

US00D992387S

(12) **United States Design Patent**
McKenzie et al.

(10) **Patent No.:** **US D992,387 S**
(45) **Date of Patent:** **** Jul. 18, 2023**

(54) **EXTRACTOR SOCKET**

(71) Applicant: **APEX BRANDS, INC.**, Apex, NC (US)

(72) Inventors: **Timothy T. McKenzie**, Westminster, MD (US); **Zhihong Fu**, Cary, NC (US)

(73) Assignee: **APEX BRANDS, INC.**, Apex, NC (US)

4,671,141 A	6/1987	Hanson
4,882,957 A	11/1989	Wright et al.
4,947,713 A	8/1990	Arnold
4,982,627 A	1/1991	Johnson
5,092,203 A	3/1992	Mader et al.
5,131,312 A	7/1992	Macor
5,219,392 A	6/1993	Ruzicka et al.
5,277,088 A	1/1994	Vasichek et al.
5,279,190 A	1/1994	Goss et al.
5,361,657 A	11/1994	Terry
5,476,024 A	12/1995	Hsieh

(Continued)

(**) Term: **15 Years**

(21) Appl. No.: **29/890,800**

(22) Filed: **Apr. 27, 2023**

FOREIGN PATENT DOCUMENTS

CA	1287991 C	8/1991
CA	2075566 A1	5/1993

(Continued)

Related U.S. Application Data

(63) Continuation of application No. 29/834,646, filed on Apr. 13, 2022, which is a continuation of application No. 16/204,134, filed on Nov. 29, 2018, now Pat. No. 11,554,470.

(51) **LOC (14) Cl.** **08-05**

(52) **U.S. Cl.**
USPC **D8/29**
CPC **B25B 27/18** (2013.01); **B25B 13/065** (2013.01); **B25B 23/105** (2013.01)

(58) **Field of Classification Search**
USPC D8/29
CPC B25B 27/18; B25B 13/065; B25B 23/105; F16B 23/003

See application file for complete search history.

OTHER PUBLICATIONS

Partial European Search Report dated Aug. 8, 2019 for European Application No. 18211218.5.

(Continued)

Primary Examiner — Michael A. Pratt
(74) *Attorney, Agent, or Firm* — Burr & Forman LLP

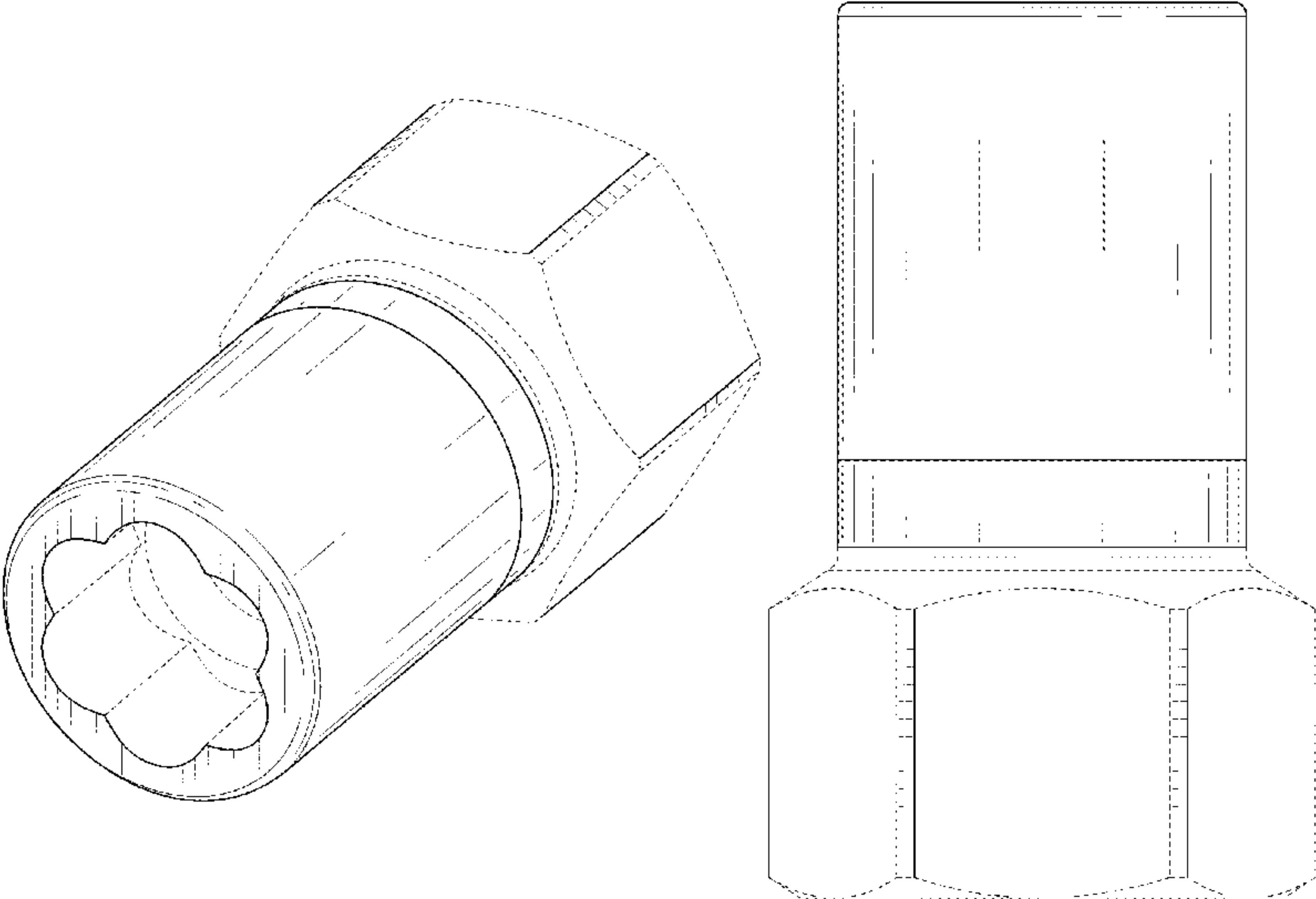
(57) **CLAIM**

The ornamental design for an extractor socket, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an extractor socket in accordance with an embodiment of the present invention; FIG. 2 is a top view of the extractor socket of FIG. 1; FIG. 3 is a bottom view of the extractor socket of FIG. 1; and, FIG. 4 is a side view of the extractor socket of FIG. 1; The broken lines of FIGS. 1-4 form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited**U.S. PATENT DOCUMENTS**

5,782,148	A	7/1998	Kerkhoven
5,904,076	A	5/1999	Siwy
5,924,342	A	7/1999	Chou
6,003,411	A	12/1999	Knox et al.
6,047,618	A	4/2000	Pieri
6,047,620	A	4/2000	Kozak et al.
6,082,229	A	7/2000	Shih
6,178,854	B1	1/2001	Shih
6,269,716	B1	8/2001	Amis
6,327,939	B1	12/2001	Macor
6,343,531	B2	2/2002	Amis
6,354,175	B1	3/2002	Dobson et al.
6,382,053	B1	5/2002	Macor
6,397,706	B1	6/2002	Maznicki
6,477,923	B2	11/2002	Amis
6,546,778	B2	4/2003	Jordan
6,598,498	B1	7/2003	Pigford et al.
6,626,067	B1	9/2003	Iwinski et al.
6,877,402	B1	4/2005	Pigford et al.
6,962,100	B2	11/2005	Hsien
7,007,573	B2	3/2006	Kozak et al.
7,044,027	B2	5/2006	Richter
7,185,563	B2	3/2007	Kozak et al.
7,228,764	B1	6/2007	Macor
7,293,483	B1	11/2007	Hutchings et al.
7,311,022	B2	12/2007	Putney et al.
D570,169	S	6/2008	Lin
7,484,440	B2	2/2009	Wright
7,523,688	B2	4/2009	Putney et al.
7,926,393	B2	4/2011	Hart
8,505,417	B2	8/2013	Hui et al.
8,544,367	B2	10/2013	Buchanan
8,607,670	B2	12/2013	Stawarski
8,752,455	B1	6/2014	Taylor, Jr.
9,168,643	B2	10/2015	Hsu et al.
9,186,782	B2	11/2015	Banks
9,272,395	B2	3/2016	Hui
9,381,624	B1	7/2016	Patterson
9,452,516	B2	9/2016	Alavi
9,687,968	B2	6/2017	Doroslovac et al.
9,718,170	B2	8/2017	Eggert et al.
D887,233	S *	6/2020	Kukucka D8/29
D937,060	S *	11/2021	Peng D8/29
11,590,637	B2 *	2/2023	Kukucka B25B 23/108
2001/0035075	A1	11/2001	Amis
2002/0017170	A1	2/2002	Amis
2002/0100346	A1	8/2002	Binns
2005/0039581	A1	2/2005	Eggert et al.
2005/0252346	A1	11/2005	Kozak et al.
2005/0279192	A1	12/2005	Richter
2006/0032343	A1	2/2006	Putney et al.
2006/0101950	A1	5/2006	Kozak et al.
2006/0117912	A1	6/2006	McCalley et al.
2007/0125204	A1	6/2007	Lin
2007/0137441	A1	6/2007	Wright
2007/0144311	A1	6/2007	Hsieh
2007/0151425	A1	7/2007	Macor
2007/0289426	A1	12/2007	Chaconas
2008/0006126	A1	1/2008	Hsieh
2008/0245195	A1	10/2008	Lee
2010/0005932	A1	1/2010	Young et al.
2010/0005933	A1	1/2010	Cline
2010/0058897	A1	3/2010	Alsobrook
2010/0064859	A1	3/2010	Stephens
2010/0154602	A1	6/2010	Piper et al.
2010/0275739	A1	11/2010	Hart
2011/0048175	A1	3/2011	LeVert
2011/0056337	A1	3/2011	Buchanan
2012/0137837	A1	6/2012	Souma
2013/0032009	A1	2/2013	Hui et al.
2013/0263701	A1	10/2013	Hsu et al.
2014/0013904	A1	1/2014	Meholovitch
2014/0182421	A1	7/2014	Chang
2014/0196578	A1	7/2014	Milligan et al.
2015/0135910	A1	5/2015	Eggert et al.

2017/0036324	A1	2/2017	Taylor, Jr.
2017/0266786	A1	9/2017	Rydberg
2017/0291284	A1	10/2017	Eggert et al.
2018/0021927	A1	1/2018	Lin
2019/0186525	A1 *	6/2019	Dilling B21K 1/56
2021/0146506	A1 *	5/2021	Kukucka B25B 13/04
2022/0362910	A1 *	11/2022	Kukucka B25B 13/065

FOREIGN PATENT DOCUMENTS

CA	2057104	A1	6/1993
CA	2172570	A1	9/1997
CA	2311816	A1	6/1999
CA	2258440	A1	7/1999
CA	2261087	A1	8/1999
CA	2281005	A1	2/2001
CA	2172570	C	8/2004
CA	2476474	A1	11/2005
CA	2252171	C	5/2007
CA	2258440	C	7/2008
CA	2697755	A1	9/2011
CA	2476474	C	2/2013
CA	2864338	A1	5/2015
CN	2291994	Y	9/1998
CN	103072106	A	5/2013
CN	209774481	U	12/2019
DE	202005007853	U1	8/2005
EP	458771	A1	11/1991
EP	976502	B1	7/2002
EP	1256418	A2	11/2002
EP	1595652	A2	11/2005
EP	930132	B1	4/2007
EP	2243597	A1	10/2010
EP	1371453	B1	2/2012
EP	2418049	A2	2/2012
EP	3263278	A1	1/2018
GB	893536	A	4/1962
GB	906839	A	9/1962
GB	9011788		7/1990
GB	2260587	B	3/1995
GB	0021821		10/2000
GB	2366532	A	3/2002
GB	2520435	A	5/2015
GB	2501181	B	4/2018
GB	2558701	A	7/2018
GB	2520435	B	8/2018
JP	2564473	B2	12/1996
JP	2001347463	A	12/2001
JP	2005177867	A	7/2005
JP	3124111	U	8/2006
JP	3135906	U	10/2007
JP	2012115948	A	6/2012
JP	4973895	B2	7/2012
JP	2013094932	A	5/2013
JP	3200007	U	10/2015
TW	200621436	A	7/2006
WO	9927261	A3	7/1999
WO	2004018123	A1	3/2004
WO	2004105529	A2	12/2004
WO	2005082641	A1	9/2005
WO	2006023374	A1	3/2006
WO	2009115016	A1	9/2009
WO	2010107676	A9	11/2010
WO	2011116474	A1	9/2011
WO	2017041998	A1	3/2017

OTHER PUBLICATIONS

Partial European Search Report dated Nov. 11, 2019 for European Application No. 18211218.5.

Chinese Office Action issued in Chinese Application No. 201811523244.2 dated Apr. 26, 2020.

Chinese Office Action issued in Chinese Application No. 201811523244.2 dated Nov. 9, 2020.

Communication pursuant to Article 94(3) EPC in European Application No. 18211218.5 dated Apr. 9, 2021.

(56)

References Cited

OTHER PUBLICATIONS

Chinese Office Action issued in Chinese Application No.
201811523244.2 dated Apr. 25, 2021.

* cited by examiner

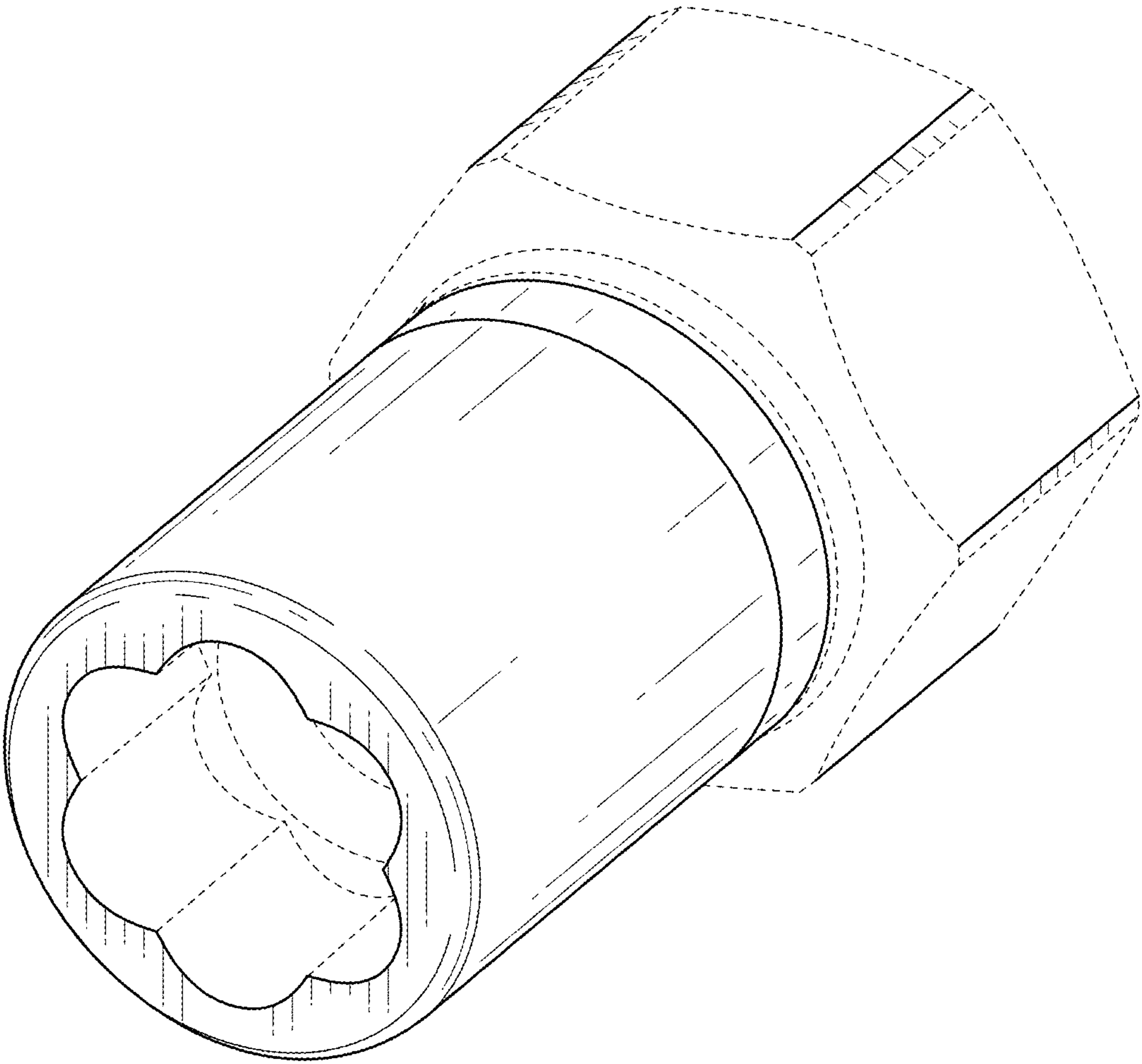


FIG. 1

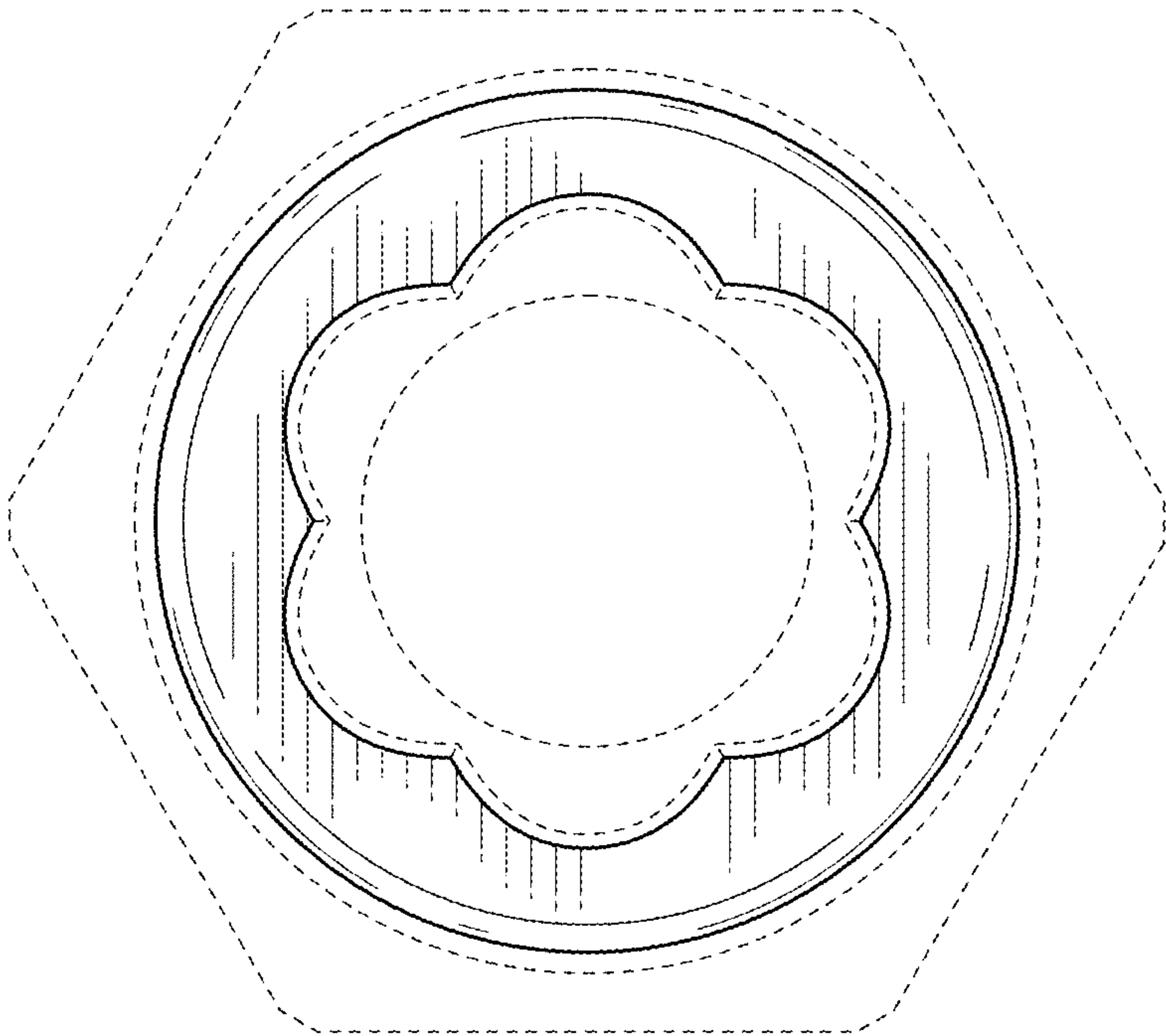


FIG. 2

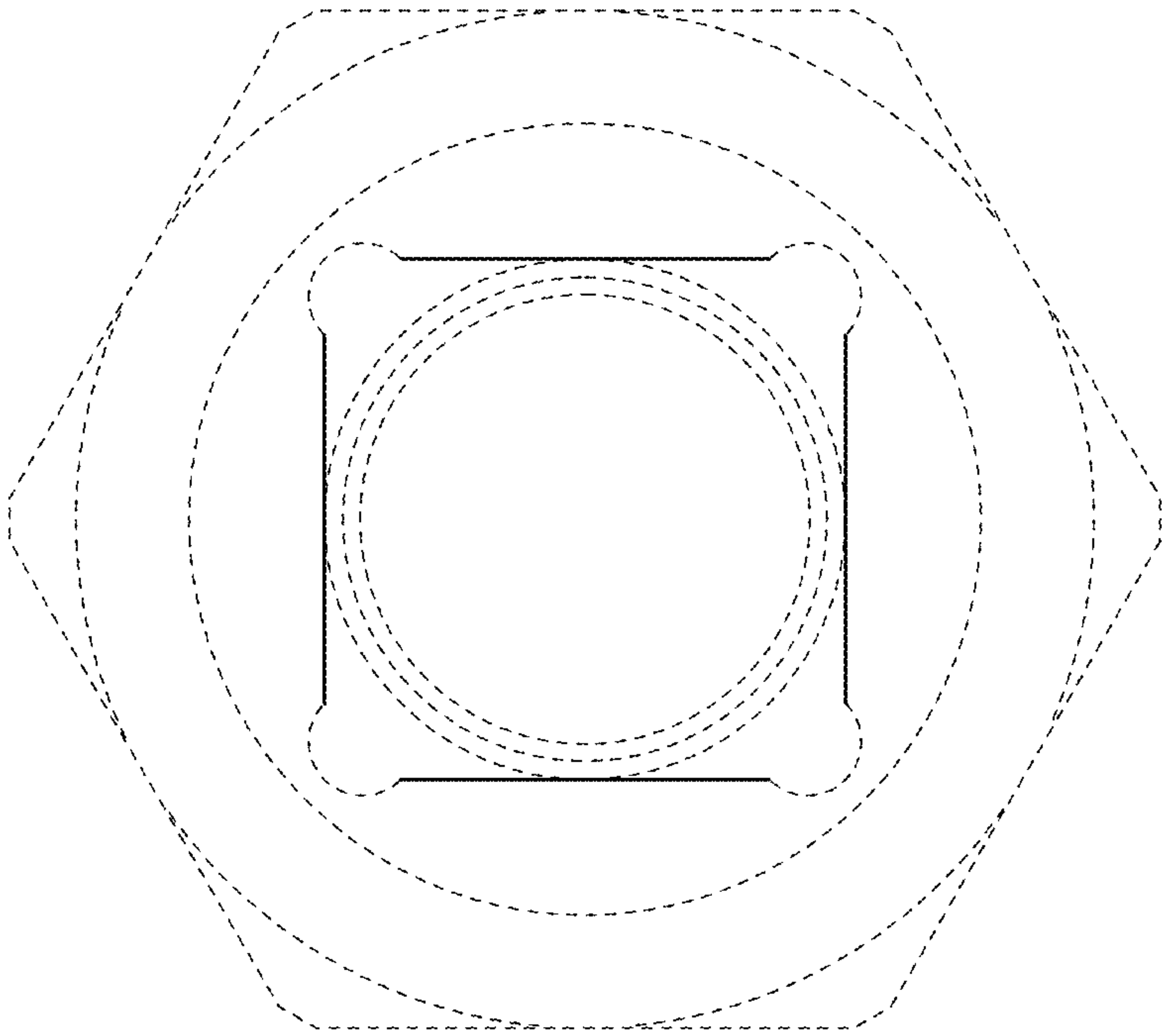


FIG. 3

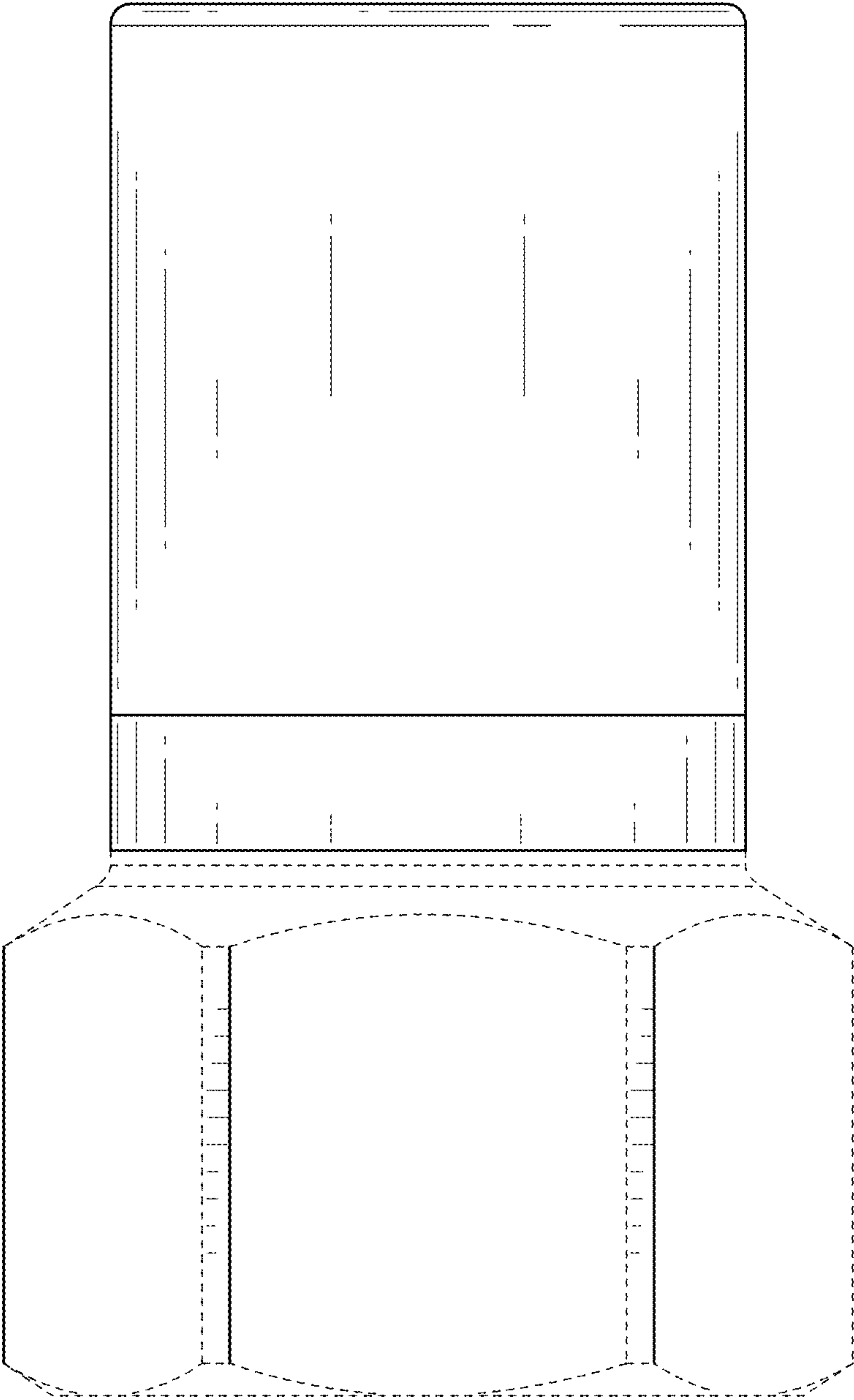


FIG. 4