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(12) **United States Design Patent** (10) **Patent No.:** **US D854,057 S**
de Cavalcanti et al. (45) **Date of Patent:** **** *Jul. 16, 2019**

(54) **REFRIGERATOR AIR FILTER ASSEMBLY**

FOREIGN PATENT DOCUMENTS

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CN 2162612 Y 4/1994
CN 2401534 Y 10/2000

(Continued)

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(57) **CLAIM**

The ornamental design for a refrigerator air filter assembly,
as shown and described.

(73) Assignee: **Whirlpool Corporation**, Benton
Harbor, MI (US)

DESCRIPTION

(*) Notice: This patent is subject to a terminal dis-
claimer.

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

(21) Appl. No.: **29/565,439**

(22) Filed: **May 20, 2016**

(51) **LOC (11) Cl.** **15-07**

(52) **U.S. Cl.**
USPC **D15/89**

(58) **Field of Classification Search**
USPC D15/79-91
CPC .. F25D 11/00; F25D 17/065; F25D 2325/022;
F25D 23/069; F25D 25/025; F25D 11/02;
F25D 17/062; F25D 21/12; F25D 21/125;
F25D 21/14; F25D 2317/061; F25D
2317/067; F25D 2323/021; F25D
(Continued)

FIG. 1 is a front perspective view of a refrigerator air filter
assembly according to our design shown in an unclaimed
refrigerator, back, right side, left side, top and bottom views
of the design showing no claimed portion of the design when
in place within the unclaimed refrigerator;
FIG. 2 is a top-front perspective view of the refrigerator air
filter assembly of FIG. 1 with portions of the unclaimed
refrigerator removed;
FIG. 3 is a front-right perspective view thereof;
FIG. 4 is a front view thereof;
FIG. 5 is a right cross-sectional reference view thereof taken
along the line 5-5 in FIG. 4; and,
FIG. 6 is a bottom cross-sectional reference view thereof
taken along the line 6-6 in FIG. 4.

The broken line showing of various features of the air filter
assembly and the unclaimed refrigerator is for the purpose of
illustrating unclaimed portions of the refrigerator air filter
assembly and forms no part of the claimed design.

Dash-dot lines adjacent un-shaded areas represent bounds of
the claimed design and form no part of the claimed design
themselves.

Stipple-filled portions of the article indicate a contrasting
appearance due to such portions being illuminated by inci-
dent light and does not indicate a stipple pattern in the
lighting itself.

FIGS. 5 and 6 are sectional views for purposes of illustrating
relationships between certain structures relative the front
vertical plane of the assembly.

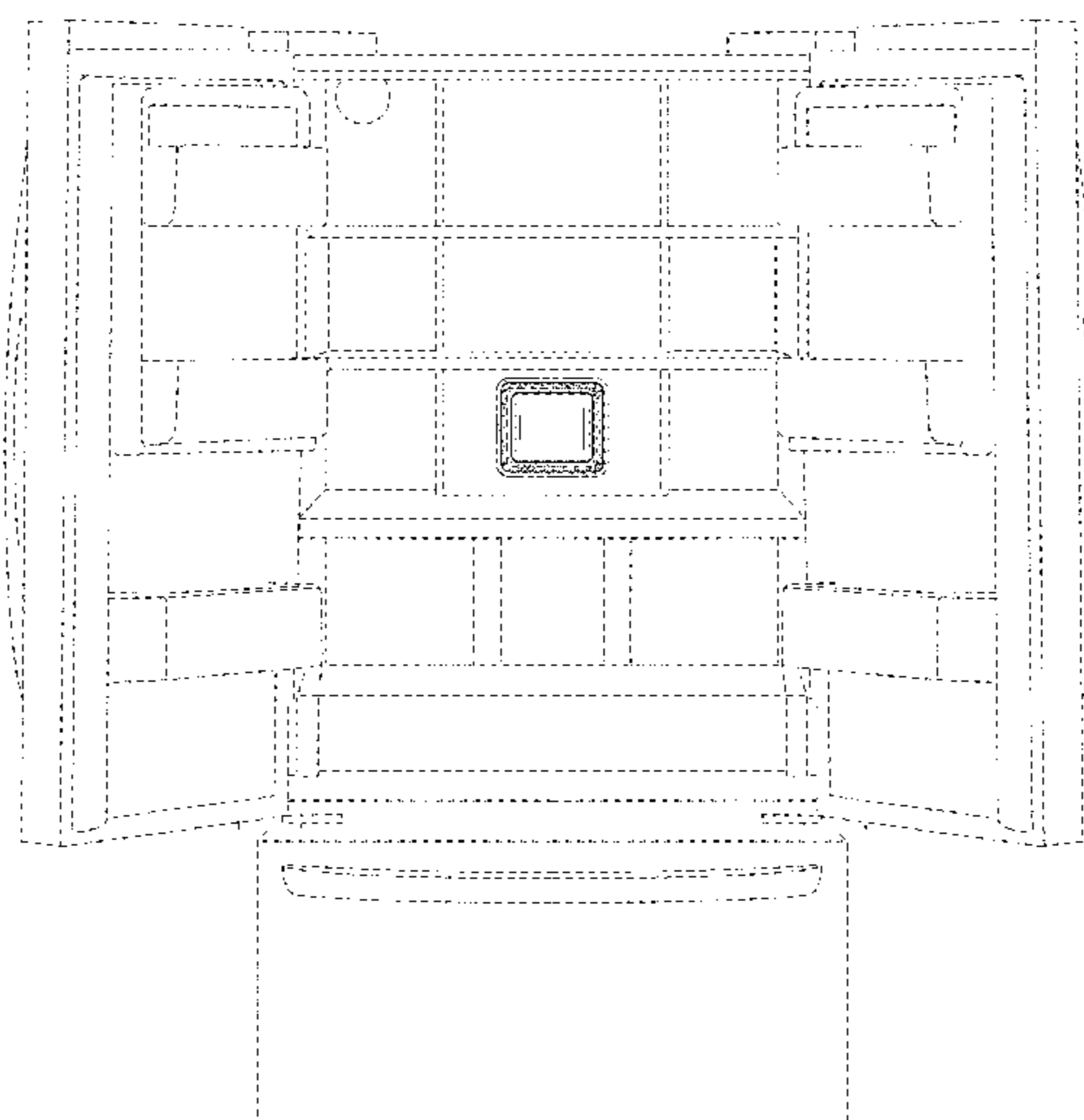
(56) **References Cited**

U.S. PATENT DOCUMENTS

D511,178 S * 11/2005 Tunzi D15/89
D514,138 S * 1/2006 Jackovin D15/89

(Continued)

1 Claim, 5 Drawing Sheets



(58) **Field of Classification Search**

CPC .. 2323/024; F25D 23/028; F25D 23/04; F25D
 23/066; F25D 23/085; F25D 23/087;
 F25D 23/126; F25D 2400/02; F25D
 2400/06; F25D 2400/361; F25D 2400/40;
 F25D 25/005; F25D 25/02; F25D
 2600/02; F25D 2700/02; F25D 2700/12;
 F25D 2700/121; F25D 2700/14; F25D
 29/00

See application file for complete search history.

D668,276 S *	10/2012	Jungwirth	D15/89
D673,588 S *	1/2013	Choi	D15/89
D710,402 S	8/2014	Jeon et al.	
D737,344 S *	8/2015	Lee	D15/89
D744,013 S *	11/2015	Pfaff	D15/89
D751,126 S *	3/2016	Pfaff	D15/89
D766,997 S *	9/2016	Lee	D15/89
D767,651 S *	9/2016	Heinzle	D15/89
D770,542 S *	11/2016	Floeter Junior	D15/89
D784,429 S *	4/2017	Kim	D15/89
D807,412 S *	1/2018	Lee	D15/89

(56)

References Cited

U.S. PATENT DOCUMENTS

D616,001 S	5/2010	Yang et al.
8,002,367 B2	8/2011	Kim et al.
D654,515 S	2/2012	Hwang et al.
D657,402 S	4/2012	Hwang et al.

FOREIGN PATENT DOCUMENTS

CN	201754008 U	3/2011
CN	202470609 U	10/2012
JP	9079729 A	3/1997
KR	100821748 B1	4/2008
KR	1020090075054 A	7/2009

* cited by examiner

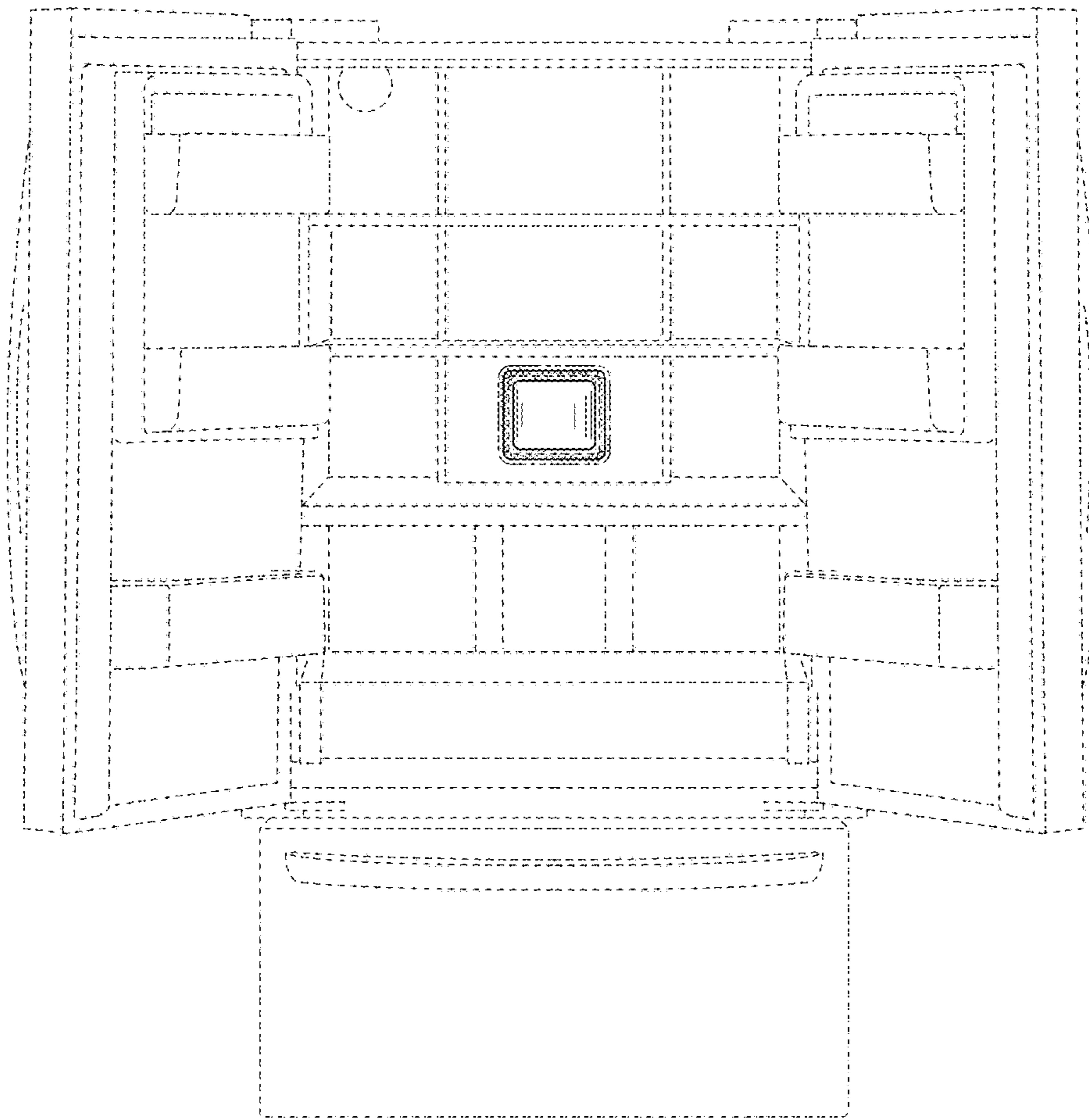


FIG. 1

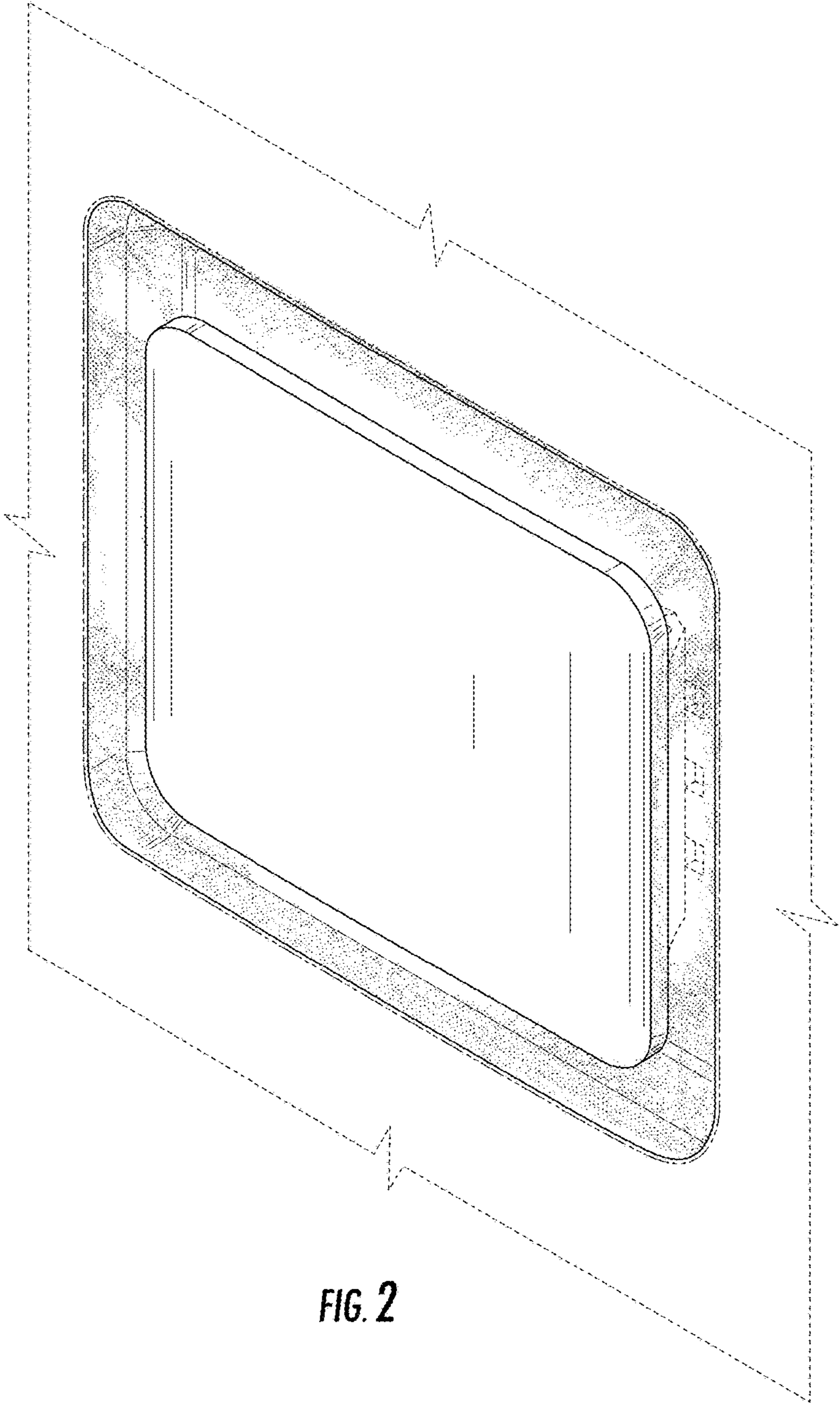


FIG. 2

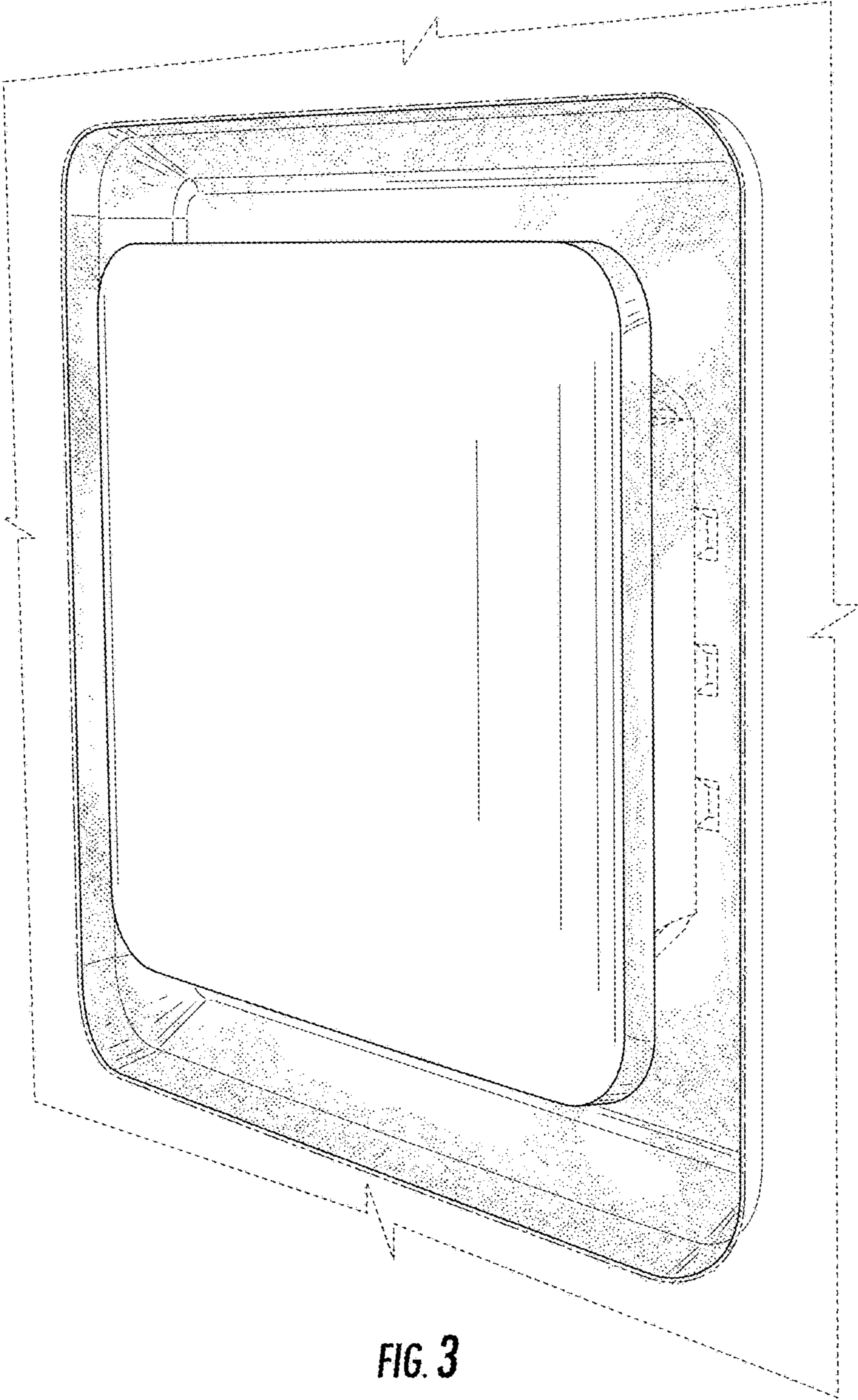


FIG. 3

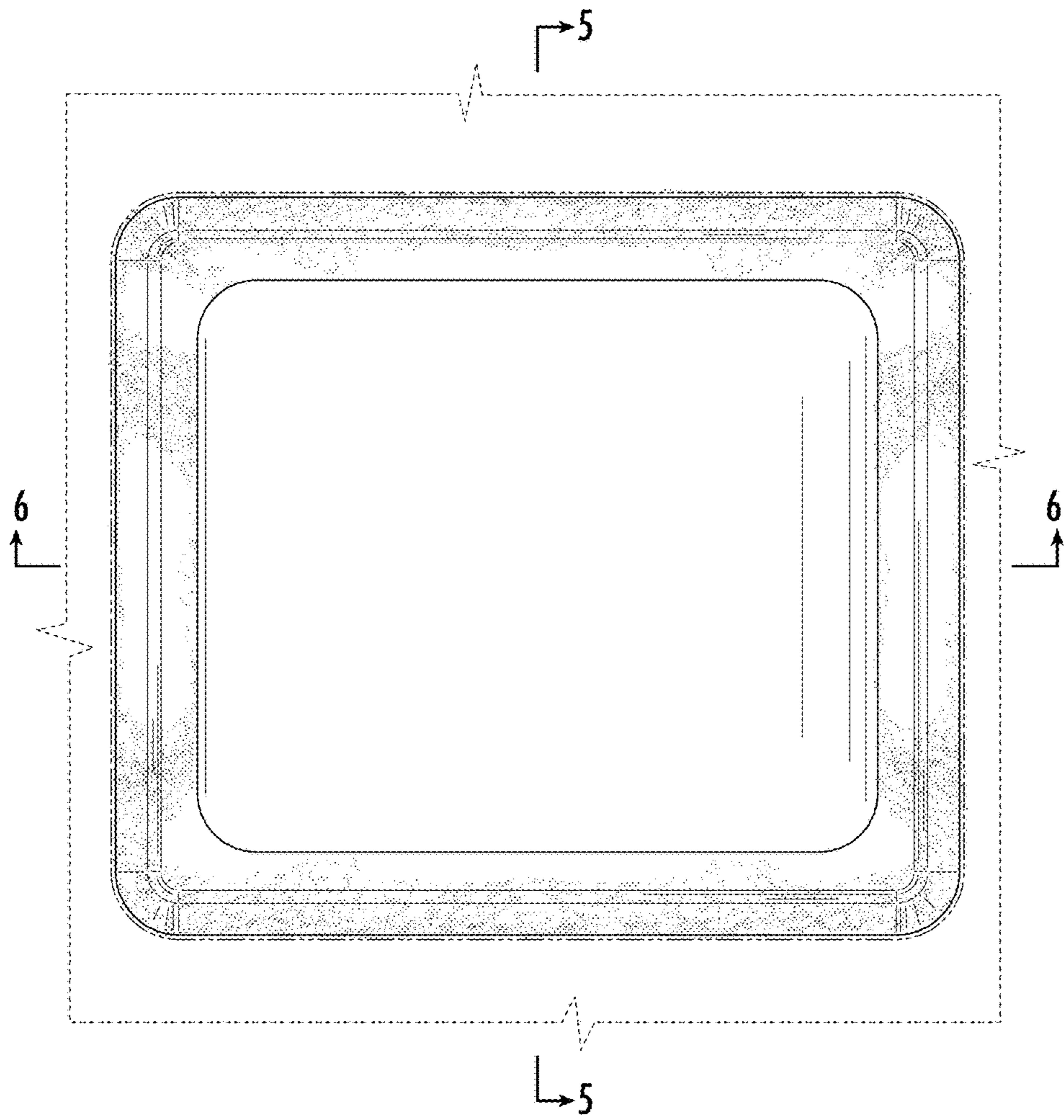


FIG. 4

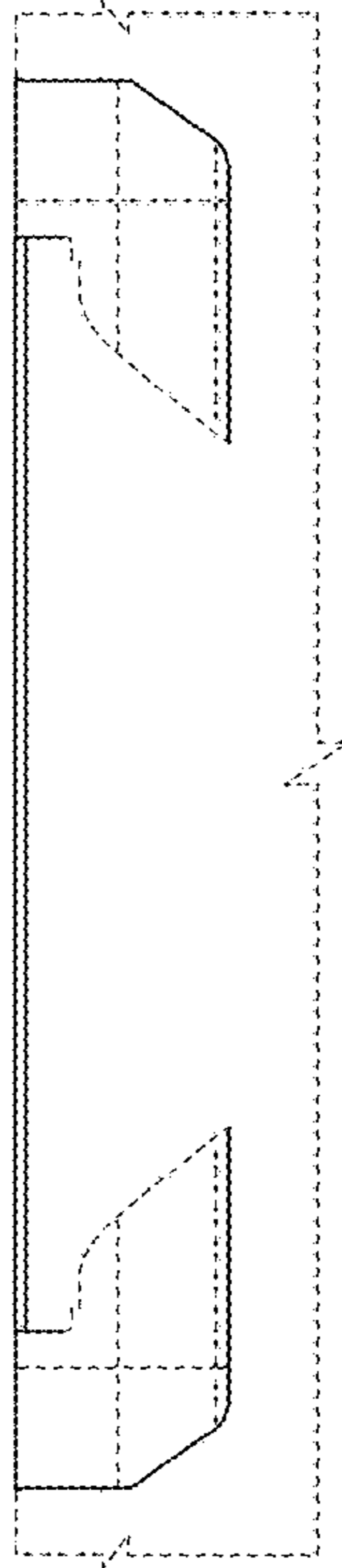


FIG. 5

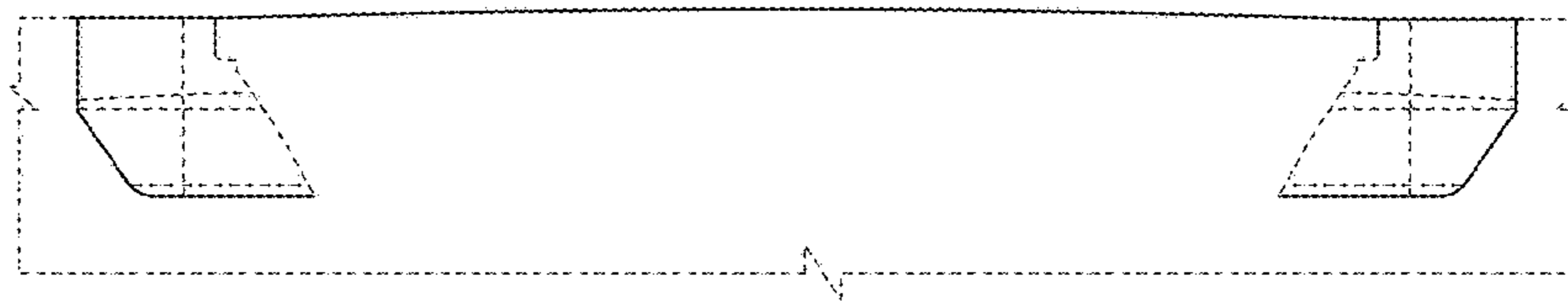


FIG. 6