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

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(54) **CUTTING INSERT**

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

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Related U.S. Application Data

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(51) **LOC (13) Cl.** **15-09**

(52) **U.S. Cl.**
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CPC **B23B 27/145** (2013.01)

(58) **Field of Classification Search**
USPC D15/124–144; D8/20, 70, 90, 98; 407/59, 114; 409/139–140
CPC ... B23C 5/06; B23C 5/202; B23C 2200/0455; B23C 2200/081; B23C 2200/087; B23C 2200/206; B23C 2210/66; B23B 2200/0471; B23B 2200/081; B23B 2200/086; B23B 27/145; Y10T 407/245
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D347,642 S * 6/1994 Lindberg D15/139
D379,360 S * 5/1997 Satran D15/139

D388,444 S * 12/1997 Satran D15/139
D404,406 S * 1/1999 Satran D15/139
6,217,264 B1 * 4/2001 Kim B23B 27/143
407/114
D485,852 S * 1/2004 Arvidsson D15/139
D486,505 S * 2/2004 Arvidsson D15/139
D487,281 S * 3/2004 Roman D15/139
6,957,935 B2 * 10/2005 Sung B23C 5/202
407/113
D637,214 S * 5/2011 Saito D15/139
D638,041 S * 5/2011 Saito D15/139
8,177,460 B2 * 5/2012 Satran B23C 5/2213
407/113
8,419,320 B2 * 4/2013 Sung B23C 5/202
407/113
D688,716 S * 8/2013 Lampe D15/139
8,727,675 B2 * 5/2014 Nam B23C 5/06
407/113
8,876,440 B2 * 11/2014 Nam B23C 5/06
407/113
D736,841 S * 8/2015 Jung D15/139

(Continued)

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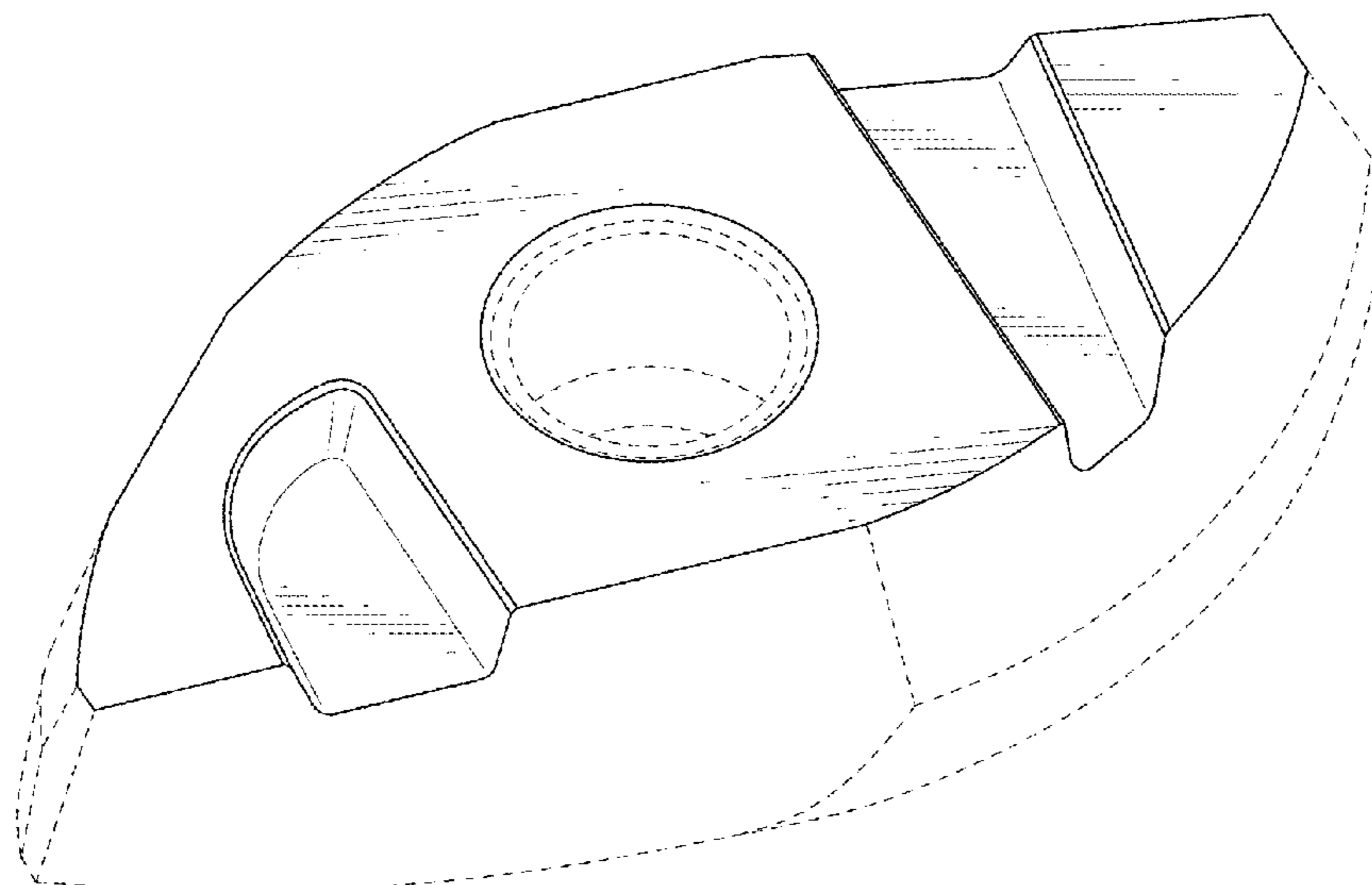
(57) **CLAIM**

The ornamental design for a cutting insert, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a cutting insert showing our new design;
FIG. 2 is a rear perspective view thereof;
FIG. 3 is a top plan view thereof;
FIG. 4 is a bottom plan view thereof;
FIG. 5 is a front elevation view thereof;
FIG. 6 is a rear elevation view thereof;
FIG. 7 is a left side elevation view thereof; and,
FIG. 8 is a right side elevation view thereof.
The broken lines shown in the drawings illustrate portions of the cutting insert that form no part of claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D748,703	S	*	2/2016	Nam	.....	D15/139
D752,664	S	*	3/2016	Jung	.....	D15/139
D755,267	S	*	5/2016	Lee	.....	D15/139
D771,726	S	*	11/2016	Nam	.....	D15/139
D772,318	S	*	11/2016	Nam	.....	D15/139
D772,319	S	*	11/2016	Nam	.....	D15/139
D772,963	S	*	11/2016	Nam	.....	D15/139
9,545,672	B2	*	1/2017	Lee	.....	B23B 27/1611
9,623,486	B2	*	4/2017	Nam	.....	B23B 27/145
D816,133	S	*	4/2018	Mura	.....	D15/139
D816,134	S	*	4/2018	Mura	.....	D15/139
D826,664	S	*	8/2018	Matsubara	.....	D8/20
D828,414	S	*	9/2018	Takahashi	.....	D15/139
D853,456	S	*	7/2019	Aizawa	.....	D15/138

* cited by examiner

FIG. 1

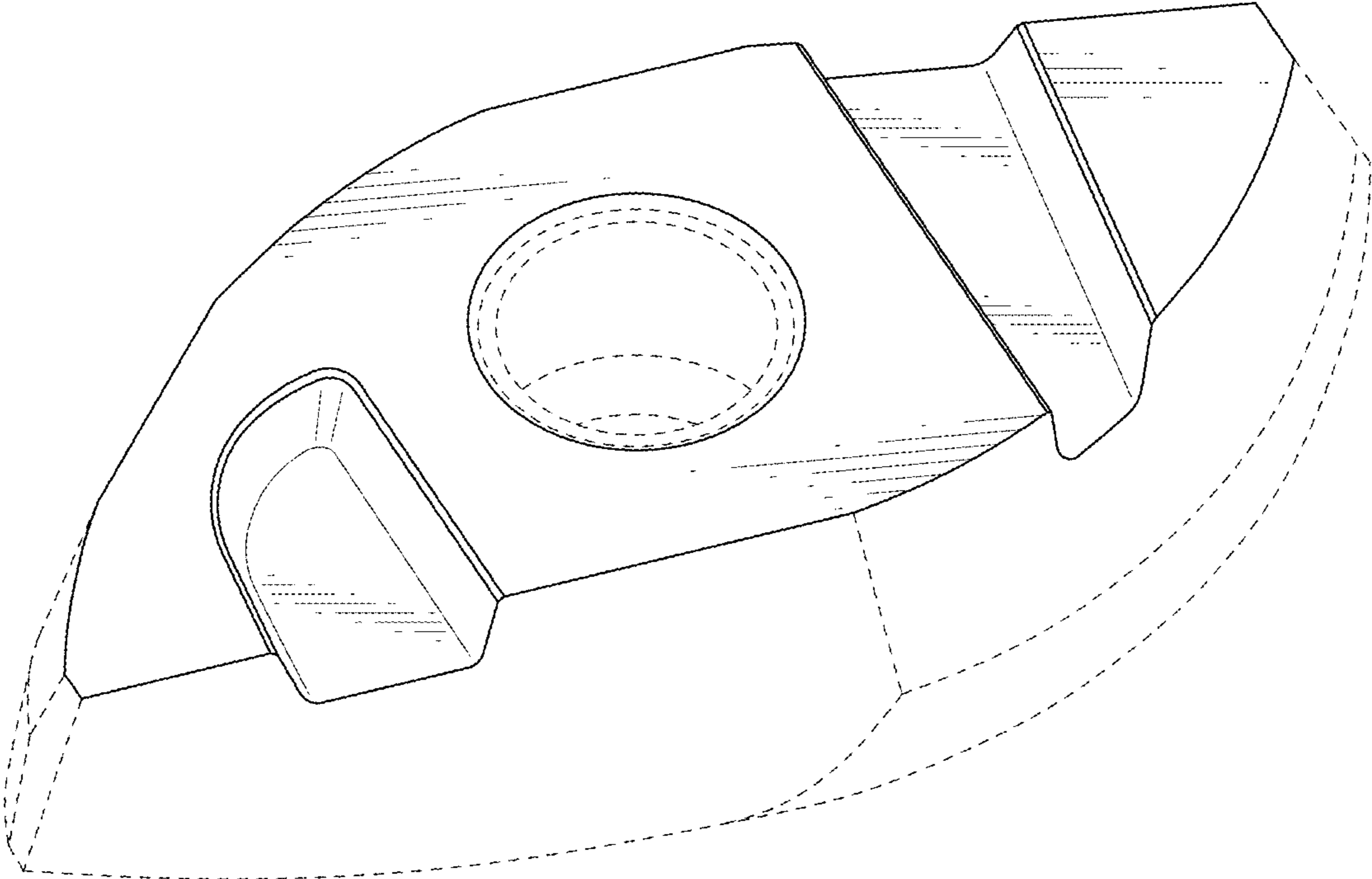


FIG. 2

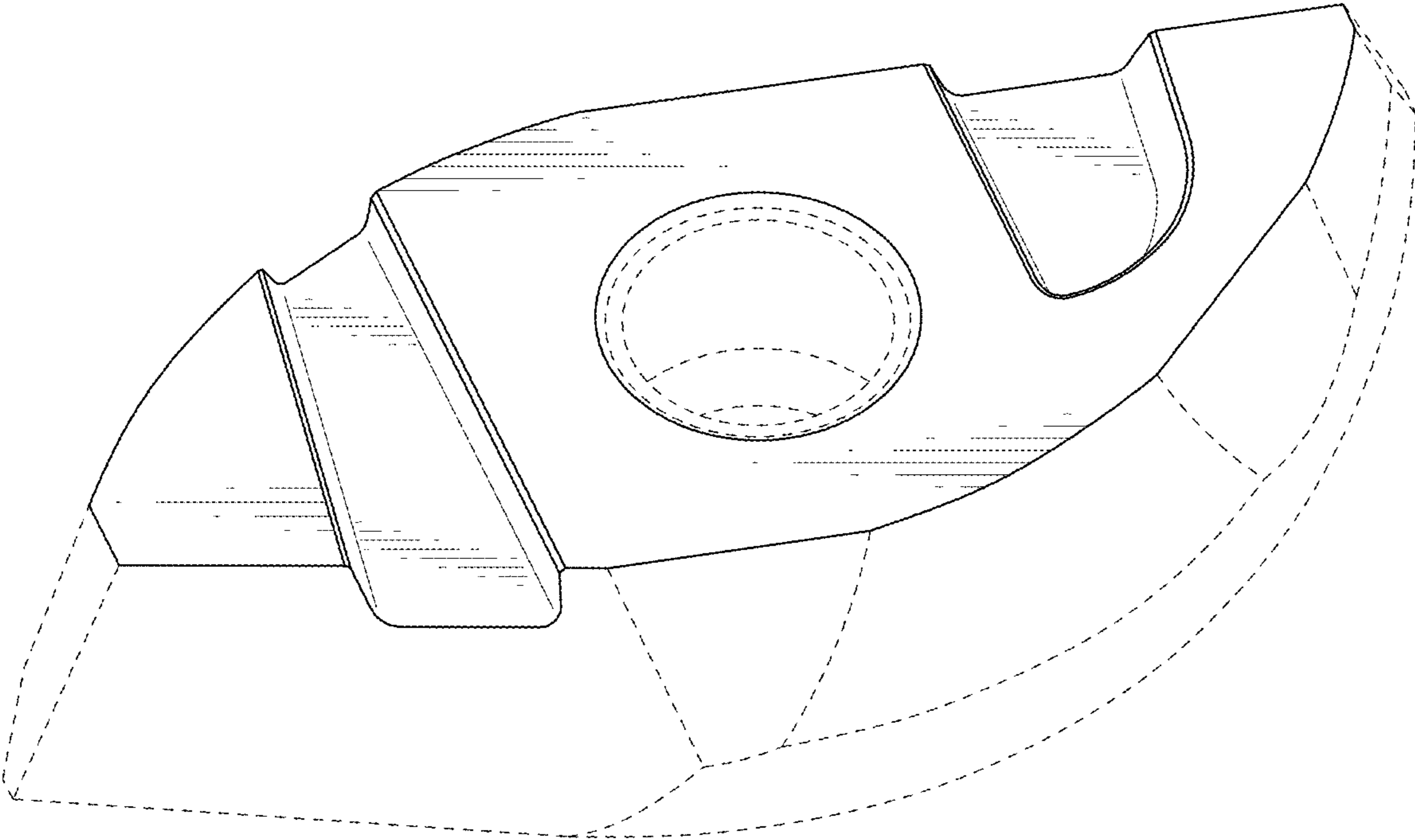


FIG. 3

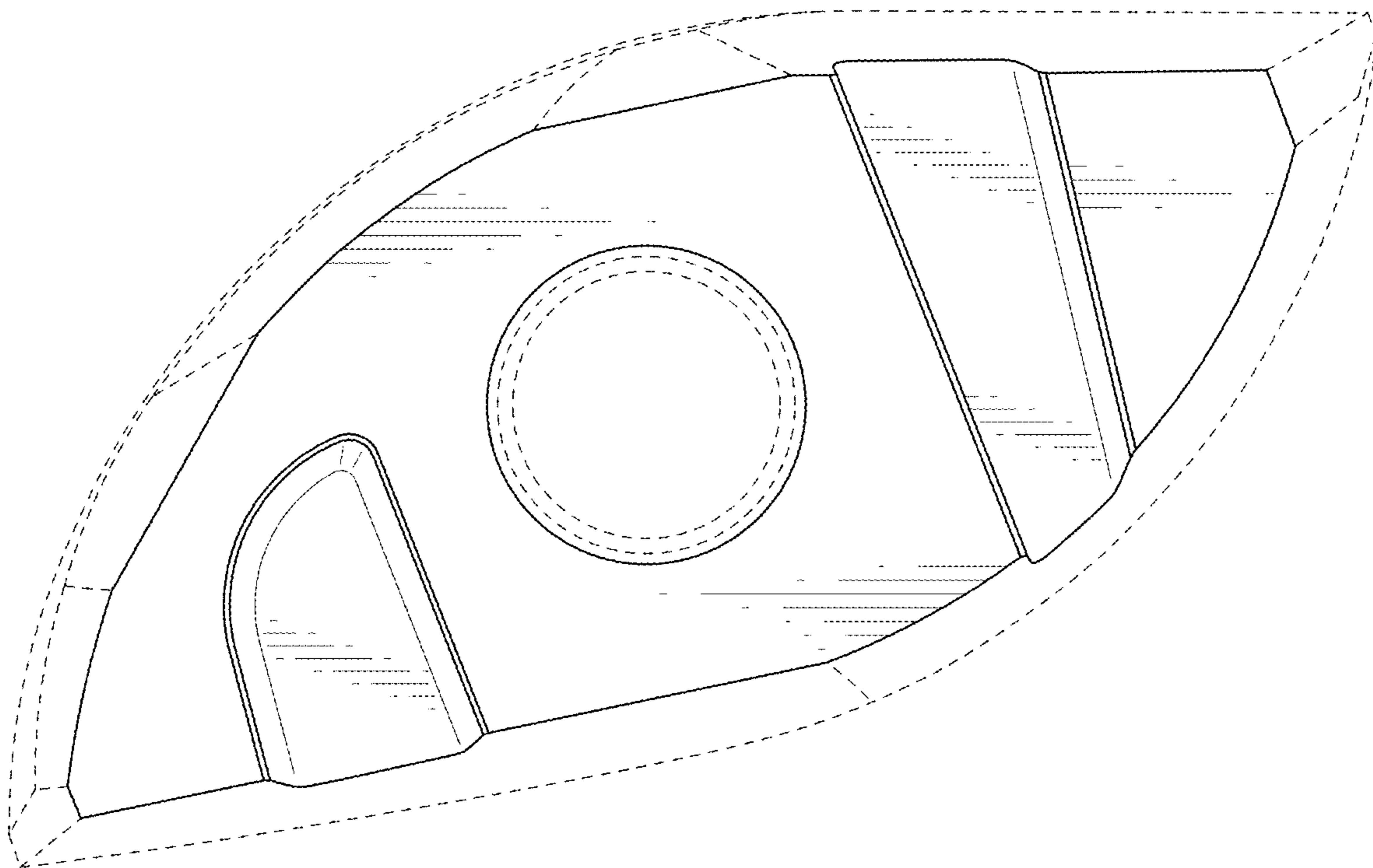


FIG. 4

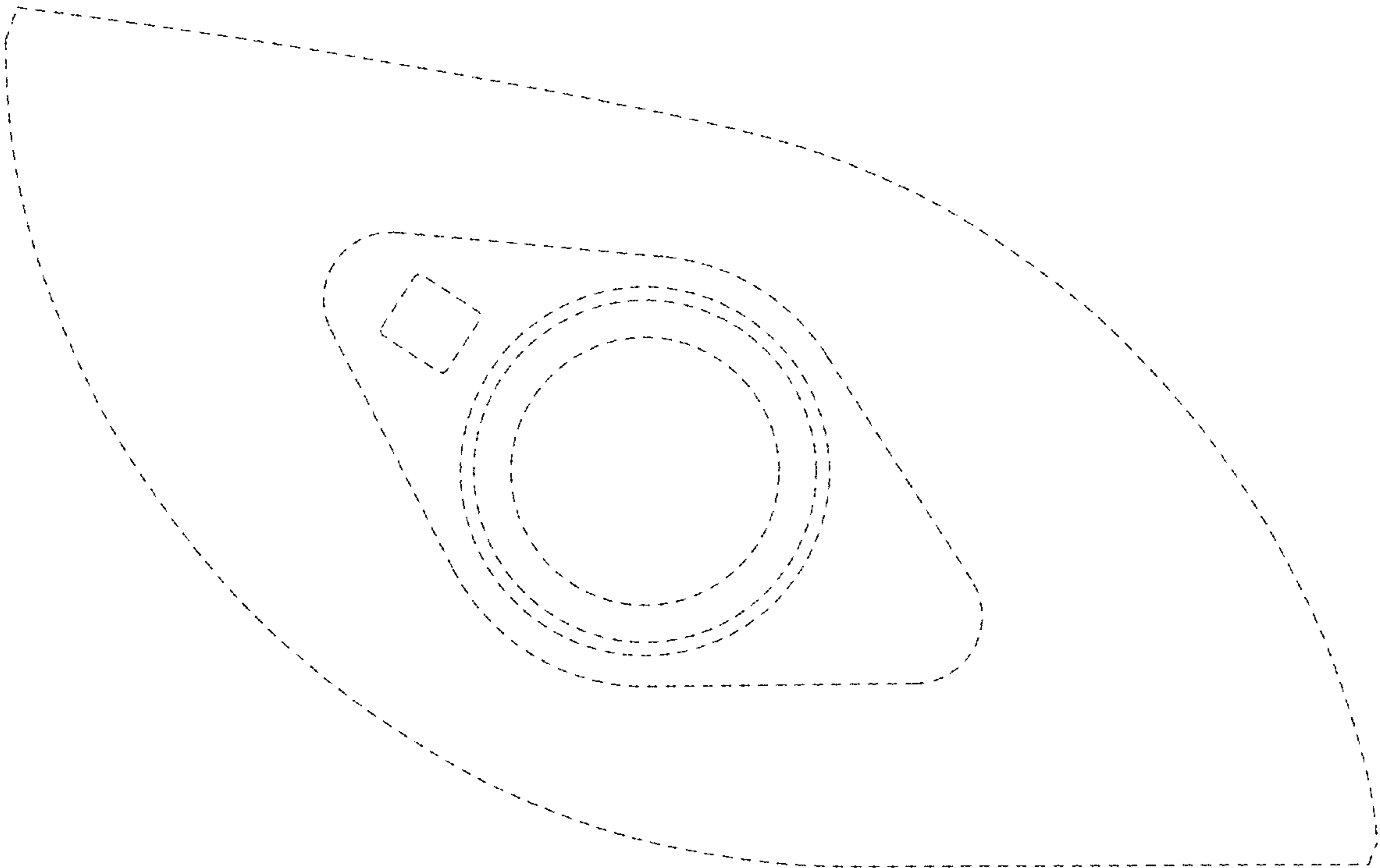


FIG. 5

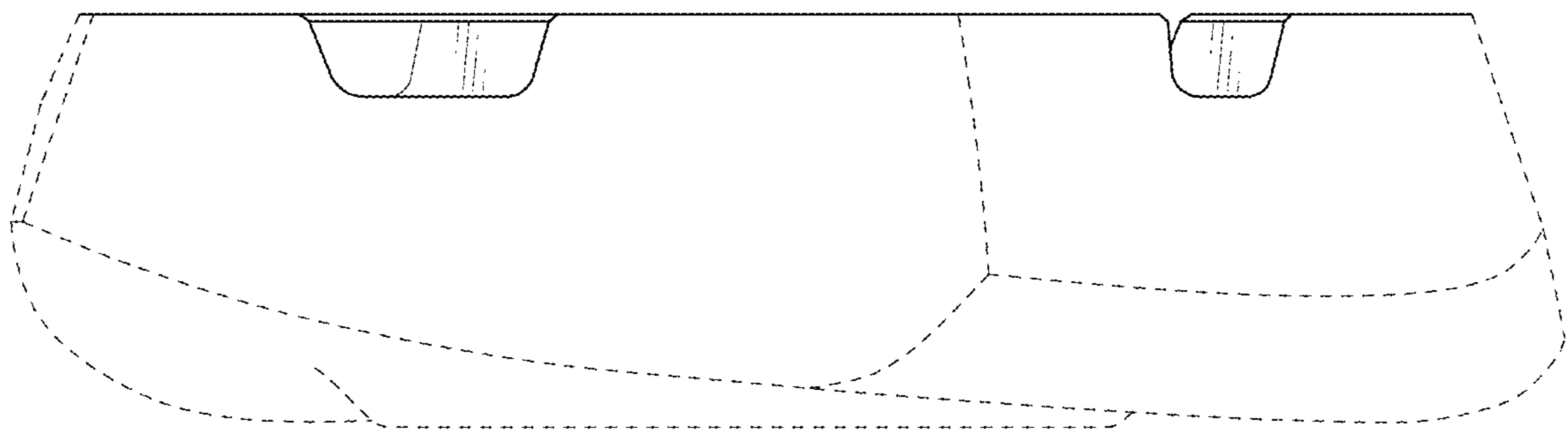


FIG. 6

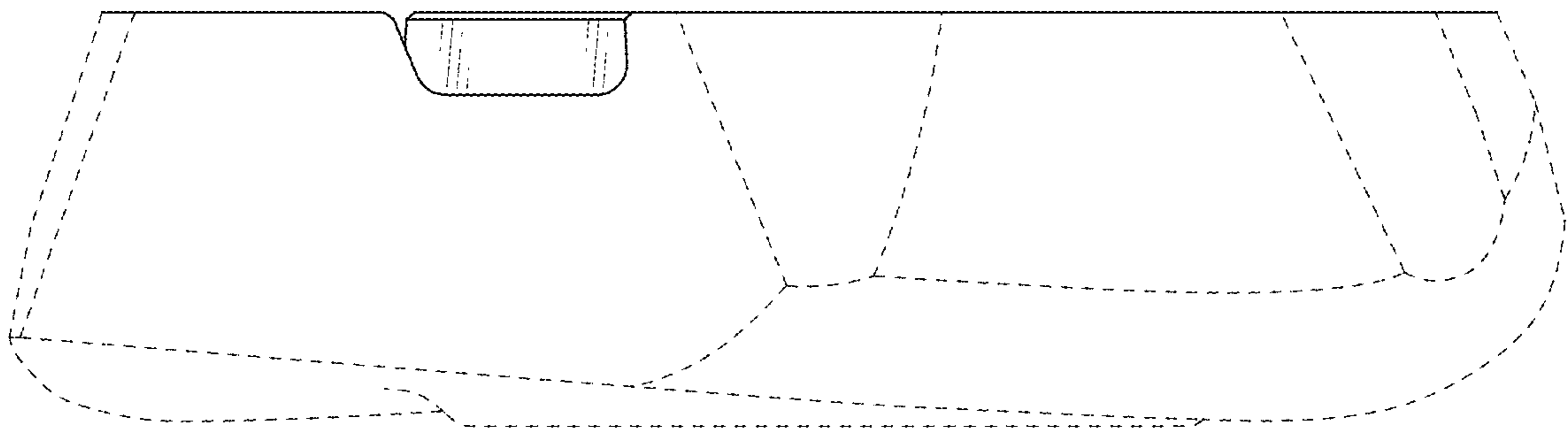


FIG. 7

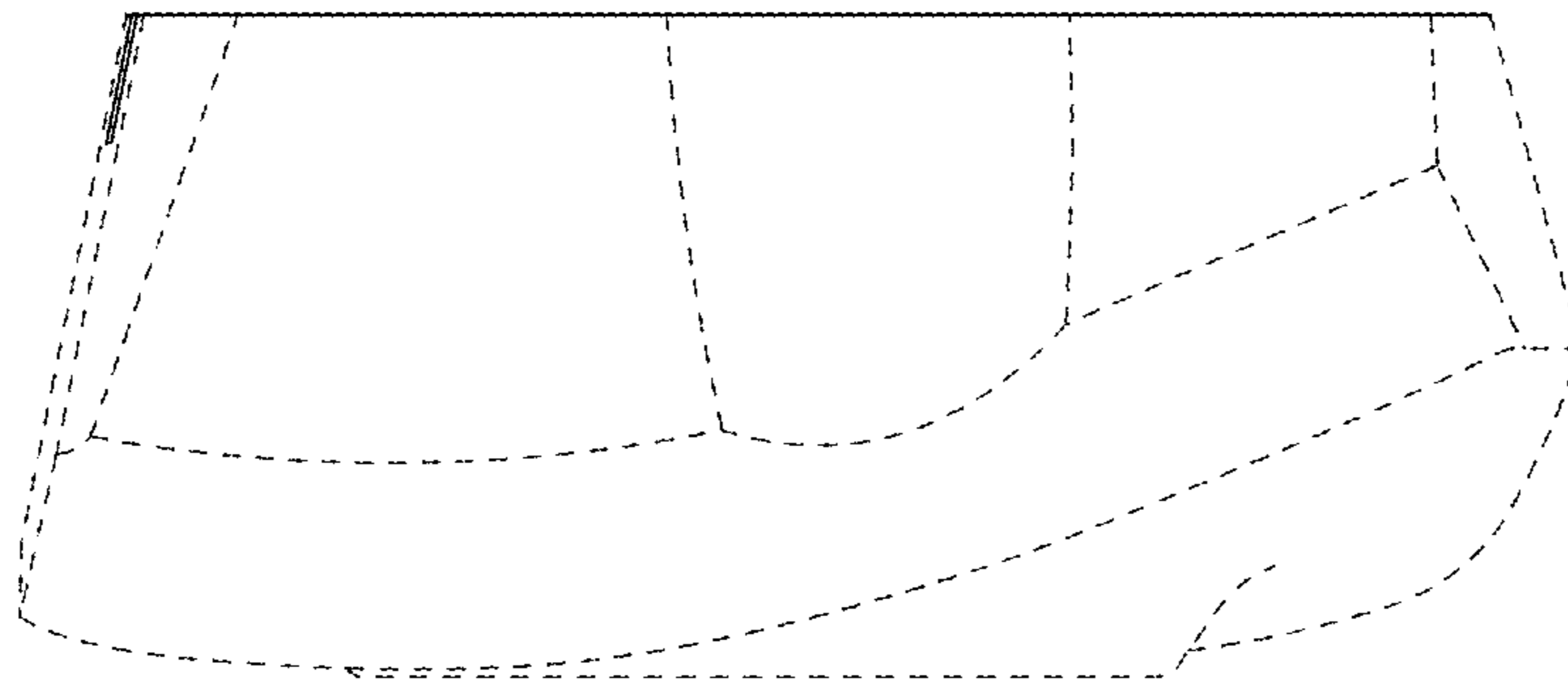


FIG. 8

