



US00D839317S

(12) **United States Design Patent** (10) **Patent No.:** **US D839,317 S**
de Cavalcanti et al. (45) **Date of Patent:** **** Jan. 29, 2019**

(54) **REFRIGERATOR AIR FILTER ASSEMBLY**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **WHIRLPOOL CORPORATION**,
Benton Harbor, MI (US)

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

(Continued)

(72) Inventors: **Daniel de Cavalcanti**, St. Joseph, MI
(US); **Alexandre D. Grosse**,
Joinville-SC (BR); **Jose Paulo Remor**,
Stevensville, MI (US)

Primary Examiner — Ian Simmons
Assistant Examiner — Khawaja Anwar

(74) *Attorney, Agent, or Firm* — Price Heneveld LLP

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

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

(57) **CLAIM**

(21) Appl. No.: **29/565,447**

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

(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
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.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D511,178 S * 11/2005 Tunzi D15/89
D514,138 S * 1/2006 Jackovin D15/89
D616,001 S 5/2010 Yang et al.

(Continued)

DESCRIPTION

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; and

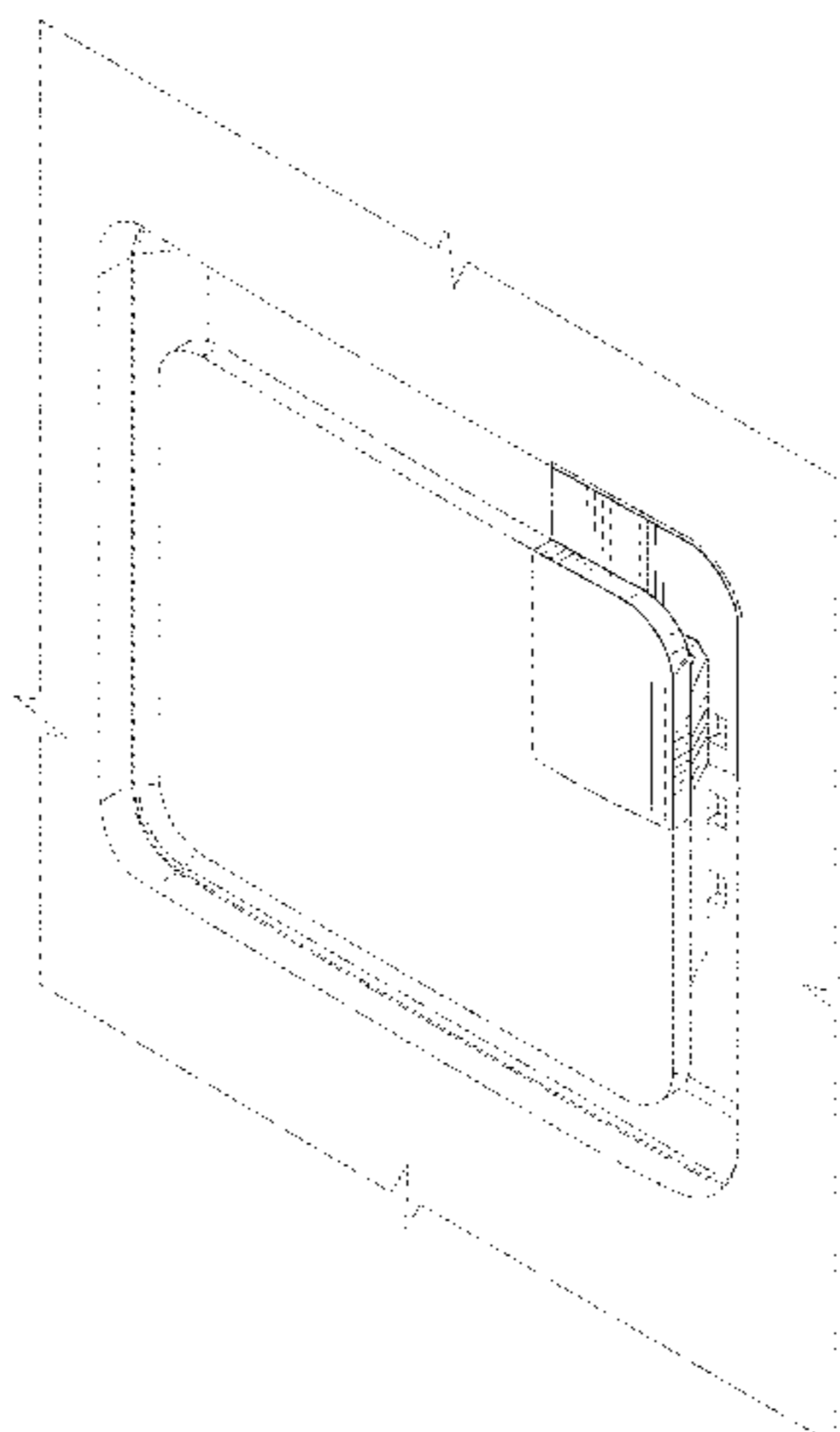
FIG. 5 is a right cross-sectional reference view thereof taken along the line 5-5 in FIG. 4; and,

FIG. 5 is a sectional view for purposes of illustrating the relationship between certain structures relative the front vertical plane of the assembly.

The broken line showing 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.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

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.
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

FOREIGN PATENT DOCUMENTS

CN 201754008 U 3/2011
CN 202470609 U 10/2012
JP 3079729 A 3/1997
KR 100821748 B1 4/2008
KR 1020090075054 A 7/2009

* cited by examiner

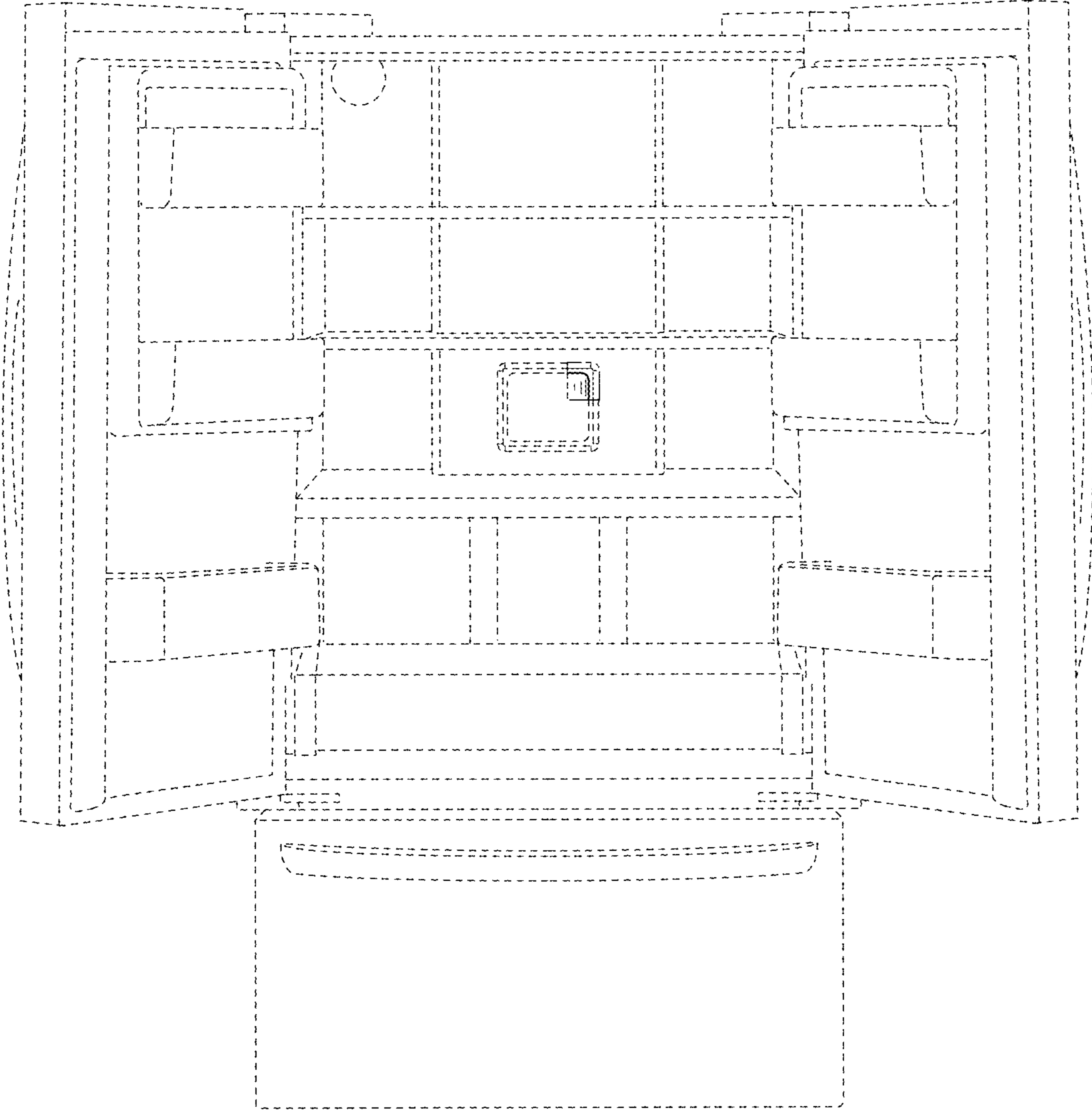


FIG. 1

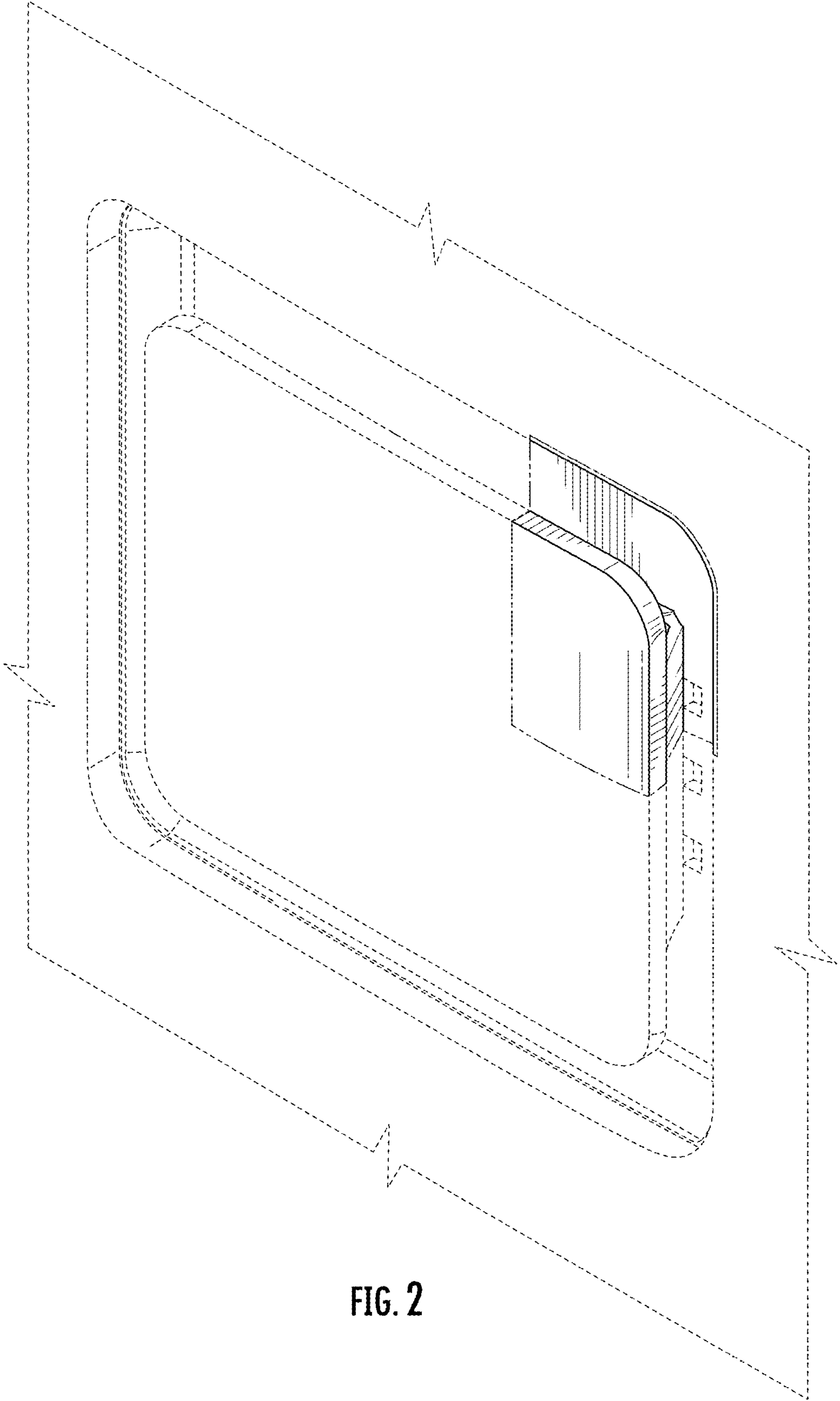


FIG. 2

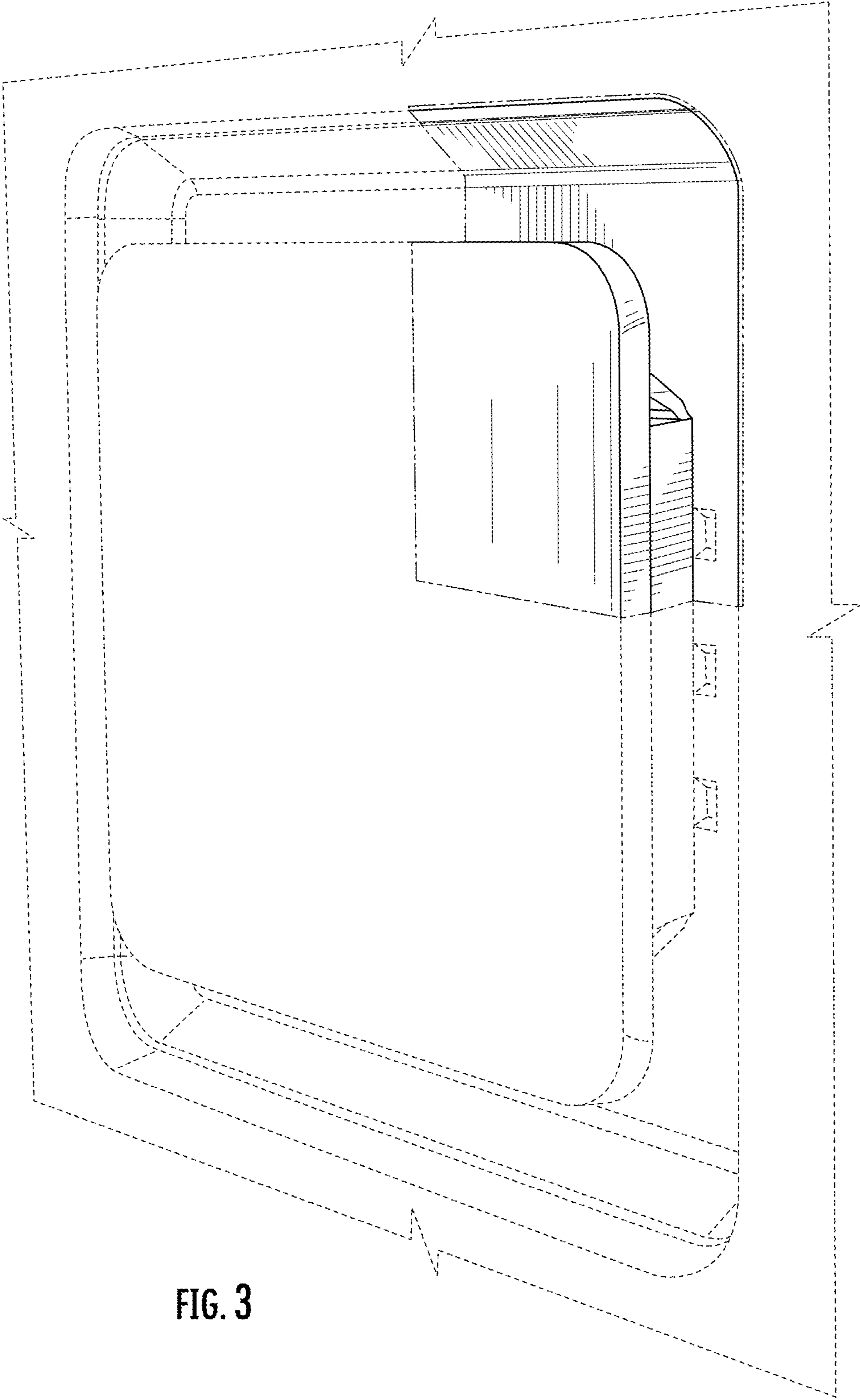


FIG. 3

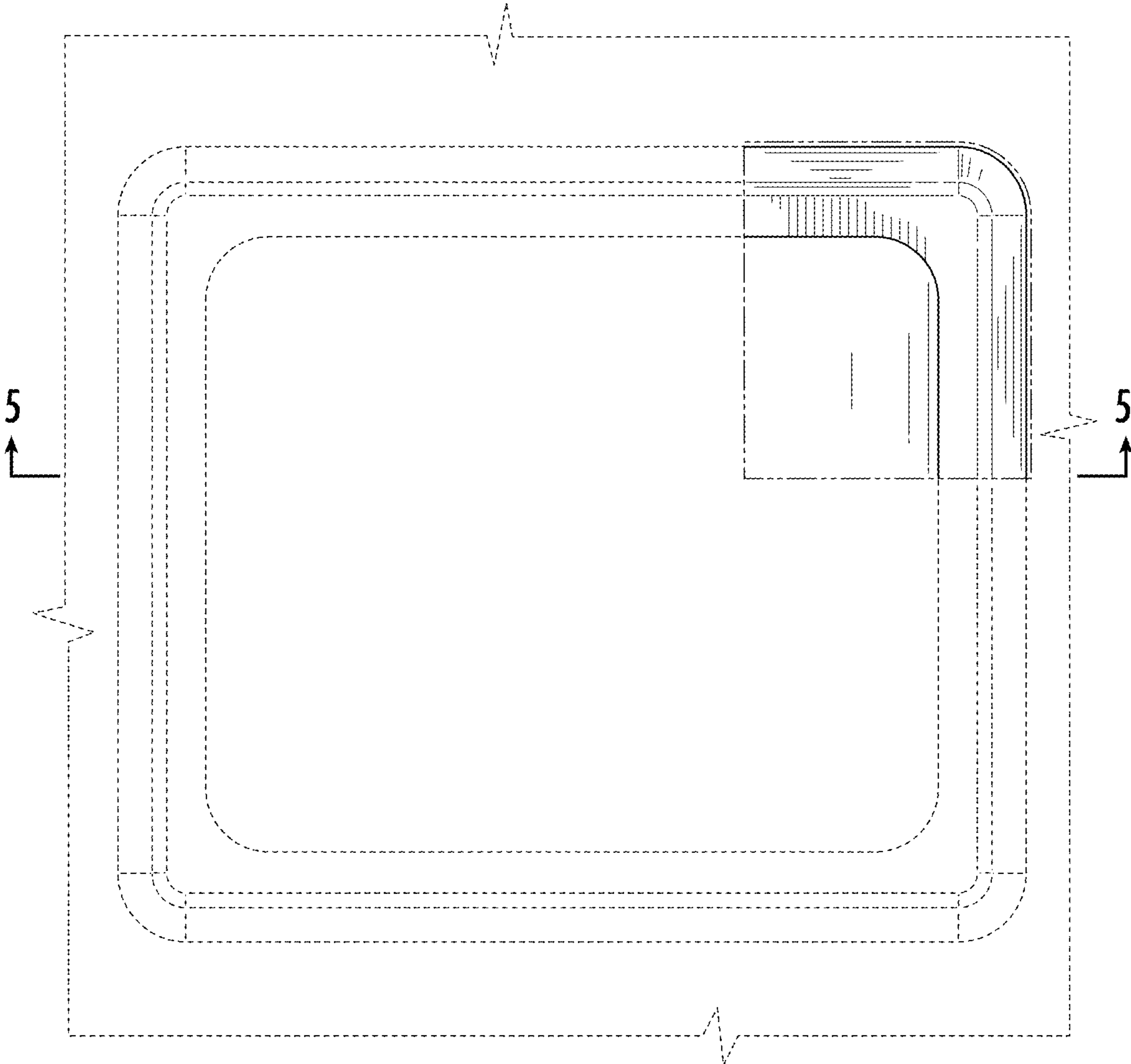


FIG. 4

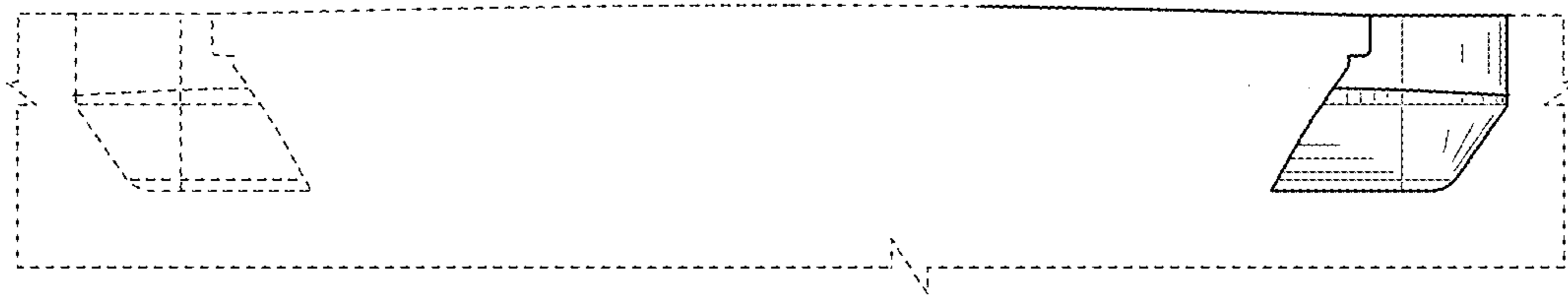


FIG. 5