



US00D884041S

(12) **United States Design Patent** (10) **Patent No.:** **US D884,041 S**
Endoh et al. (45) **Date of Patent:** **** May 12, 2020**

(54) **CUTTING INSERT**

(71) Applicant: **OSG CORPORATION**, Toyokawa,
Aichi (JP)

(72) Inventors: **Yasuyuki Endoh**, Toyohashi (JP);
Yasuhito Fujii, Toyokawa (JP)

(73) Assignee: **OSG CORPORATION**, Toyokawa (JP)

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

(21) Appl. No.: **29/682,555**

(22) Filed: **Mar. 6, 2019**

(30) **Foreign Application Priority Data**

Sep. 7, 2018	(JP)	2018-019593
Sep. 7, 2018	(JP)	2018-019594
Sep. 7, 2018	(JP)	2018-019595

(51) **LOC (12) Cl.** **15-09**

(52) **U.S. Cl.**
USPC **D15/139**

(58) **Field of Classification Search**
USPC D8/20, 70; D15/126, 131, 138, 139, 140
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D772,319 S	*	11/2016	Nam		D15/139
D822,077 S	*	7/2018	Takahashi		D15/139

(Continued)

Primary Examiner — Patricia A Palasik

(74) *Attorney, Agent, or Firm* — Oliff PLC

(57) **CLAIM**

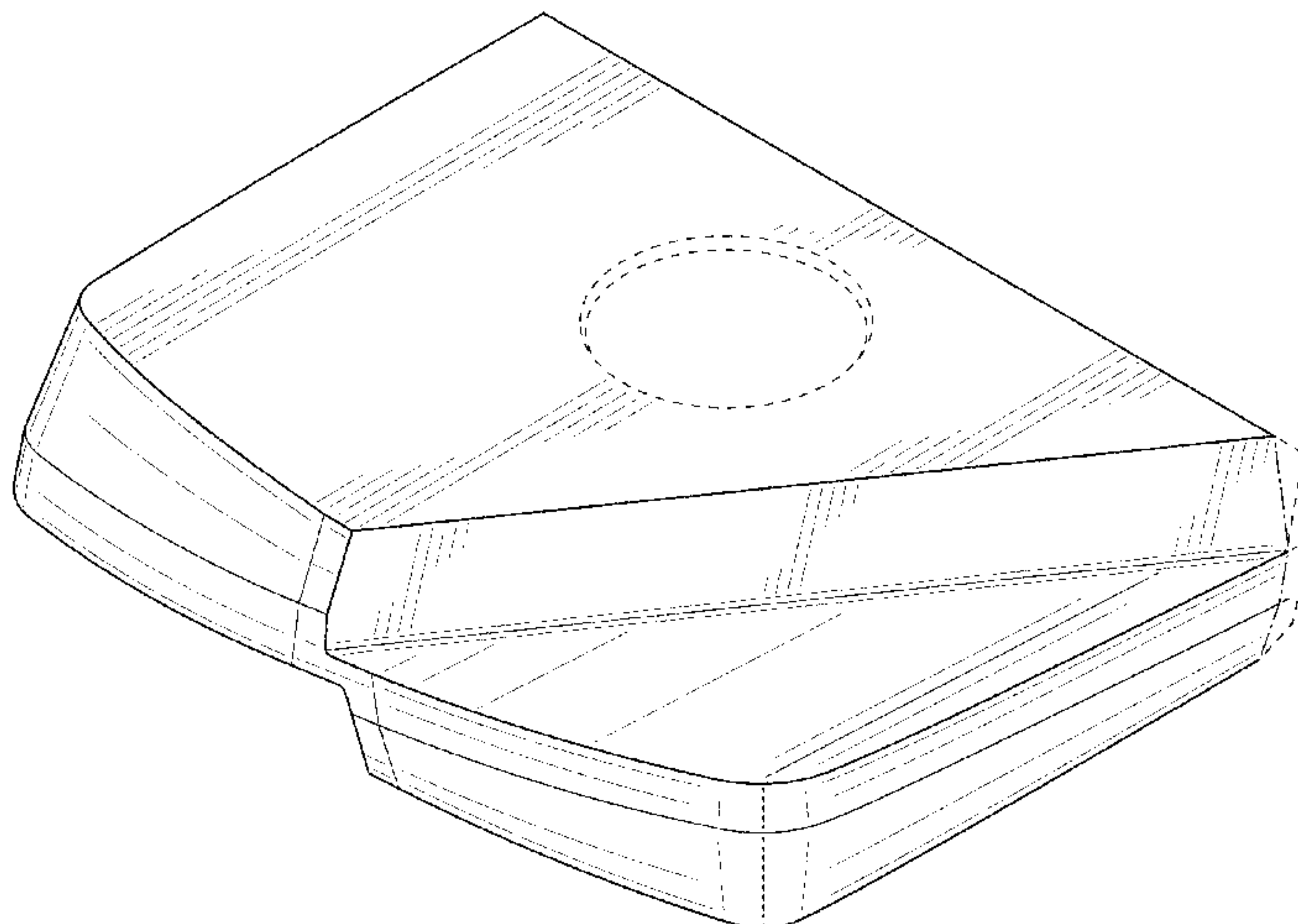
The ornamental design for a cutting insert, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a first embodiment of the cutting insert;

FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left view thereof;
FIG. 5 is a right view thereof;
FIG. 6 is a top view thereof;
FIG. 7 is a bottom view thereof;
FIG. 8 is a detail view of the portion marked “8” in FIG. 2;
FIG. 9 is a detail view of the portion marked “9” in FIG. 2;
FIG. 10 is a cross-section along line “10-10” in FIG. 2;
FIG. 11 is a perspective view of a second embodiment of the cutting insert;
FIG. 12 is a front view thereof;
FIG. 13 is a rear view thereof;
FIG. 14 is a left view thereof;
FIG. 15 is a right view thereof;
FIG. 16 is a top view thereof;
FIG. 17 is a bottom view thereof;
FIG. 18 is a detail view of the portion marked “18” in FIG. 12;
FIG. 19 is a detail view of the portion marked “19” in FIG. 12;
FIG. 20 is a cross-section along line “20-20” in FIG. 12;
FIG. 21 is a perspective view of a third embodiment of the cutting insert;
FIG. 22 is a front view thereof;
FIG. 23 is a rear view thereof;
FIG. 24 is a left view thereof;
FIG. 25 is a right view thereof;
FIG. 26 is a top view thereof;
FIG. 27 is a bottom view thereof;
FIG. 28 is a detail view of the portion marked “28” in FIG. 22;
FIG. 29 is a detail view of the portion marked “29” in FIG. 22; and,
FIG. 30 is a cross-section along line “30-30” in FIG. 22.
The evenly spaced broken lines depict unclaimed parts of the cutting insert and form no part of the claimed design. The single dot-dash chain lines depict a boundary of the claimed subject matter and form no part of the claimed design. The double dot-dash chain lines depict either (i) cross-sectional lines or (ii) areas shown as detail views in certain figures, and form no part of the claimed design.

1 Claim, 21 Drawing Sheets



(58) **Field of Classification Search**

CPC . B23B 27/1622; B23B 2200/321; B23C 5/06;
B23C 5/15; B23C 5/007; B23C 5/143;
B23C 5/145; B23C 5/205; B23C 5/207;
B23C 2200/048; B23C 2200/085; B23C
2200/086; B23C 2200/087; B23C
2200/125; B23C 2200/128; B23C
2200/201; B23C 2200/204; B23C
2200/362; B23C 2200/367; B23C
2200/0416; B23C 2200/0422; B23C
2200/0423; B23C 2200/0477; B23C
2200/0494

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D847,883	S	*	5/2019	Kobayashi		D15/139
D852,245	S	*	6/2019	Kobayashi		B23C 5/1036
						D15/139
D852,246	S	*	6/2019	Kobayashi		D15/139
2011/0299945	A1	*	12/2011	Choi		B23C 5/1036
						407/11

* cited by examiner

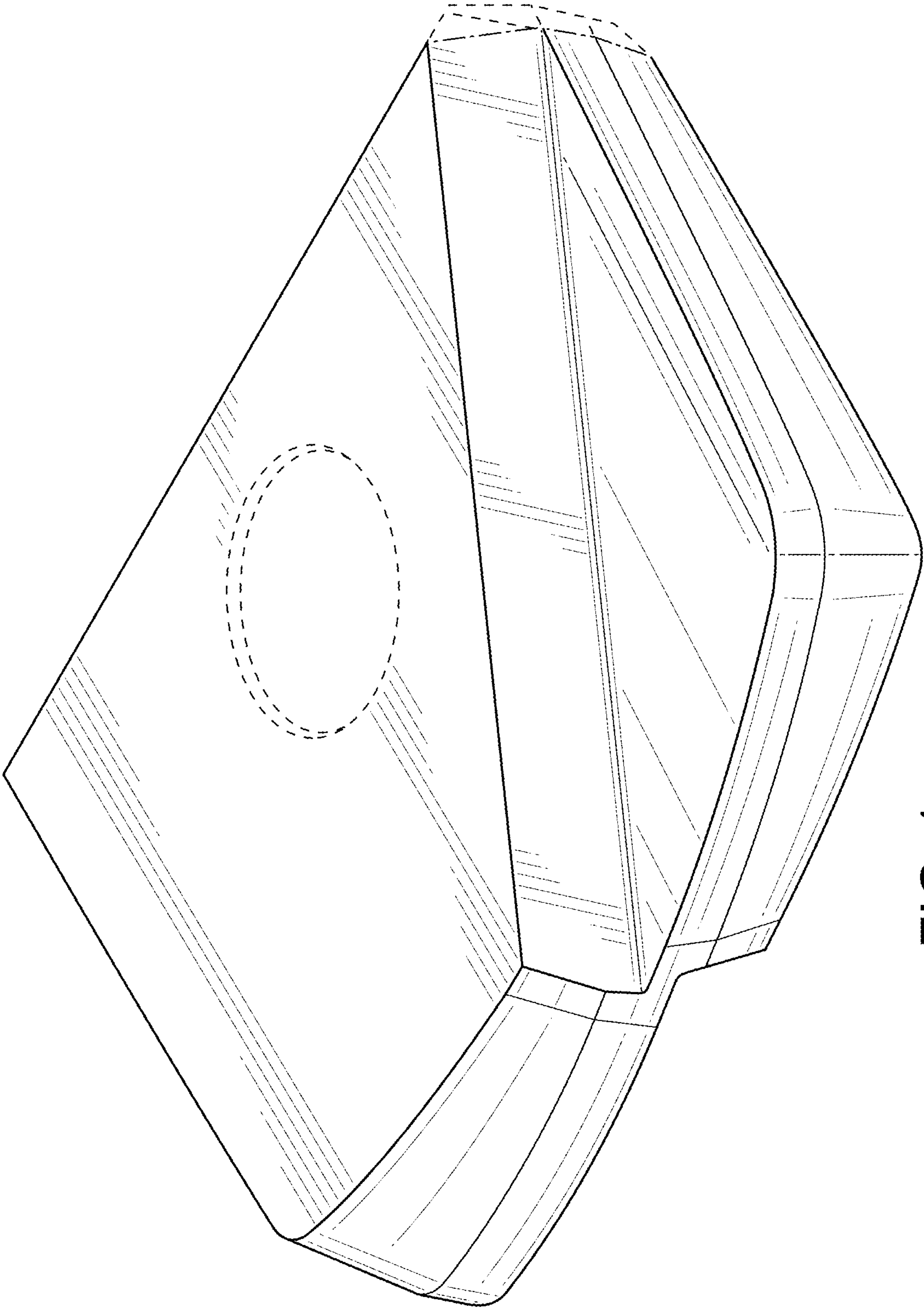


FIG. 1

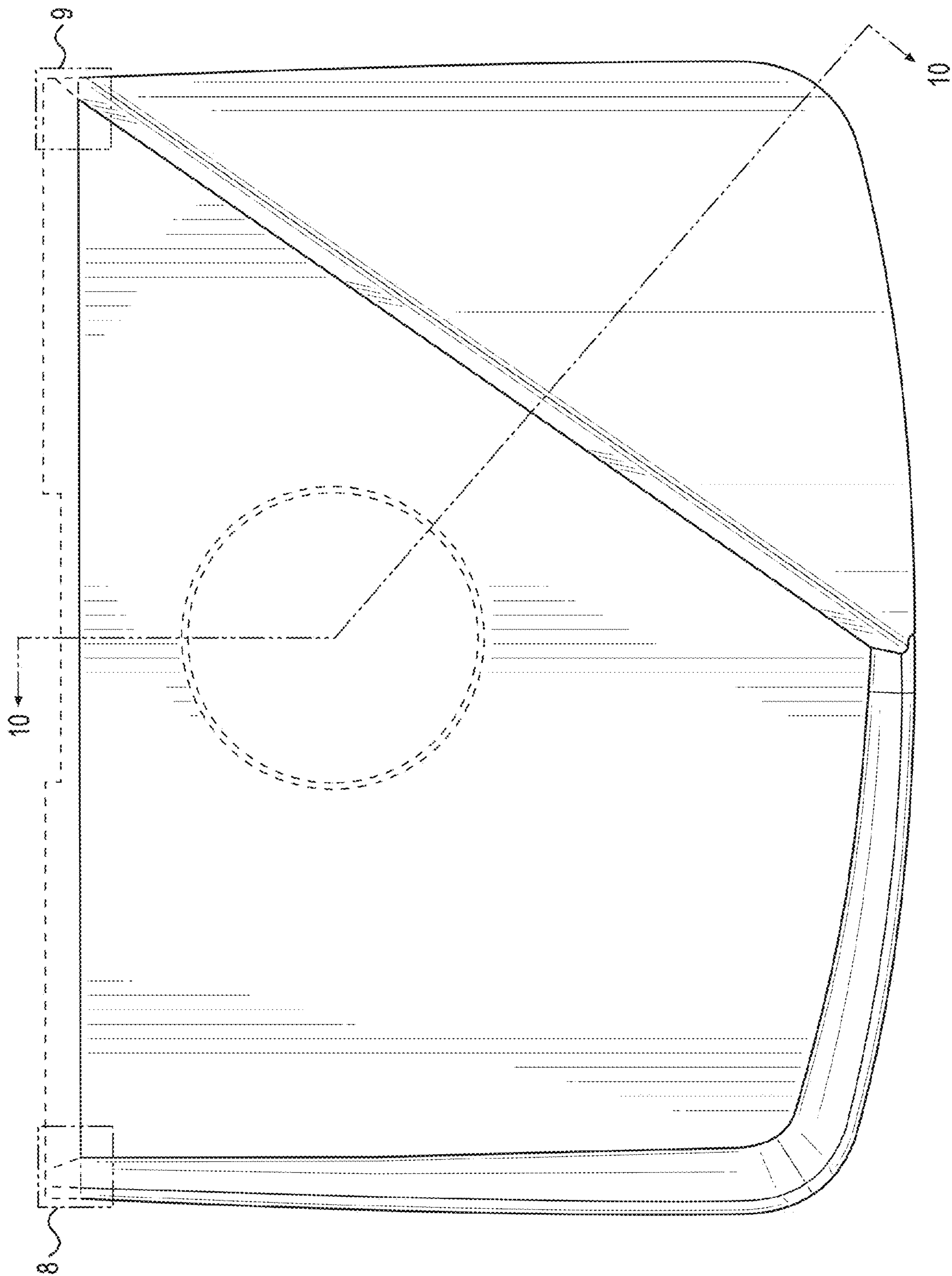


FIG. 2

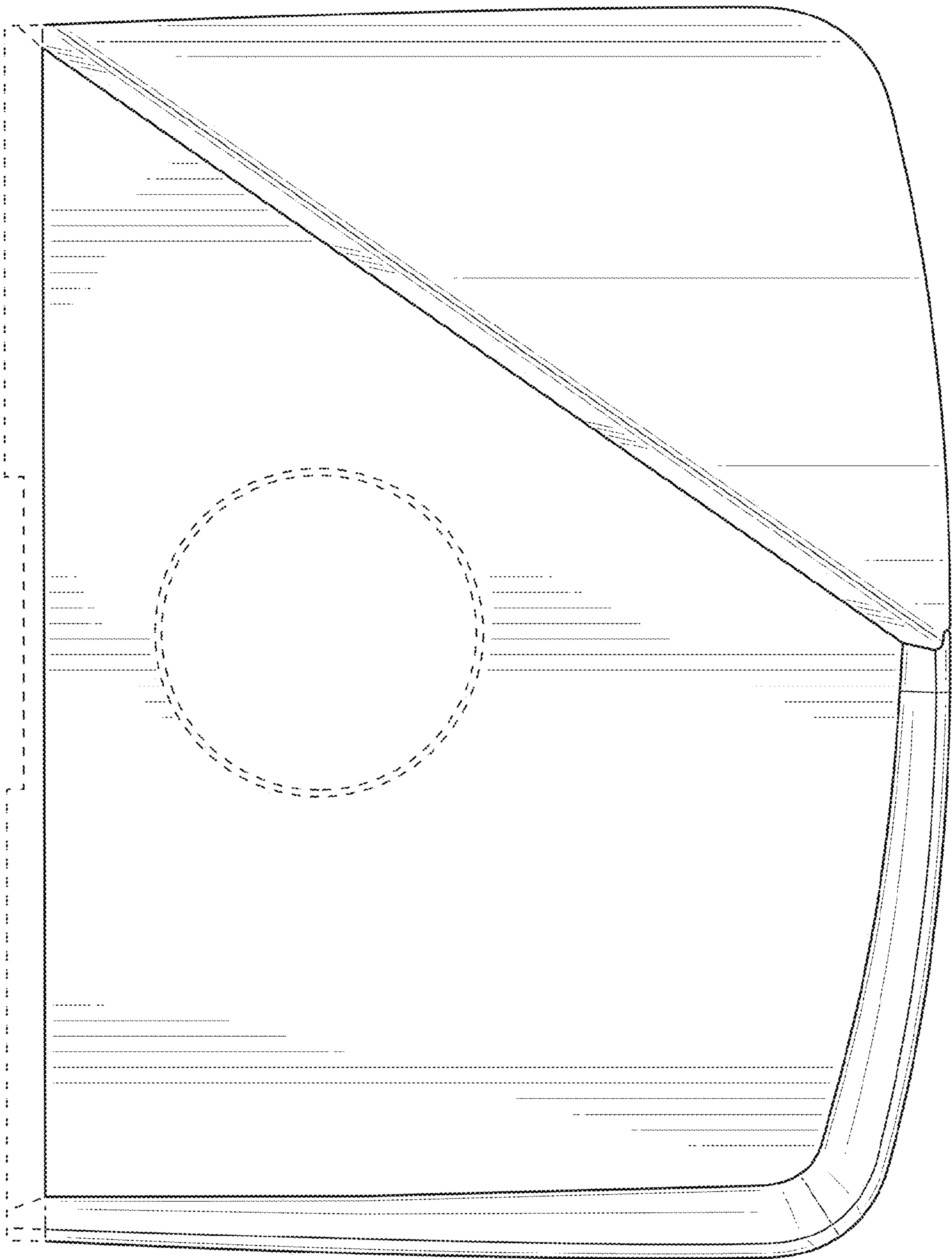


FIG. 3

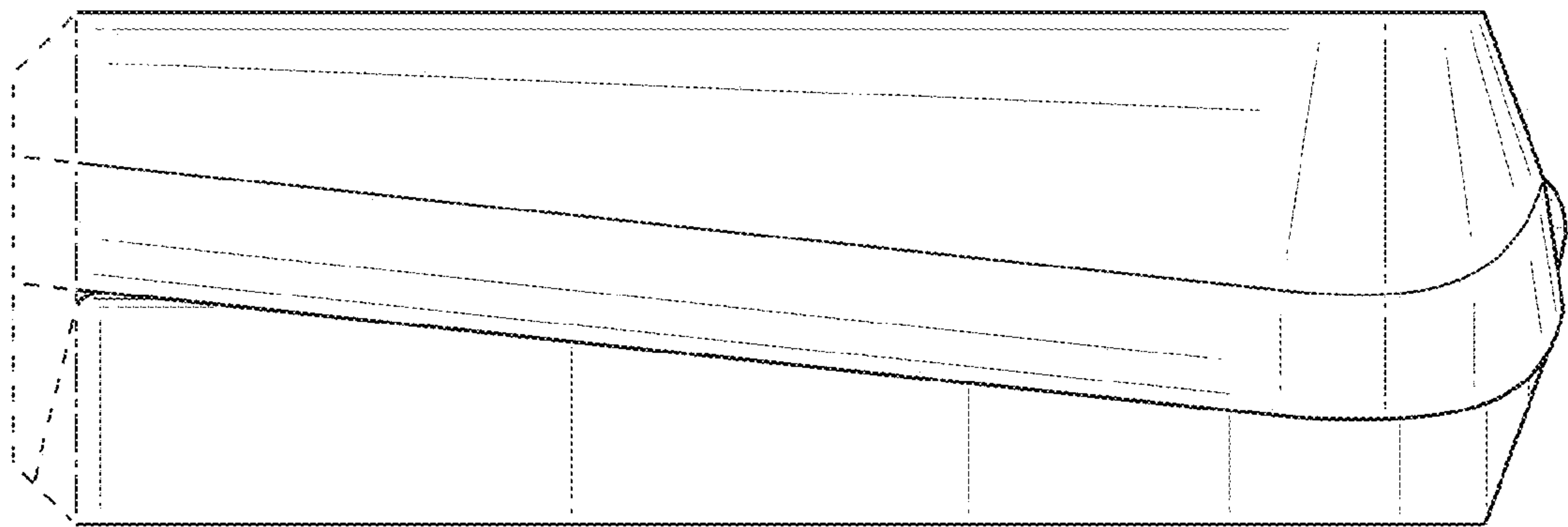


FIG. 4

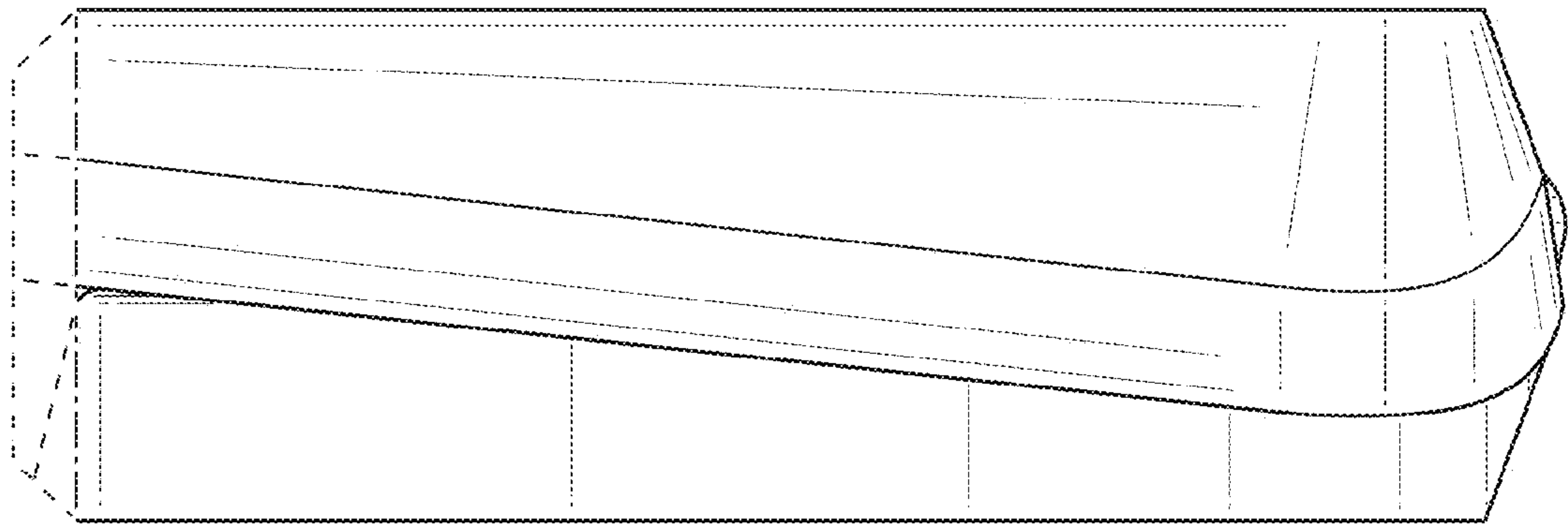


FIG. 5

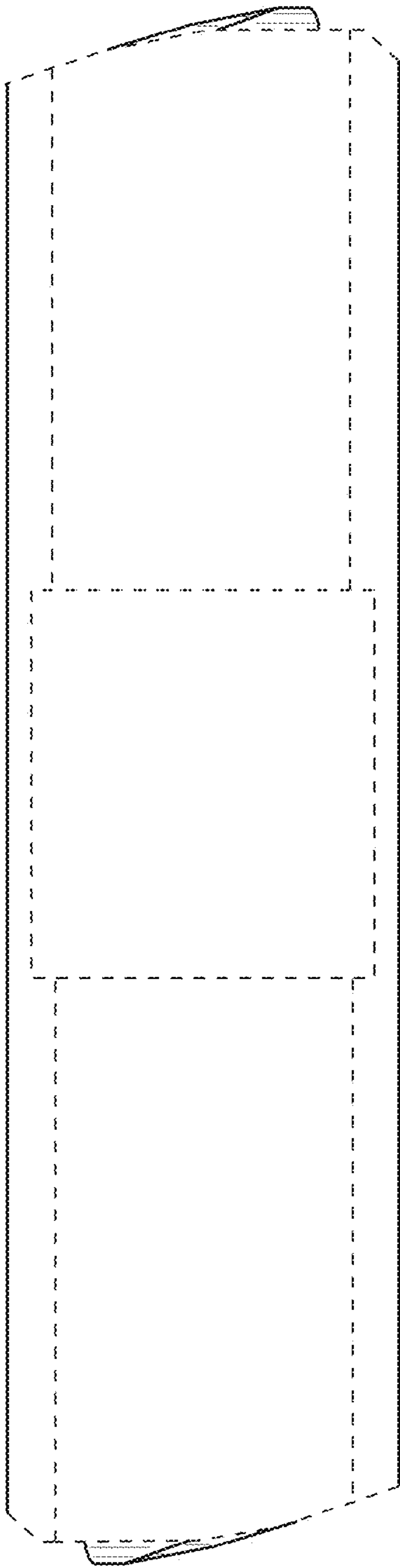


FIG. 6

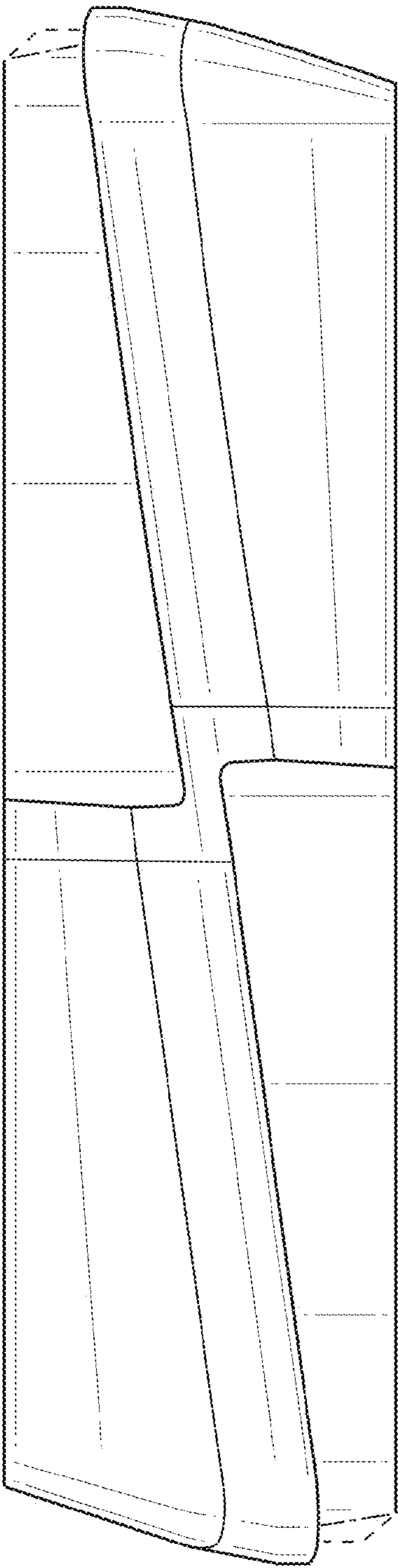


FIG. 7

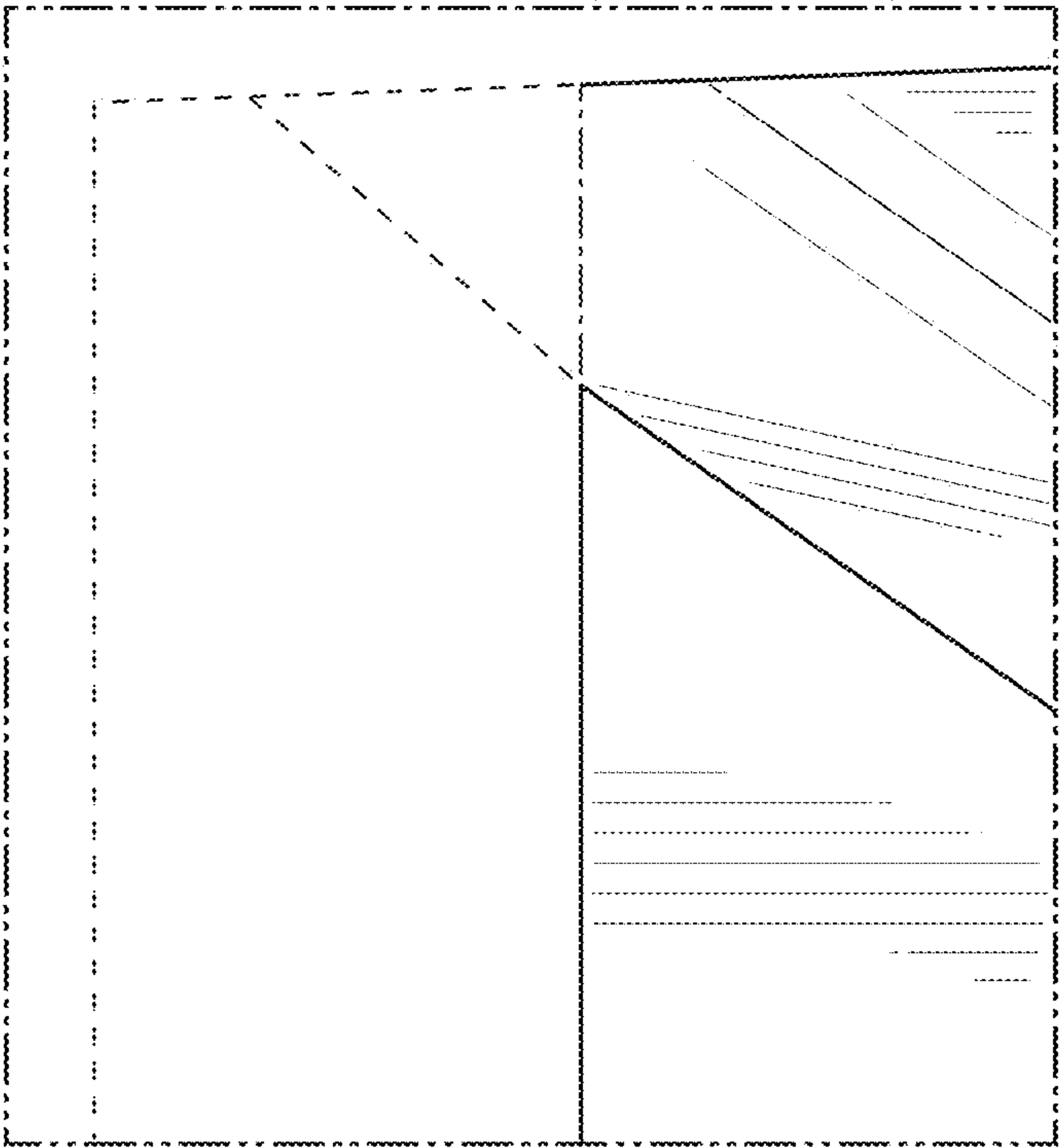


FIG. 9

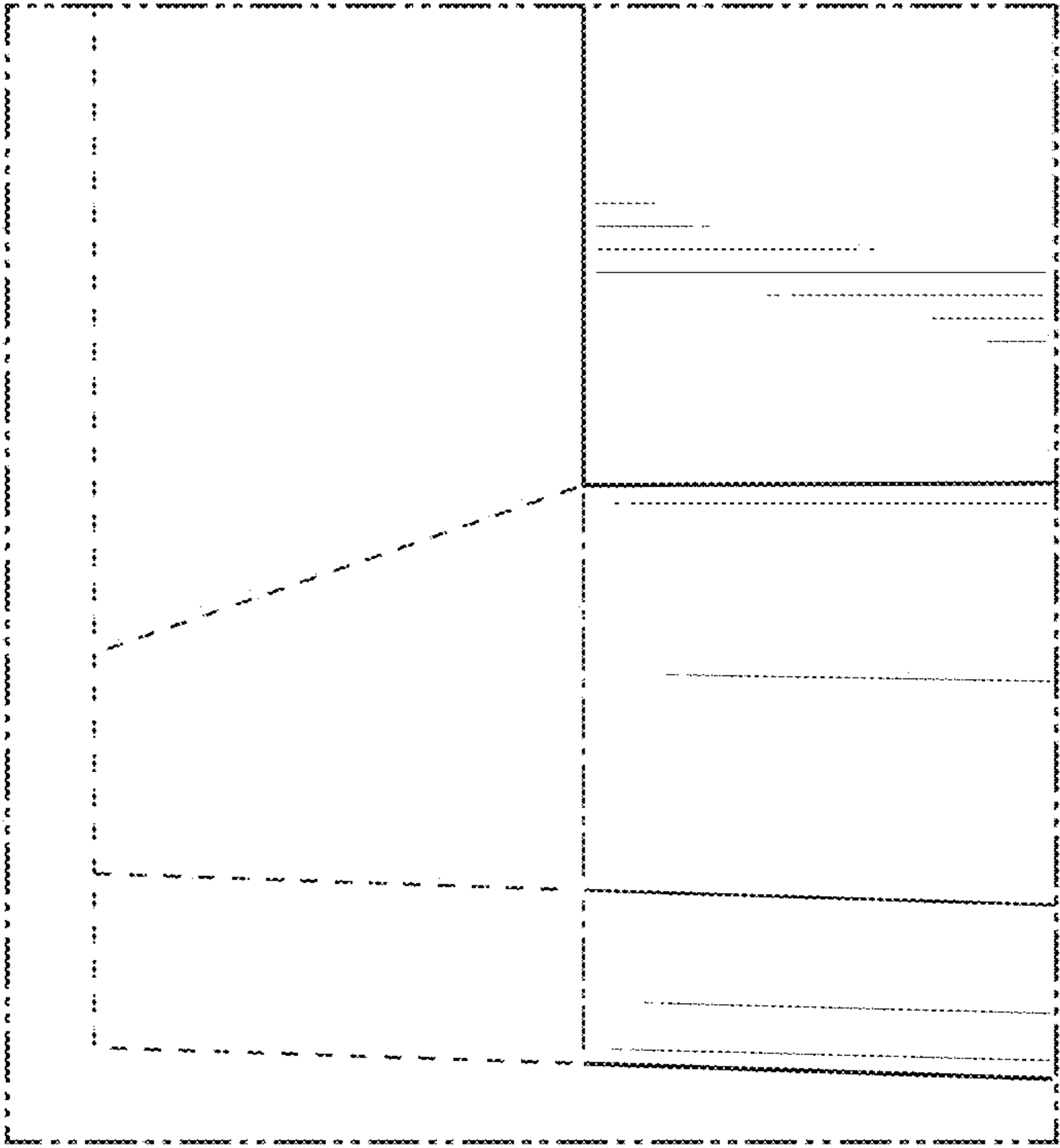


FIG. 8

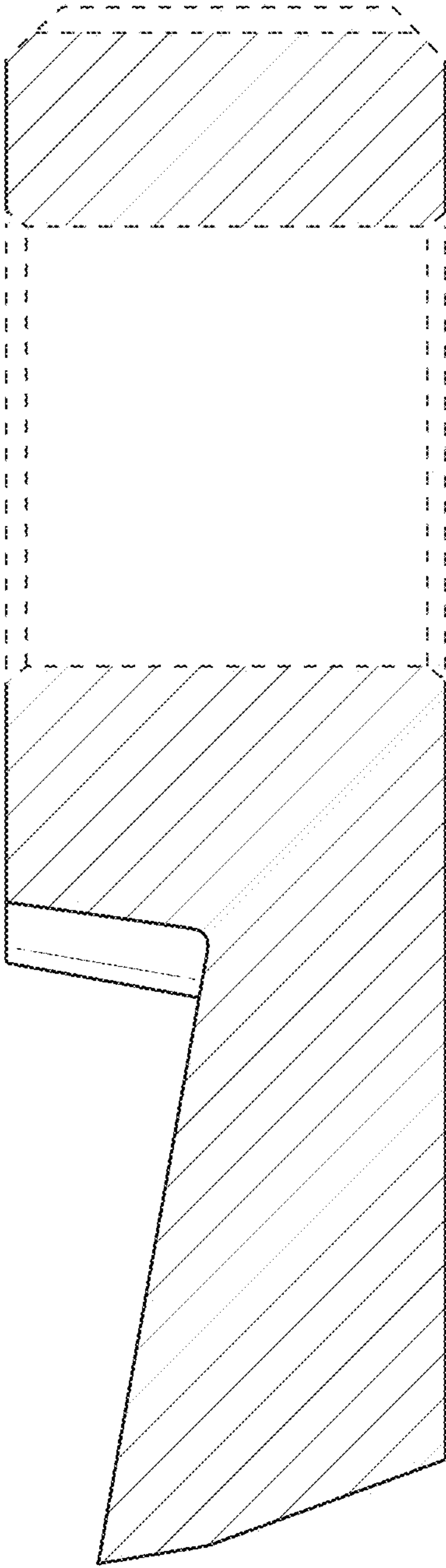


FIG. 10

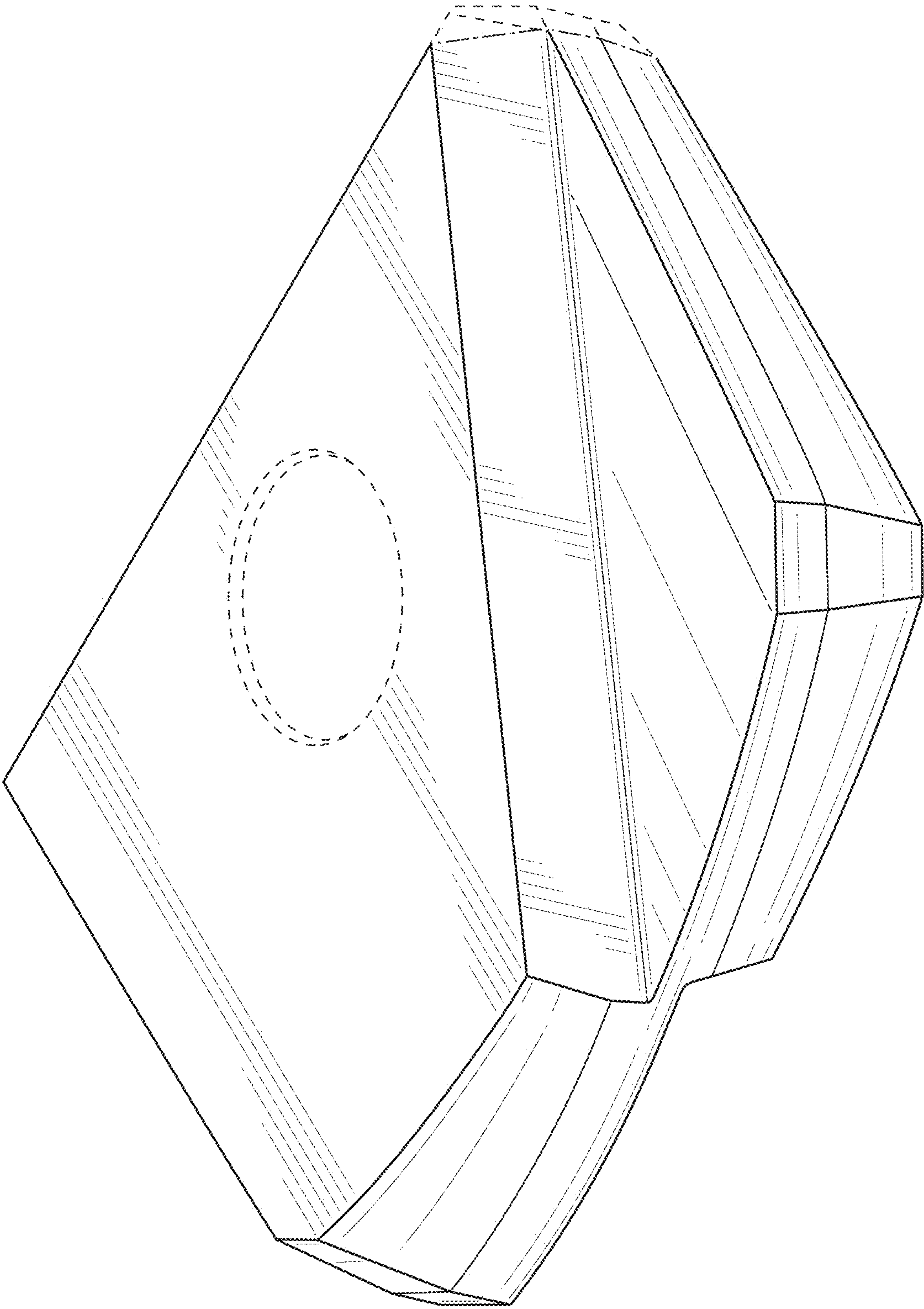


FIG. 11

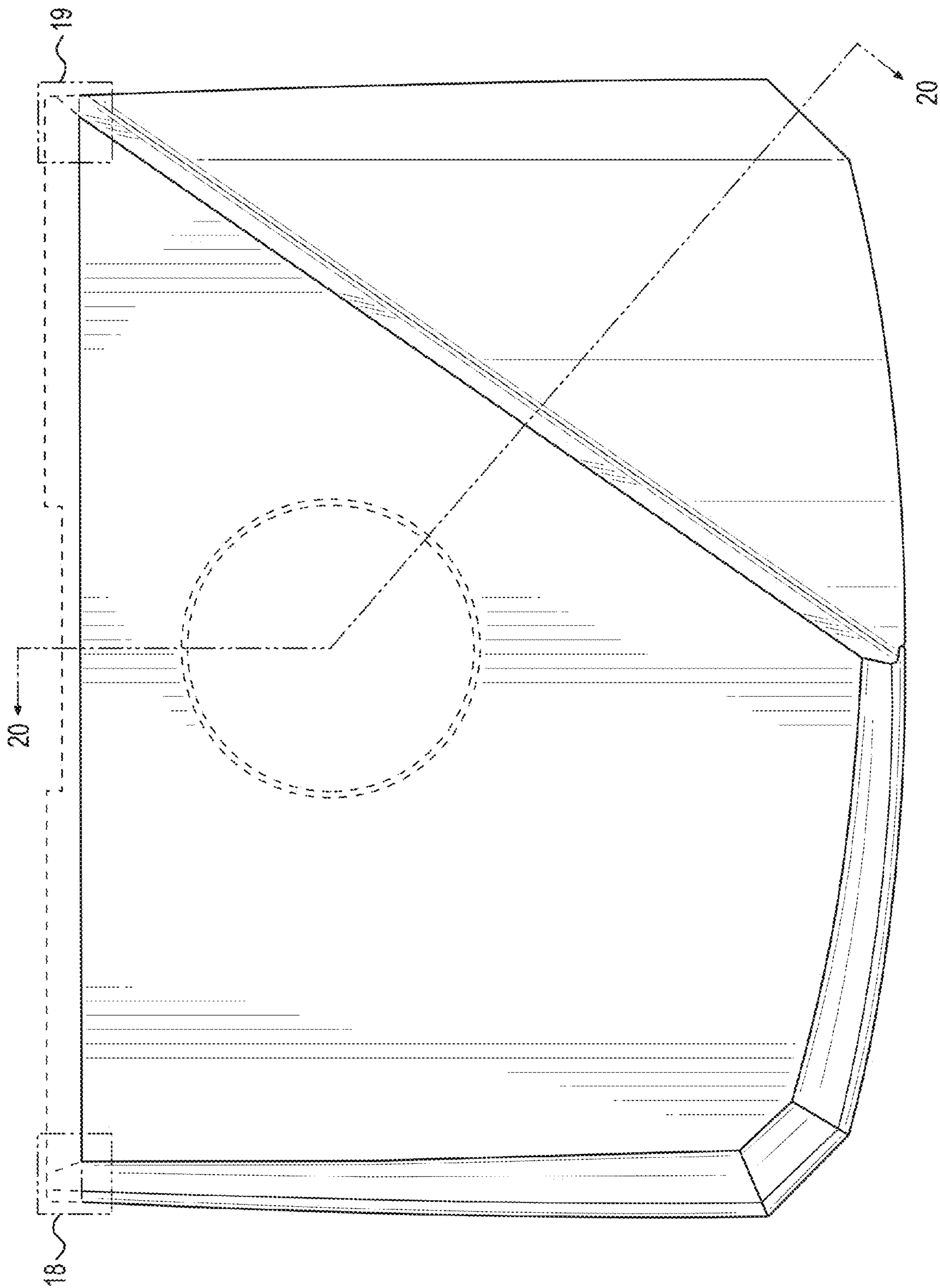


FIG. 12

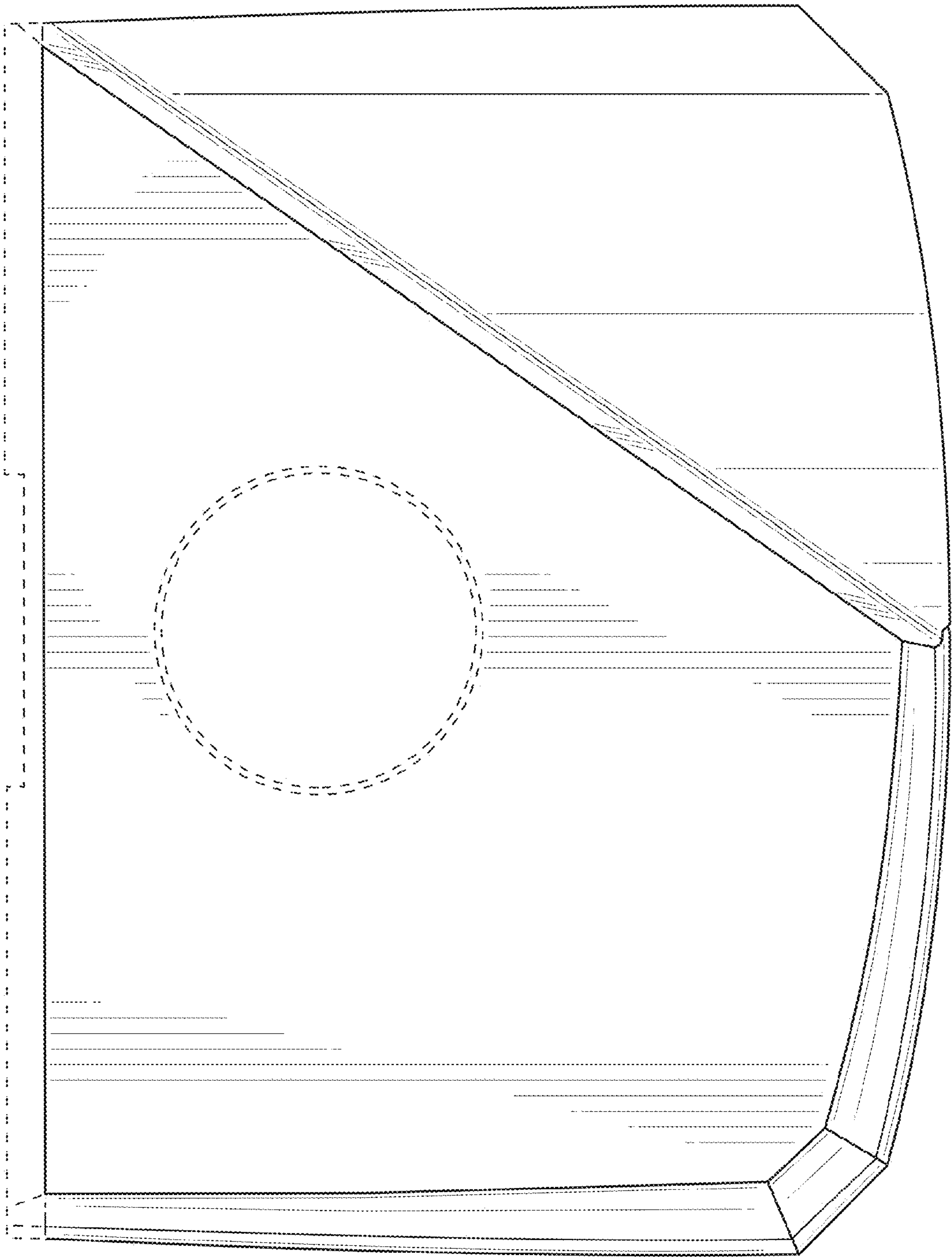


FIG. 13

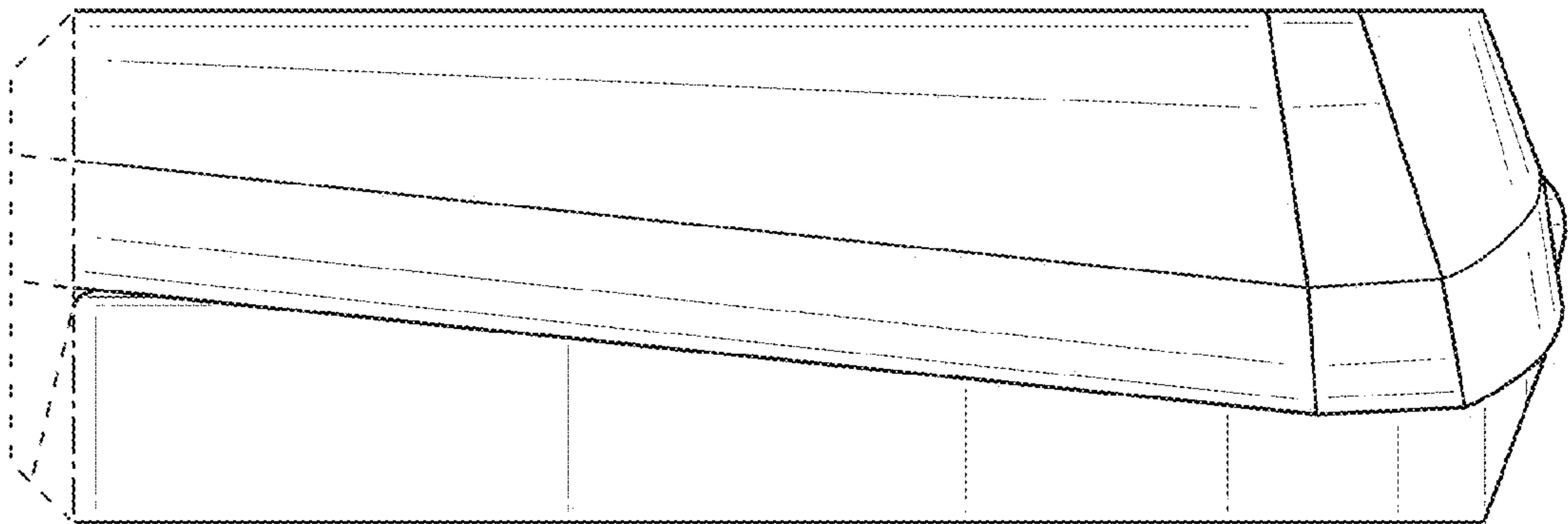


FIG. 14

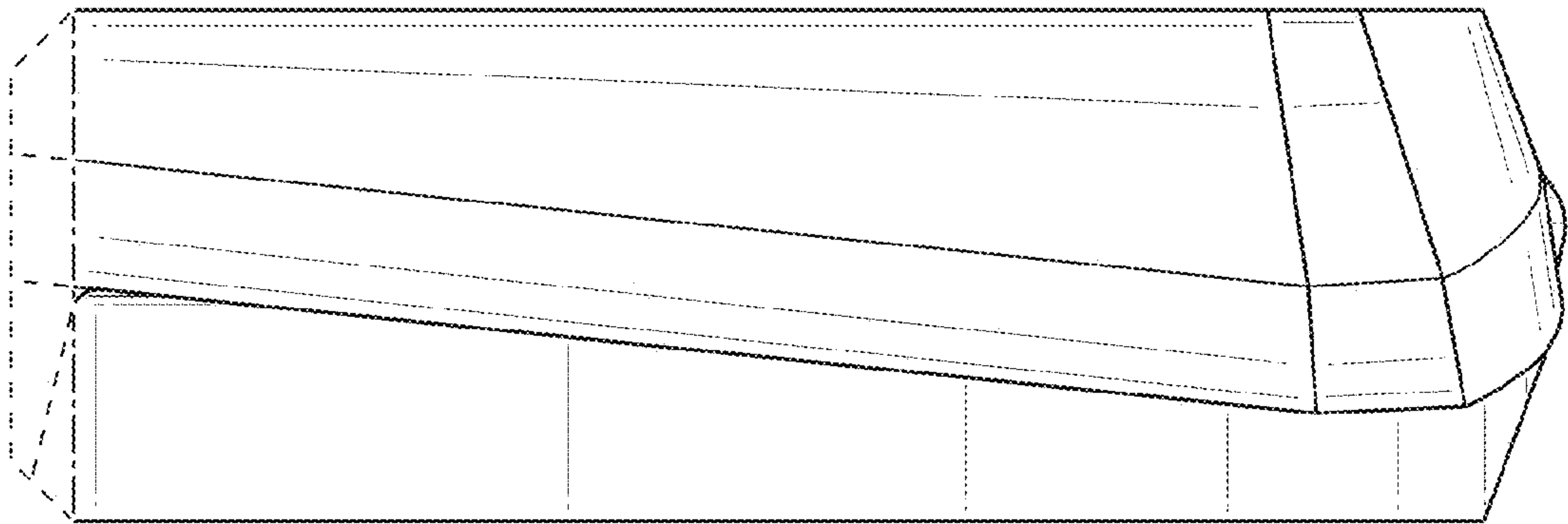


FIG. 15

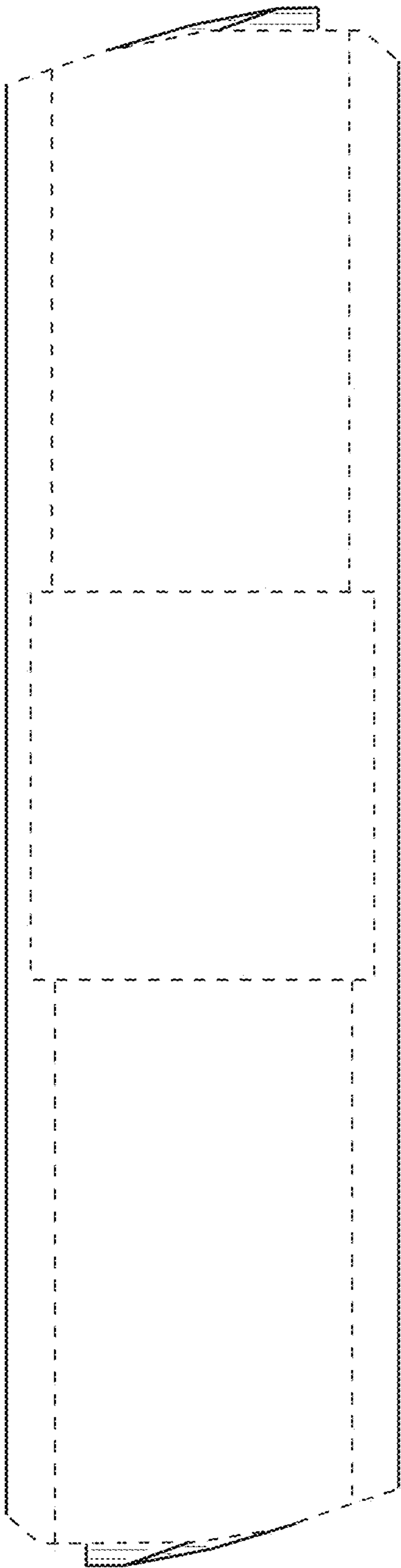


FIG. 16

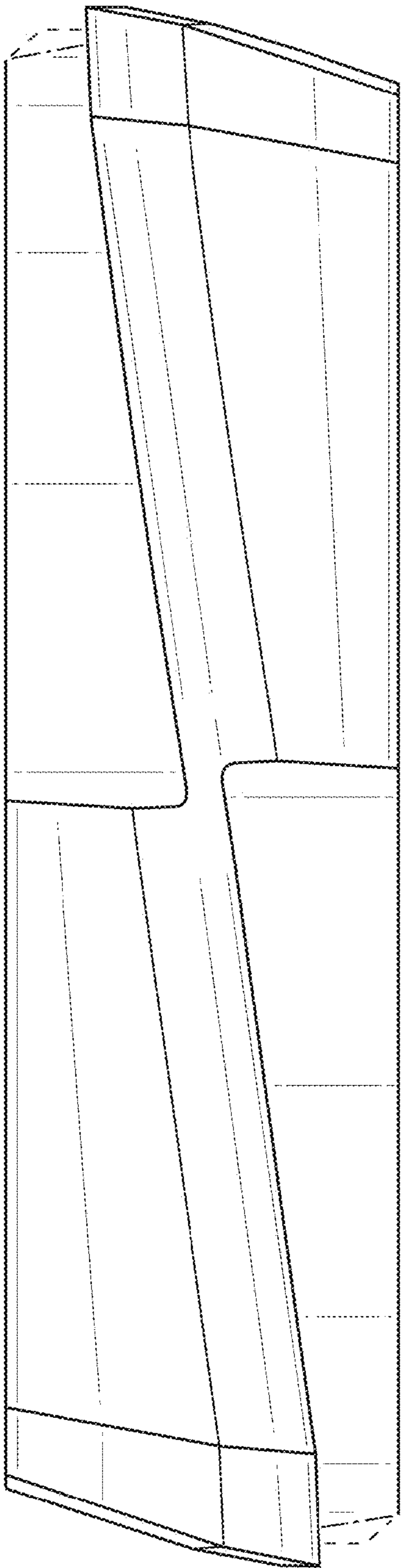


FIG. 17

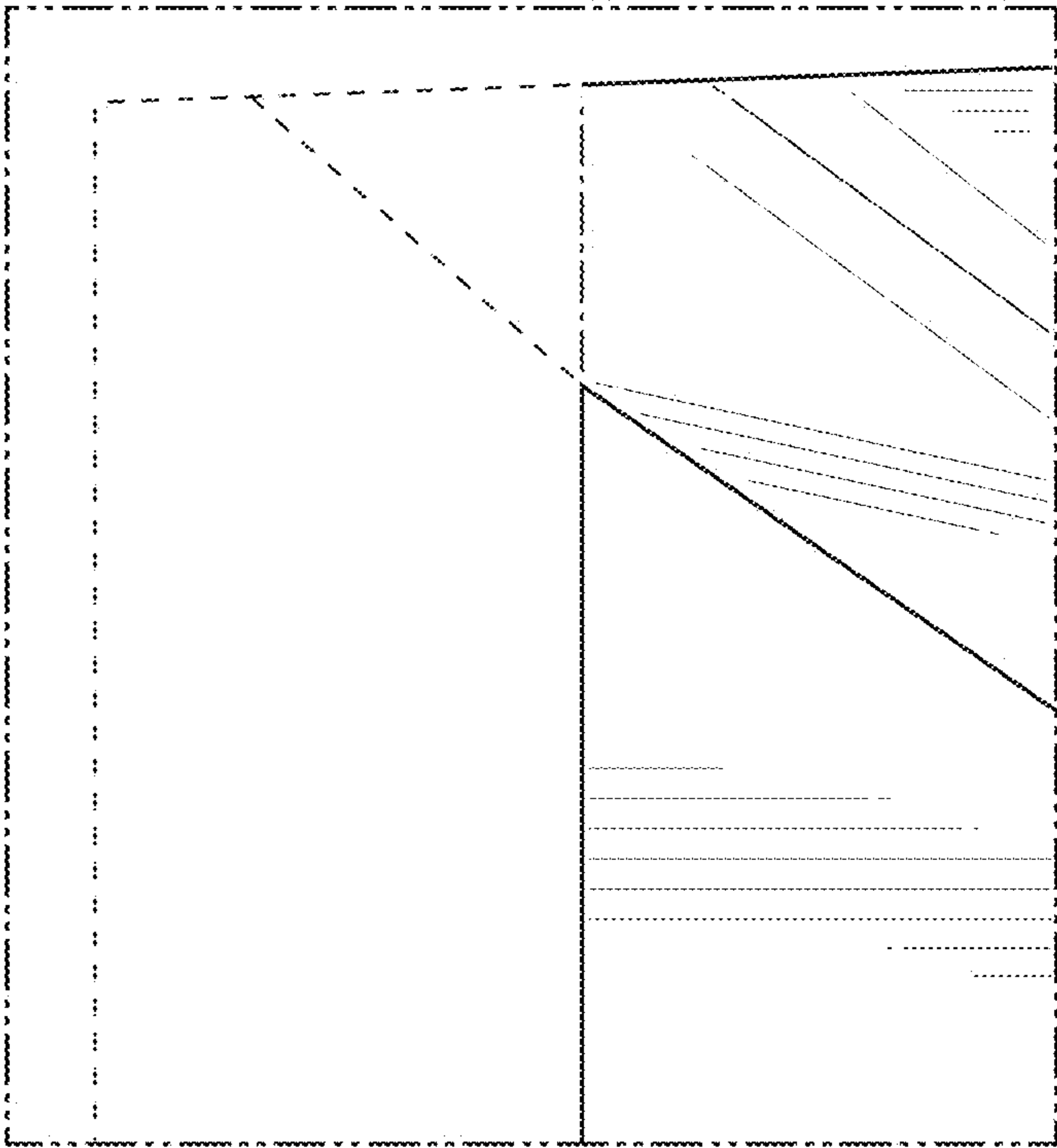


FIG. 19

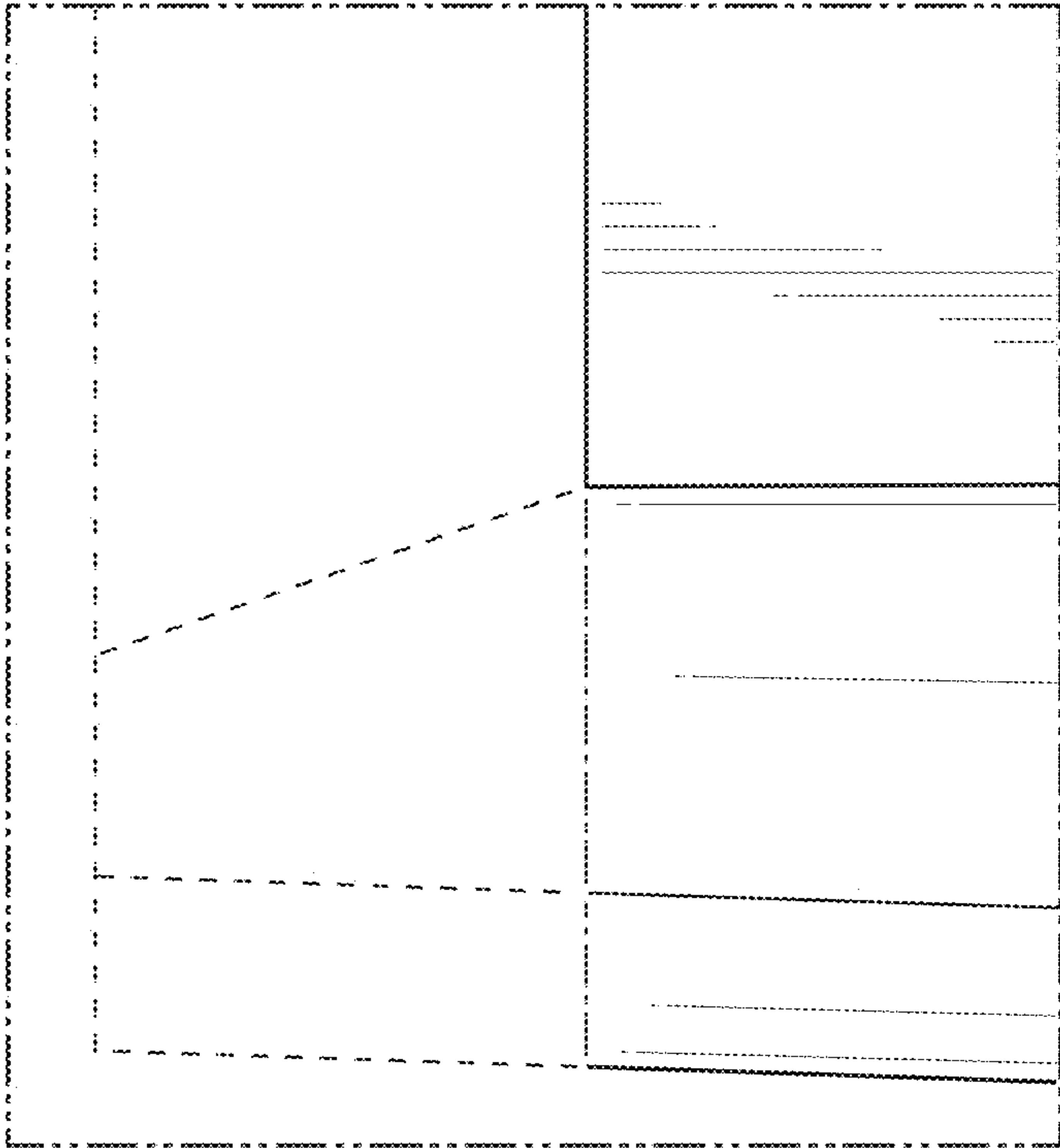


FIG. 18

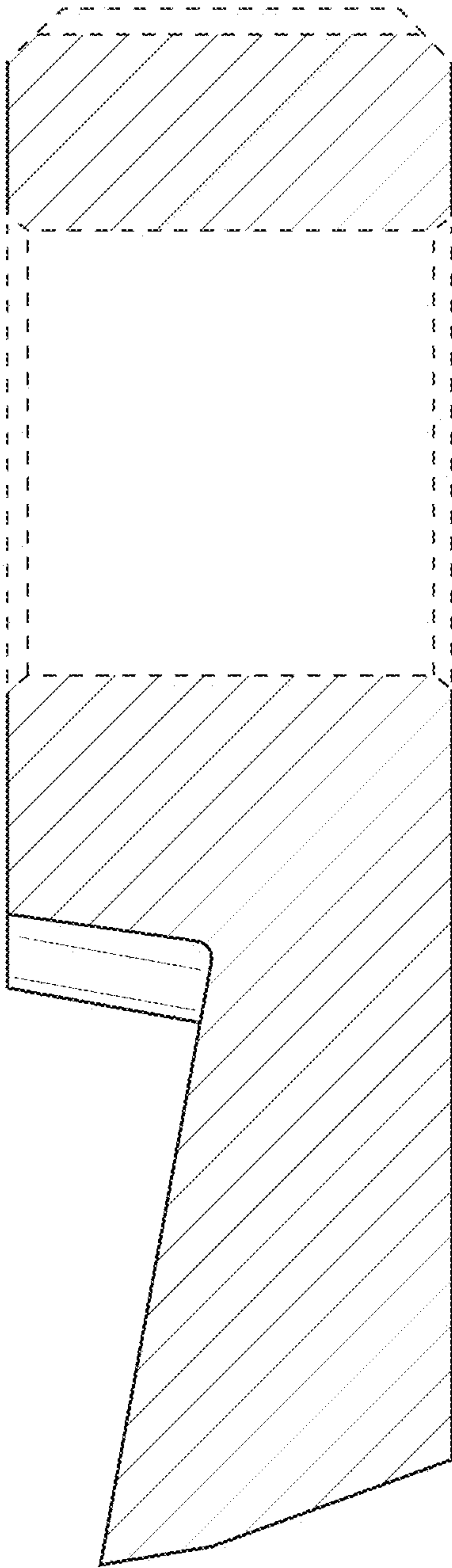


FIG. 20

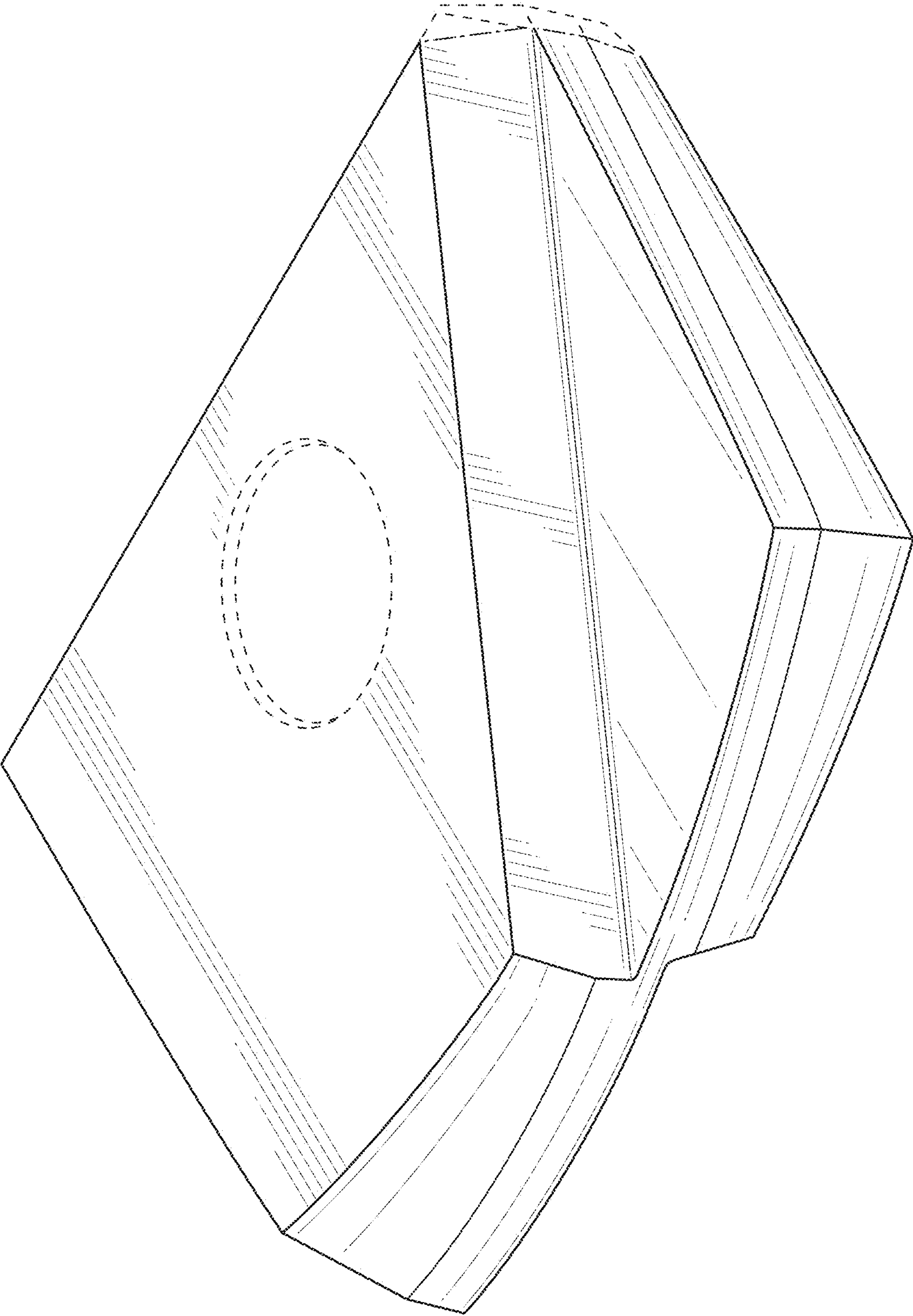


FIG. 21

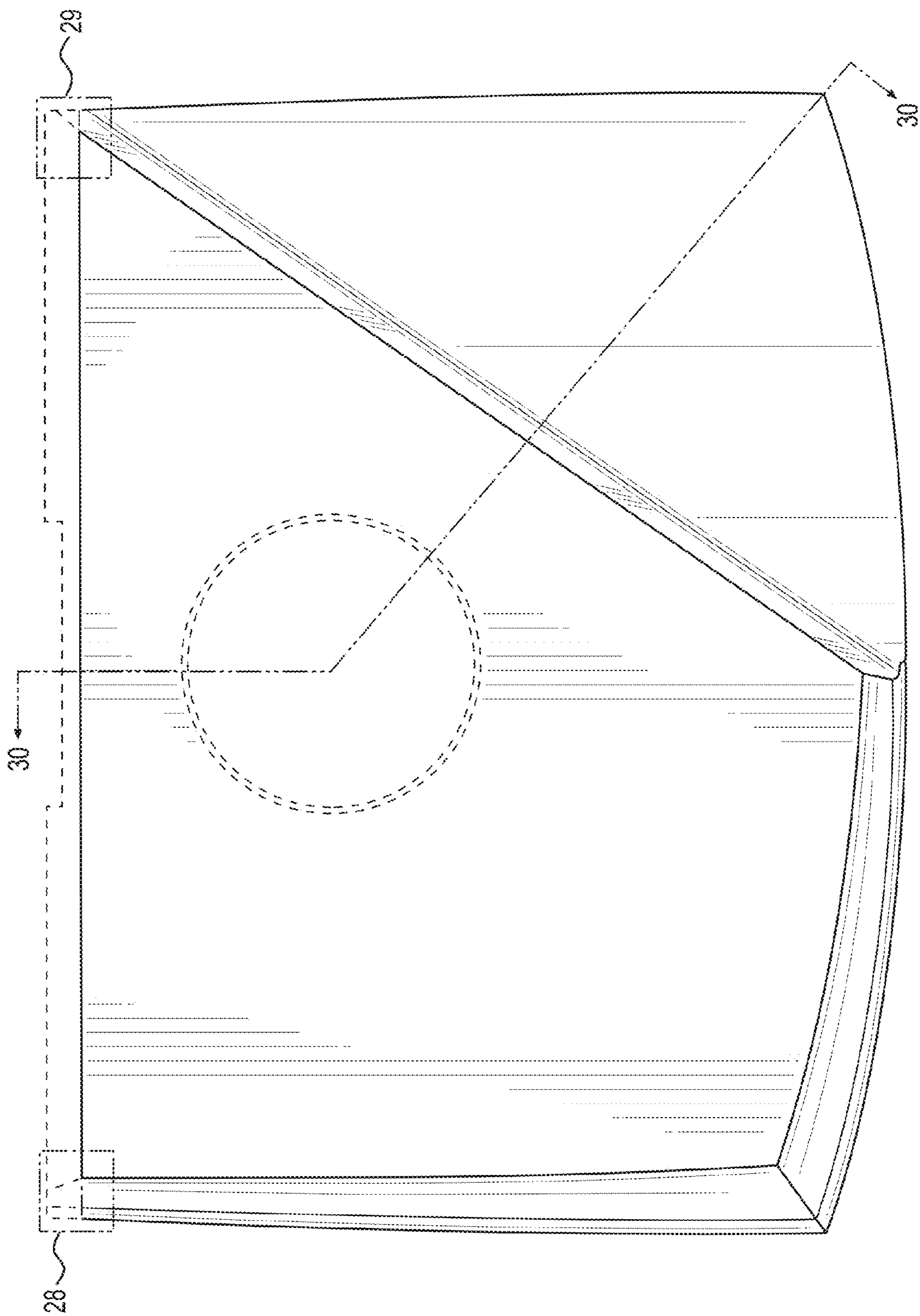


FIG. 22

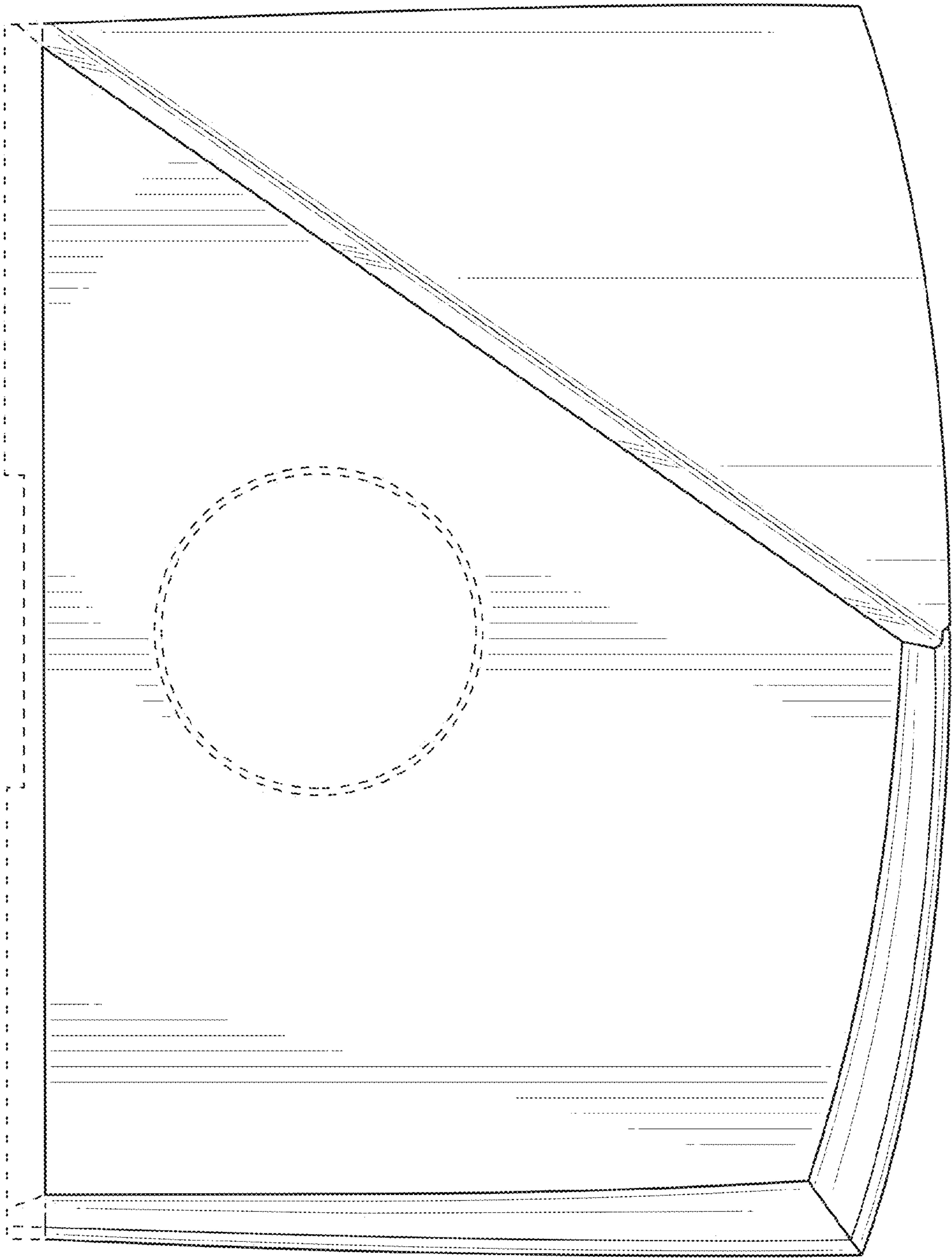


FIG. 23

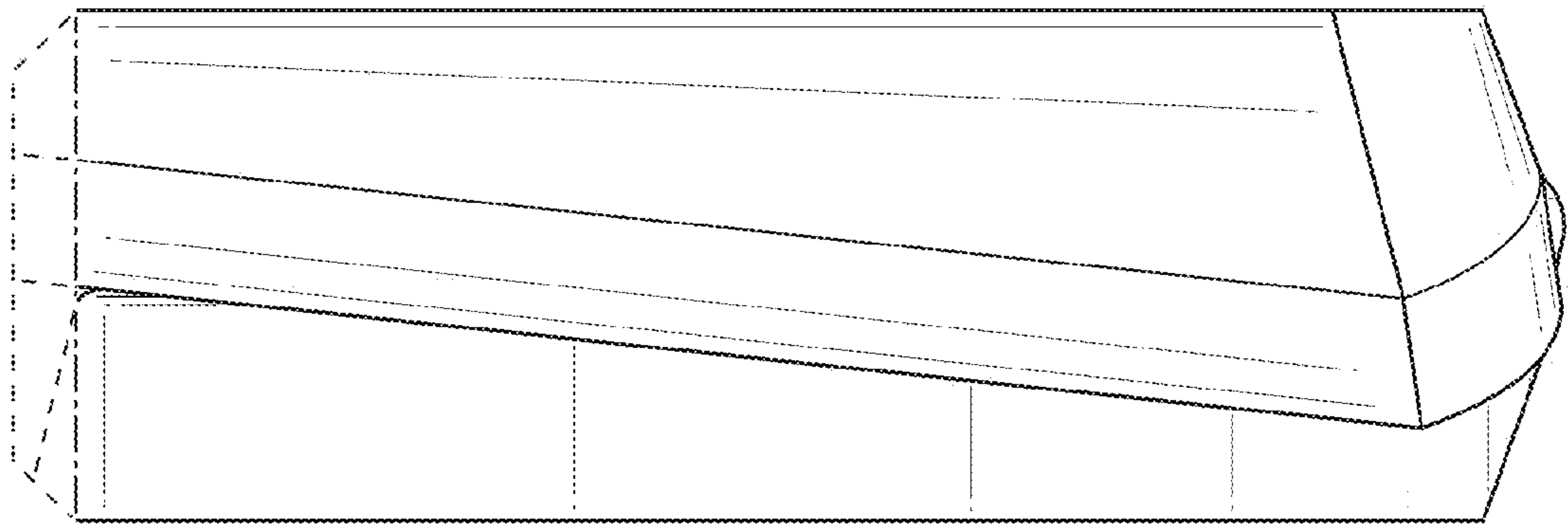


FIG. 24

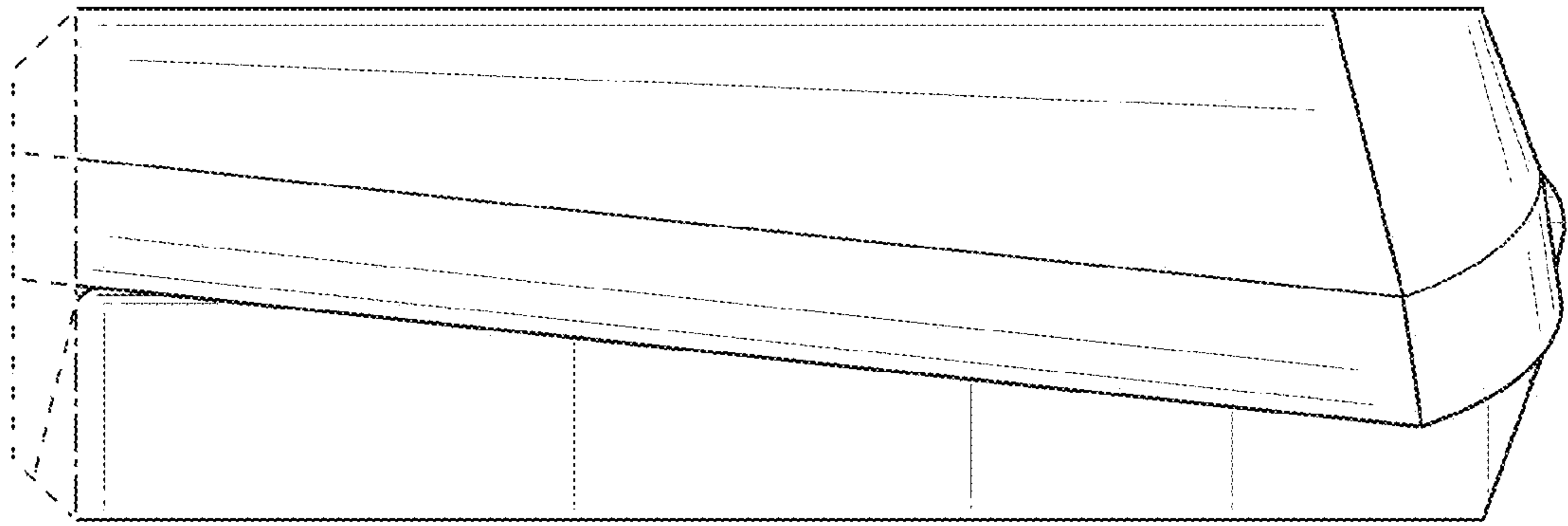


FIG. 25

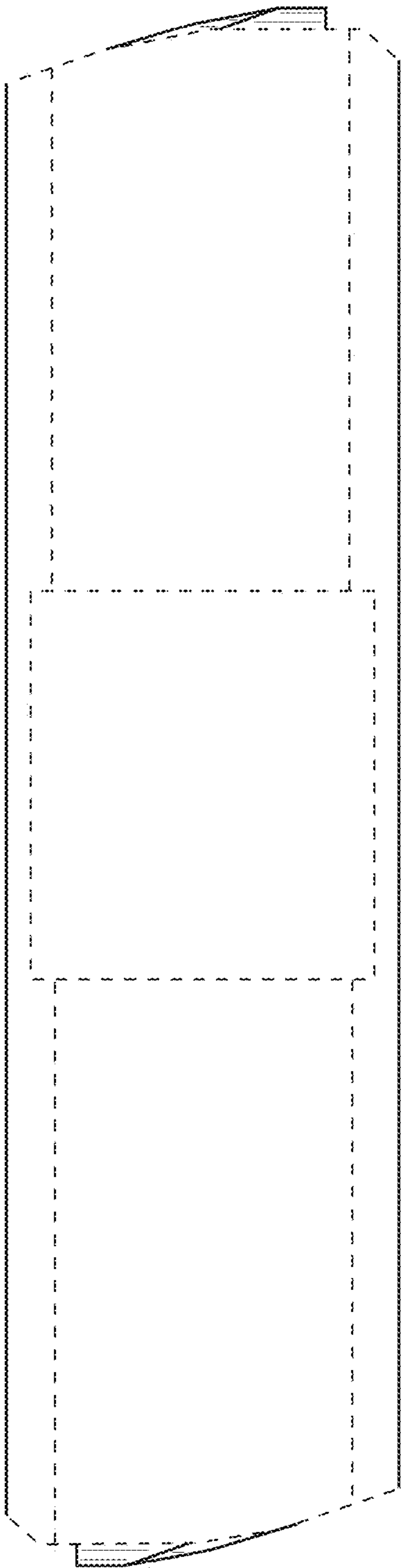


FIG. 26

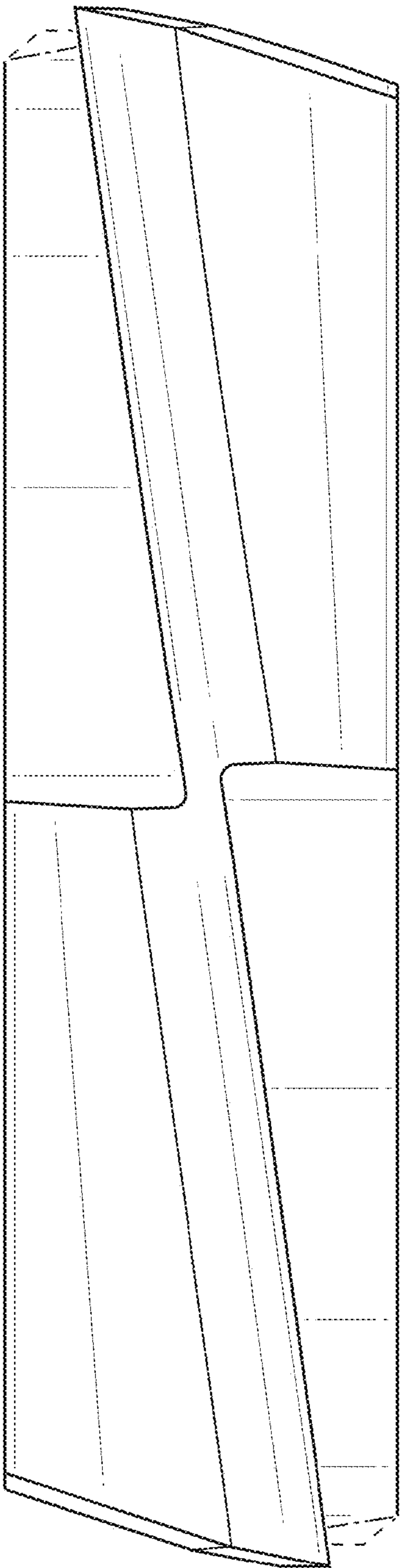


FIG. 27

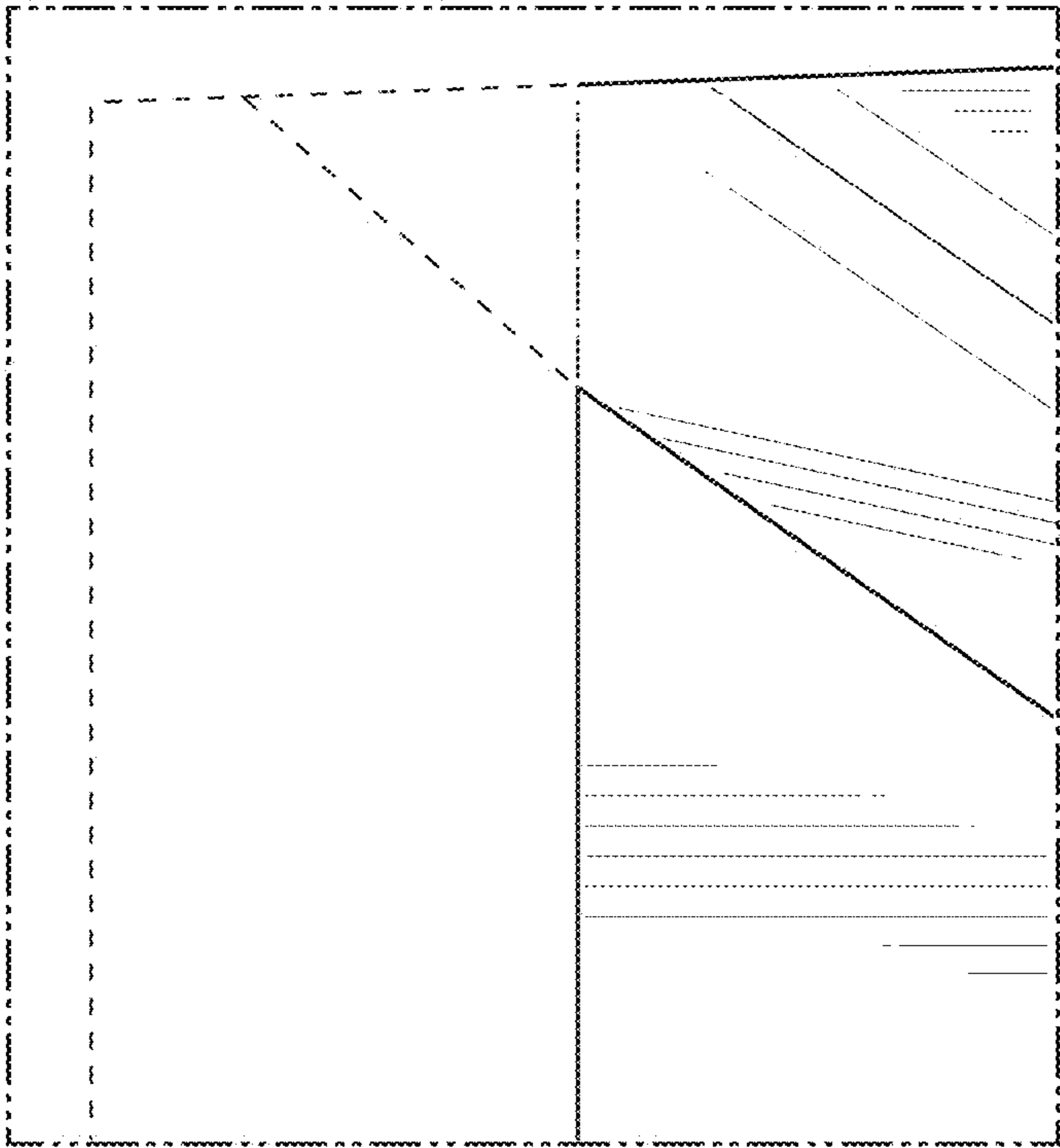


FIG. 29

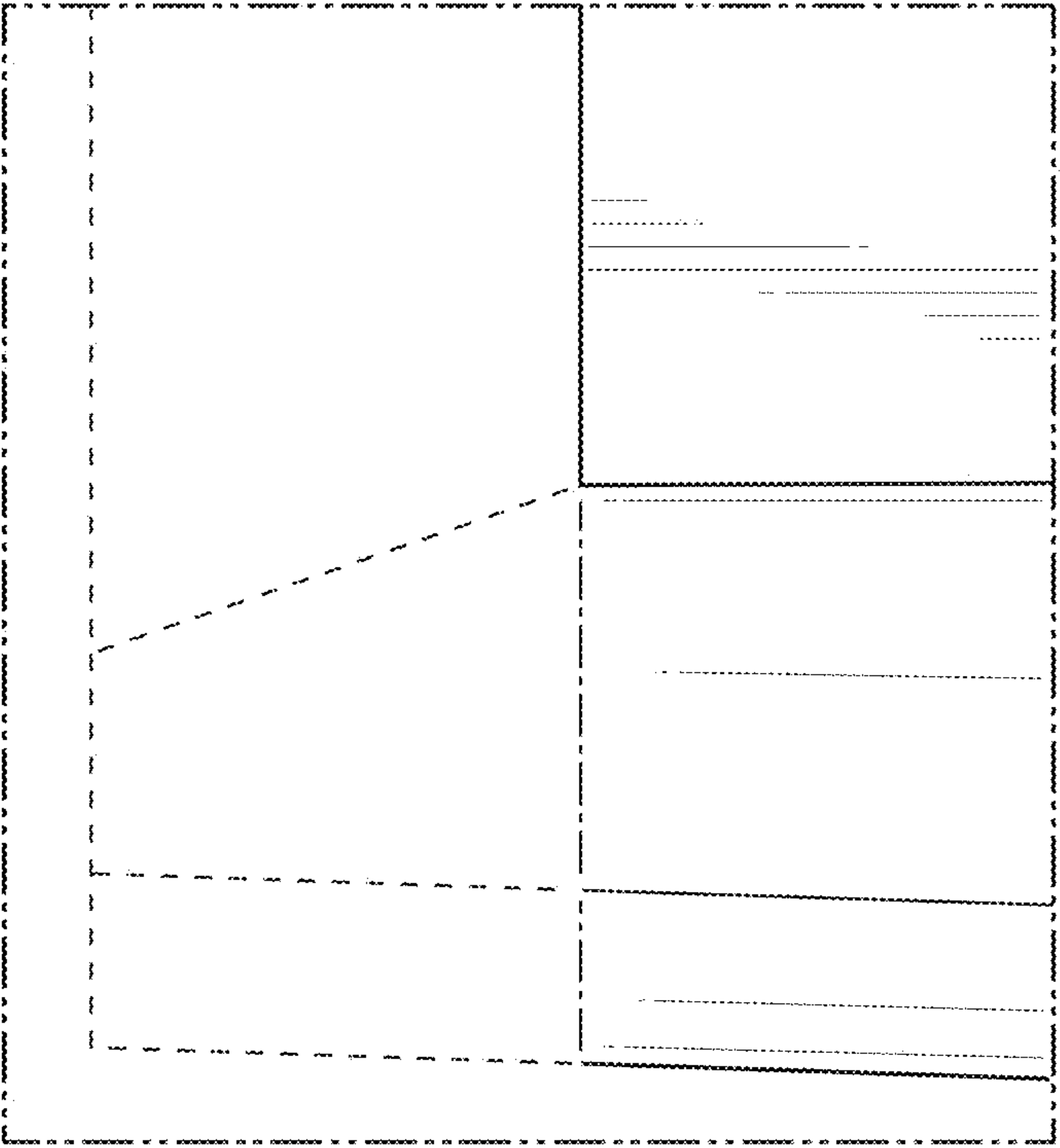


FIG. 28

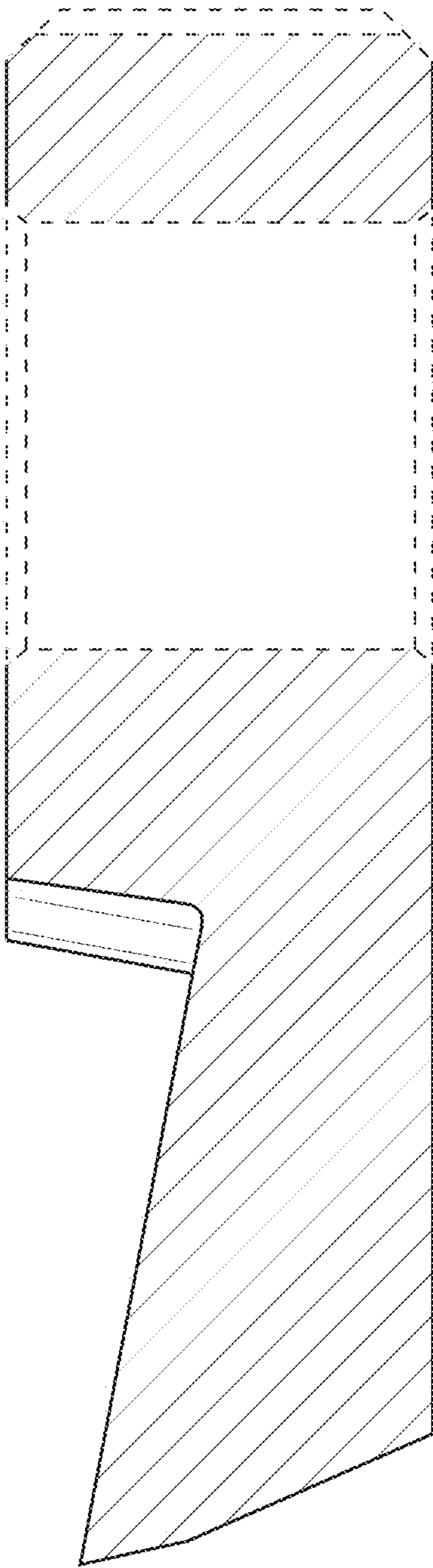


FIG. 30