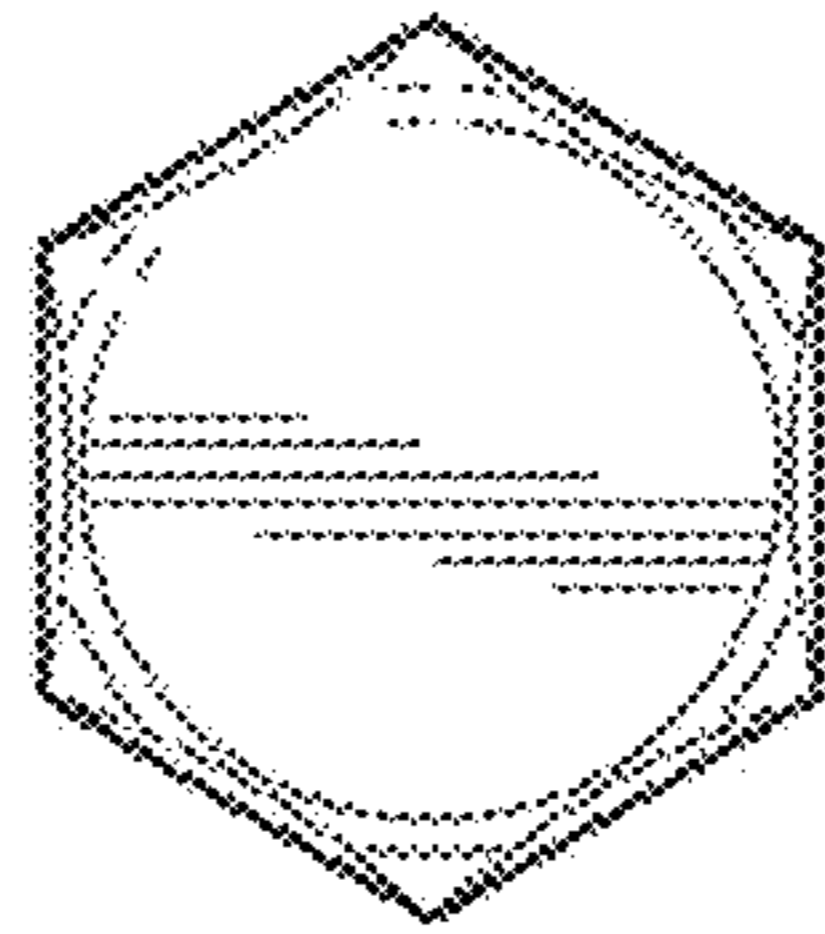


FIG. 6