



US00D772432S

(12) **United States Design Patent** (10) **Patent No.:** **US D772,432 S**
West (45) **Date of Patent:** **** Nov. 22, 2016**

(54) **PANEL FRAME**

4,155,346 A 5/1979 Aresty
4,215,677 A 8/1980 Erickson
4,217,825 A 8/1980 Bruckner

(71) Applicant: **SolarCity Corporation**, San Mateo, CA (US)

(Continued)

(72) Inventor: **Jack Raymond West**, San Rafael, CA (US)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **SOLARCITY CORPORATION**, San Mateo, CA (US)

DE 3111969 A1 10/1982
DE 4444439 A1 4/1995

(Continued)

(**) Term: **14 Years**

OTHER PUBLICATIONS

(21) Appl. No.: **29/523,011**

US 5,819,447, 10/1998, Yamawaki (withdrawn)

(22) Filed: **Apr. 6, 2015**

(Continued)

Related U.S. Application Data

(63) Continuation of application No. 13/402,846, filed on Feb. 22, 2012, which is a continuation-in-part of application No. 12/830,249, filed on Jul. 2, 2010, now Pat. No. 8,919,052, application No. 29/523,011, which

Primary Examiner — Daniel Bui
Assistant Examiner — Gino Colan
(74) *Attorney, Agent, or Firm* — Sterne, Kessler, Goldstein & Fox P.L.L.C.

(Continued)

(51) **LOC (10) Cl.** **25-01**

(52) **U.S. Cl.**
USPC **D25/119**

(58) **Field of Classification Search**
USPC D25/119, 125, 136, 123
CPC ... E04F 19/062; E04F 19/022; E04F 19/061;
E04F 19/064; E04F 19/065; E04B 9/008
See application file for complete search history.

(57) **CLAIM**

The ornamental design for a panel frame, as shown and described.

DESCRIPTION

FIG. 1 is a top front perspective view of a panel frame showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof;
FIG. 7 is a bottom view thereof;
FIG. 8 is a top front perspective view thereof in an environment in which it may be used; and,
FIG. 9 is a cross-sectional view thereof taken along line 9-9 of FIG. 8.

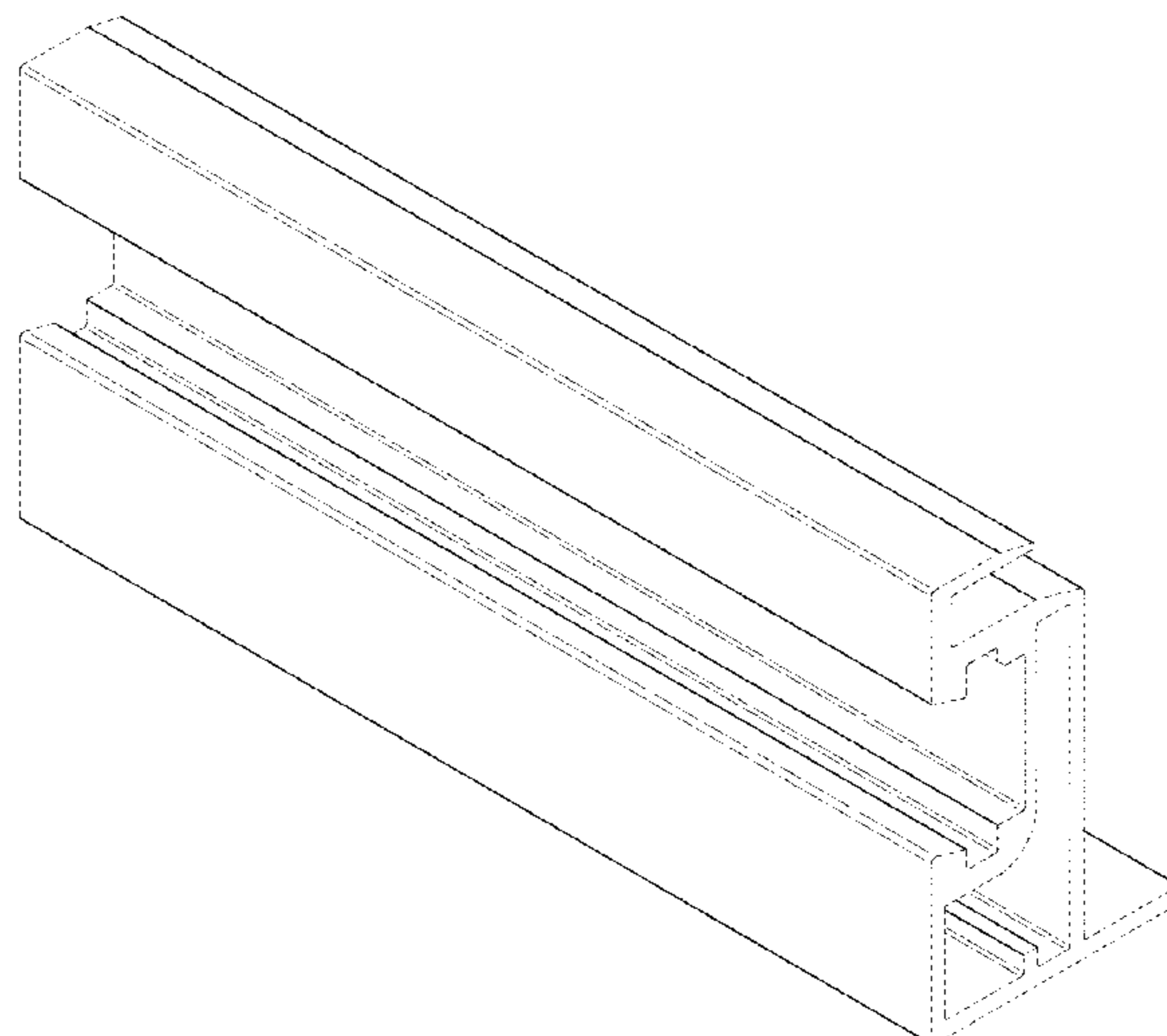
(56) **References Cited**

U.S. PATENT DOCUMENTS

3,630,253 A 12/1971 Russell
4,047,516 A 9/1977 Bruel et al.
4,112,922 A 9/1978 Skinner et al.
4,146,785 A 3/1979 Neale
4,154,223 A 5/1979 Lof

The broken lines in the Figures show portions of the panel frame and environment that form no part of the claimed design.

1 Claim, 9 Drawing Sheets



Related U.S. Application Data

is a continuation of application No. 14/504,168, filed on Oct. 1, 2014, which is a continuation of application No. 13/402,846, filed on Feb. 22, 2012, which is a continuation-in-part of application No. 12/830,249, filed on Jul. 2, 2010, application No. 29/523,011, which is a continuation of application No. 14/454,471, filed on Aug. 7, 2014, which is a continuation-in-part of application No. 12/830,249, filed on Jul. 2, 2010, application No. 29/523,011, which is a continuation of application No. 14/531,155, filed on Nov. 3, 2014, which is a continuation of application No. 12/830,249, filed on Jul. 2, 2010.

(56)

References Cited

U.S. PATENT DOCUMENTS

4,219,011 A 8/1980 Knoos
 4,271,825 A 6/1981 Schwob et al.
 4,308,858 A 1/1982 Skillman
 4,310,182 A 1/1982 Vandenbossche
 4,312,325 A 1/1982 Voges et al.
 4,353,356 A 10/1982 Vandenbossche
 4,371,139 A 2/1983 Clark
 4,400,847 A 8/1983 Farber
 4,429,872 A 2/1984 Capachi
 4,505,261 A 3/1985 Hunter
 4,570,408 A 2/1986 Frascaroli et al.
 4,691,818 A 9/1987 Weber
 4,718,185 A 1/1988 Conlin et al.
 4,966,631 A 10/1990 Matlin et al.
 D317,513 S * 6/1991 Miller D13/155
 5,046,791 A 9/1991 Kooiman
 5,076,035 A 12/1991 Wright
 5,127,762 A 7/1992 Havlovitz
 5,134,827 A 8/1992 Hartman
 5,143,556 A 9/1992 Matlin
 5,144,780 A 9/1992 Gieling et al.
 5,164,019 A 11/1992 Sinton
 5,164,020 A 11/1992 Wagner et al.
 5,203,135 A 4/1993 Bastian
 5,205,694 A 4/1993 Nagoshi et al.
 5,232,518 A 8/1993 Nath et al.
 5,316,592 A 5/1994 Dinwoodie
 5,333,602 A 8/1994 Huang
 5,338,369 A 8/1994 Rawlings
 5,460,660 A 10/1995 Albright et al.
 5,497,587 A 3/1996 Hirai et al.
 5,505,788 A 4/1996 Dinwoodie
 D374,169 S 10/1996 Kopish
 5,571,338 A 11/1996 Kadonome et al.
 5,596,981 A 1/1997 Soucy
 5,628,580 A 5/1997 Rinderer
 D387,655 S 12/1997 Kopish
 5,706,617 A 1/1998 Hirai et al.
 5,746,029 A 5/1998 Ullman
 5,746,839 A 5/1998 Dinwoodie
 5,787,653 A 8/1998 Sakai et al.
 D402,062 S * 12/1998 Leonelli D25/119
 5,960,790 A 10/1999 Rich
 6,061,978 A 5/2000 Dinwoodie et al.
 6,093,884 A 7/2000 Toyomura et al.
 6,105,317 A 8/2000 Tomiuchi et al.
 6,111,189 A 8/2000 Garvison et al.
 6,148,570 A 11/2000 Dinwoodie et al.
 6,201,180 B1 3/2001 Meyer et al.
 6,207,889 B1 3/2001 Toyomura et al.
 6,269,596 B1 8/2001 Ohtsuka et al.
 6,274,402 B1 8/2001 Verlinden et al.
 6,295,818 B1 10/2001 Ansley et al.
 6,313,395 B1 11/2001 Crane et al.
 6,337,283 B1 1/2002 Verlinden et al.
 6,360,491 B1 3/2002 Ullman
 6,370,828 B1 4/2002 Genschorek

6,387,726 B1 5/2002 Verlinden et al.
 6,423,568 B1 7/2002 Verlinden et al.
 6,465,724 B1 10/2002 Garvison et al.
 6,495,750 B1 12/2002 Dinwoodie
 6,501,013 B1 12/2002 Dinwoodie
 6,523,320 B2 2/2003 Stoof
 6,534,702 B1 3/2003 Makita et al.
 6,534,703 B2 3/2003 Dinwoodie
 6,568,873 B1 5/2003 Peterson
 6,570,084 B2 5/2003 Dinwoodie
 6,586,668 B2 7/2003 Shugar et al.
 6,617,507 B2 9/2003 Mapes et al.
 6,634,077 B2 10/2003 Layfield
 6,670,541 B2 12/2003 Nagao et al.
 6,672,018 B2 1/2004 Shingleton
 6,675,545 B2 1/2004 Chen et al.
 6,675,580 B2 1/2004 Ansley et al.
 6,676,326 B2 1/2004 Wu
 6,722,357 B2 4/2004 Shingleton
 6,761,008 B2 7/2004 Chen et al.
 6,784,360 B2 8/2004 Nakajima et al.
 6,809,251 B2 10/2004 Dinwoodie
 6,809,253 B2 10/2004 Dinwoodie
 6,935,623 B2 8/2005 Cook et al.
 D510,315 S 10/2005 Shugar et al.
 D511,576 S 11/2005 Shingleton et al.
 6,959,517 B2 11/2005 Poddany et al.
 RE38,988 E 2/2006 Dinwoodie
 6,993,917 B2 2/2006 Unger et al.
 7,043,884 B2 5/2006 Moreno
 D525,371 S * 7/2006 Levi-Senigaglia D25/119
 7,260,918 B2 8/2007 Liebendorfer
 7,297,867 B2 11/2007 Nomura et al.
 7,328,534 B2 2/2008 Dinwoodie
 7,339,110 B1 3/2008 Mulligan et al.
 D565,505 S 4/2008 Shugar et al.
 7,406,800 B2 8/2008 Cinnamon et al.
 7,435,134 B2 10/2008 Lenox
 7,592,537 B1 9/2009 West
 7,600,349 B2 10/2009 Liebendorfer
 7,748,175 B2 7/2010 Liebendorfer
 7,774,998 B2 8/2010 Aschenbrenner
 7,806,377 B2 10/2010 Strizki
 7,832,157 B2 11/2010 Cinnamon
 7,866,098 B2 1/2011 Cinnamon
 7,866,099 B2 1/2011 Komamine et al.
 7,915,519 B2 3/2011 Kobayashi
 7,987,641 B2 8/2011 Cinnamon
 8,109,048 B2 2/2012 West et al.
 8,316,590 B2 11/2012 Cusson
 D734,871 S * 7/2015 Wright D25/119
 D753,848 S * 4/2016 Gori D25/119
 2002/0078991 A1 6/2002 Nagao et al.
 2002/0112435 A1 8/2002 Hartman
 2003/0015636 A1 1/2003 Liebendorfer
 2003/0015637 A1 1/2003 Liebendorfer
 2003/0070368 A1 4/2003 Shingleton
 2003/0201009 A1 10/2003 Nakajima et al.
 2004/0007260 A1 1/2004 Dinwoodie
 2004/0063265 A1 4/2004 Noble
 2004/0163338 A1 8/2004 Liebendorfer
 2004/0179892 A1 9/2004 Du Preez
 2005/0115176 A1 6/2005 Russell et al.
 2005/0199278 A1 9/2005 Aschenbrenner
 2005/0257453 A1 11/2005 Cinnamon et al.
 2006/0042680 A1 3/2006 Korman et al.
 2006/0118163 A1 6/2006 Plaisted et al.
 2006/0156651 A1 7/2006 Genschorek
 2007/0074755 A1 4/2007 Eberspacher et al.
 2007/0102036 A1 5/2007 Cinnamon
 2007/0151594 A1 7/2007 Mascolo et al.
 2007/0157963 A1 7/2007 Metten et al.
 2007/0266672 A1 11/2007 Bateman et al.
 2008/0000173 A1 1/2008 Lenox et al.
 2008/0302407 A1 12/2008 Kobayashi
 2009/0025314 A1 1/2009 Komamine et al.
 2009/0064606 A1 3/2009 Ceria
 2009/0078299 A1 3/2009 Cinnamon et al.
 2009/0095280 A1 4/2009 Buller et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

2010/0147362 A1 6/2010 King et al.
 2010/0179678 A1 7/2010 Dinwoodie et al.
 2010/0218798 A1 9/2010 Cinnamon et al.
 2010/0236162 A1 9/2010 Tweedie
 2010/0269430 A1 10/2010 Haddock
 2011/0070765 A1 3/2011 Kobayashi
 2011/0100434 A1 5/2011 Van Walraven
 2011/0179727 A1 7/2011 Liu
 2011/0214365 A1 9/2011 Aftanas
 2011/0214368 A1 9/2011 Haddock et al.
 2011/0220180 A1 9/2011 Cinnamon et al.
 2012/0273029 A1 11/2012 Bragagna et al.

FOREIGN PATENT DOCUMENTS

DE 29703481 U1 11/1997
 DE 102005002828 A1 8/2006
 GB 2391704 A 2/2004
 JP 47023570 7/1971
 JP 47057885 5/1972
 JP S5777856 A 5/1982
 JP S5787561 A 6/1982
 JP S58133945 U 9/1983
 JP S59191748 U 12/1984
 JP H0242449 U 3/1990
 JP H0452367 A 2/1992
 JP H0641156 U 5/1994
 JP H07202242 A 8/1995
 JP H08296311 A 11/1996
 JP H10159284 A 6/1998
 JP H10176403 A 6/1998
 JP H10266499 A 10/1998
 JP H10317619 a 12/1998
 JP H10317621 A 12/1998
 JP H112004 A 1/1999
 JP H112011 A 1/1999
 JP H116262 A 1/1999
 JP H1140835 A 2/1999
 JP H11222991 A 8/1999
 JP 2000150947 A 5/2000
 JP 2000345664 A 12/2000
 JP 2001148493 A 5/2001
 JP 2001210853 A 8/2001
 JP 2002141541 A 5/2002
 JP 2002294957 A 10/2002
 JP 2003227207 A 8/2003
 JP 2008214875 A 9/2008
 WO WO-2005116359 A2 12/2005
 WO WO-2007103882 A2 9/2007
 WO WO-2008124158 A1 10/2008
 WO WO-2010074701 A1 7/2010

OTHER PUBLICATIONS

CI Solar Supplies Co. On-Line Catalog, [last modified: Mar. 13, 2010], Retrieved from the Internet: <URL: <http://www.cisolar.com/catSolarHotColl.htm>>.

Co-pending Application, U.S. Appl. No. 12/830,250, inventors John R. West, et al., filed Jul. 2, 2010 (published).

Co-pending Application, U.S. Appl. No. 12/830,252, inventors John R. West, et al., filed Jul. 2, 2010 (published).

Co-pending Application, U.S. Appl. No. 12/830,257, inventors John R. West, et al., filed Jul. 2, 2010 (published).

English Translation of Abstract for DE Publication No. 102005002828 published Aug. 3, 2006.

English Translation of Abstract for JP Publication No. 08296311 published Nov. 12, 1996.

English Translation of Abstract for JP Publication No. 10159284 published Jun. 16, 2008.

English Translation of Abstract for JP Publication No. 11222991 published Aug. 17, 1999.

English Translation of Abstract for JP Publication No. 2000345664 published Dec. 12, 2000.

English Translation of Abstract for JP Publication No. 2008214875 published Aug. 18, 2008.

English Translation of Abstract for Jp Publication No. 57087561 published Jun. 1, 1982.

English Translation of DE Publication No. 4444439 published Apr. 27, 1995.

Final Office Action mailed Feb. 17, 2009, in U.S. Appl. No. 11/053,524, John Raymond, filed Feb. 7, 2005.

International Search Report and Written Opinion for International Application No. PCT/US2010/040981, European Patent Office, Netherlands, mailed on Jul. 7, 2011.

International Search Report and Written Opinion for International Application No. PCT/US2010/040984, European Patent Office, Netherlands, mailed on Jun. 30, 2011.

International Search Report and Written Opinion for International Application No. PCT/US2010/040986, European Patent Office, Netherlands, mailed on Jul. 7, 2011.

Notice of Allowance and Fee(s) Due mailed Aug. 12, 2009, in U.S. Appl. No. 11/053,524, John Raymond, filed Feb. 7, 2005.

Notice of Non-Compliant Amendment mailed Sep. 23, 2008, in U.S. Appl. No. 11/053,524, John Raymond, filed Feb. 7, 2005.

Office Action mailed Apr. 26, 2011, in U.S. Appl. No. 12/830,252, John R. West, et al., filed Jul. 2, 2010.

Office Action mailed Apr. 26, 2011, in U.S. Appl. No. 12/830,257, John R. West, et al., filed Jul. 2, 2010.

Office Action mailed Apr. 4, 2008, in U.S. Appl. No. 11/053,524, John Raymond, filed Feb. 7, 2005.

Office Action mailed May 3, 2011, in U.S. Appl. No. 12/830,250, John R. West, et al., filed Jul. 2, 2010.

PanelClaw "Grizzly Bear Flat Roof Mounting System", accessed at <http://www.panelclaw.com/grizzly-bear.html>, pp. 1-2, accessed on May 6, 2014.

PanelClaw "Kodiak Bear Flat Roof Mounting System", accessed at <http://www.panelclaw.com/component/k2/item/41.html?Itemid=186>, pp. 1-2, accessed on May 6, 2014.

Preliminary Amendment filed Mar. 24, 2010 in U.S. Appl. No. 12/594,935.

Re-Exam Application No. 95/001,304 filed Apr. 2, 2010.

Response to Final Office Action mailed May 27, 2009, in U.S. Appl. No. 11/053,524, John Raymond, filed Feb. 7, 2005.

Response to Notice of Non-Compliant Amendment mailed Oct. 27, 2008, in U.S. Appl. No. 11/053,524, John Raymond, filed Feb. 7, 2005.

Response to Office Action mailed Jul. 5, 2011, in U.S. Appl. No. 12/830,250, John R. West, et al., filed Jul. 2, 2010.

Response to Office Action mailed Jul. 10, 2008, in U.S. Appl. No. 11/053,524, John Raymond, filed Feb. 7, 2005.

Response to Office Action mailed Jun. 27, 2011, in U.S. Appl. No. 12/830,252, John R. West, et al., filed Jul. 2, 2010.

Response to Office Action mailed Jun. 27, 2011, in U.S. Appl. No. 12/830,257, John R. West, et al., filed Jul. 2, 2010.

Sharp Product Brochure, "The On Energy Solar Racking System for Asphalt-Shingle Roofs with Flashing Attachment," 2008.

Solarex VLX PV Module, circa 1993.

Solyndra 200 Series datasheet, released Apr. 1, 2011.

Unirac Installation Manual 201, 2003.

Unirac Technical Bulletin 103, May 2002.

* cited by examiner

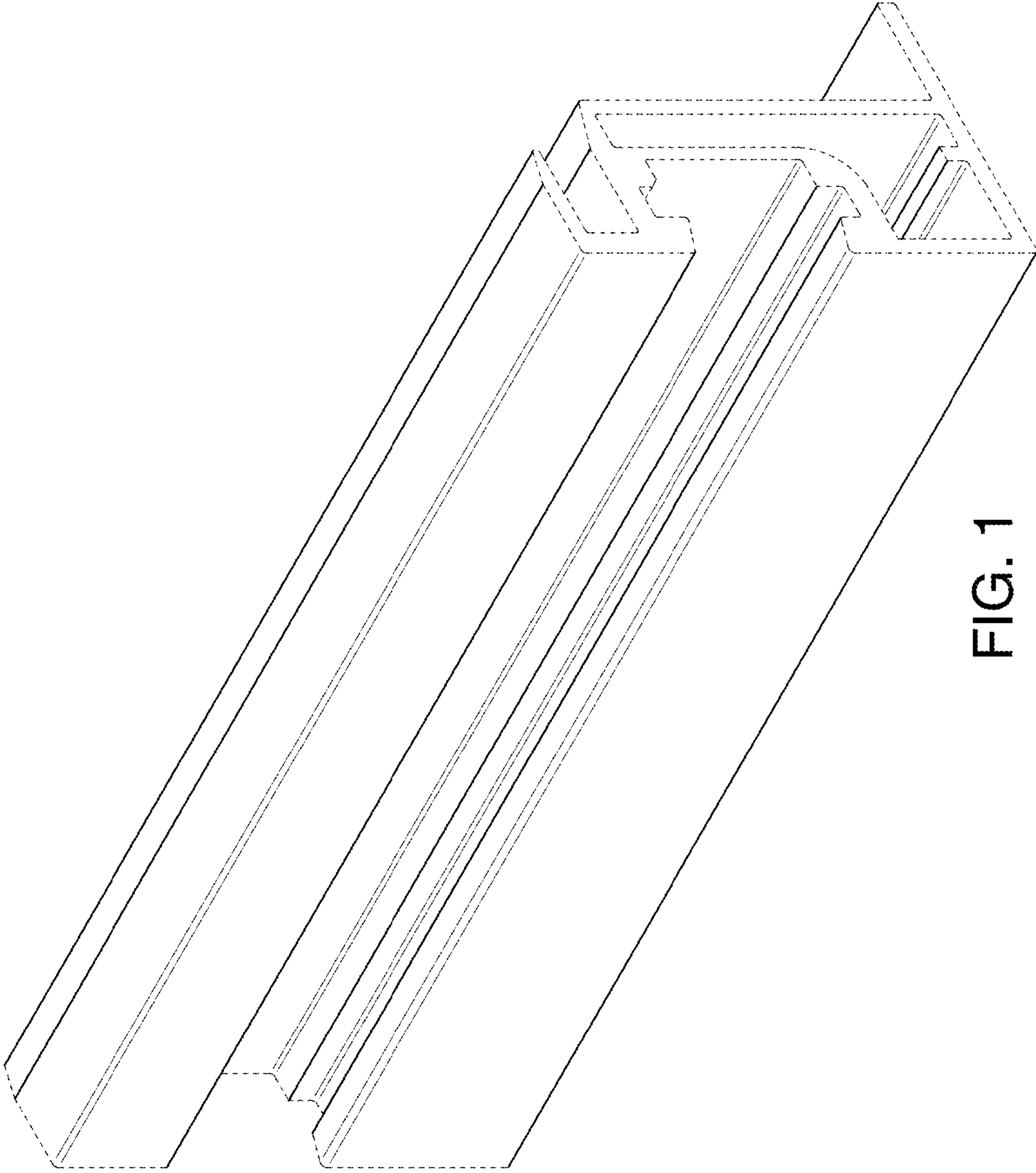


FIG. 1

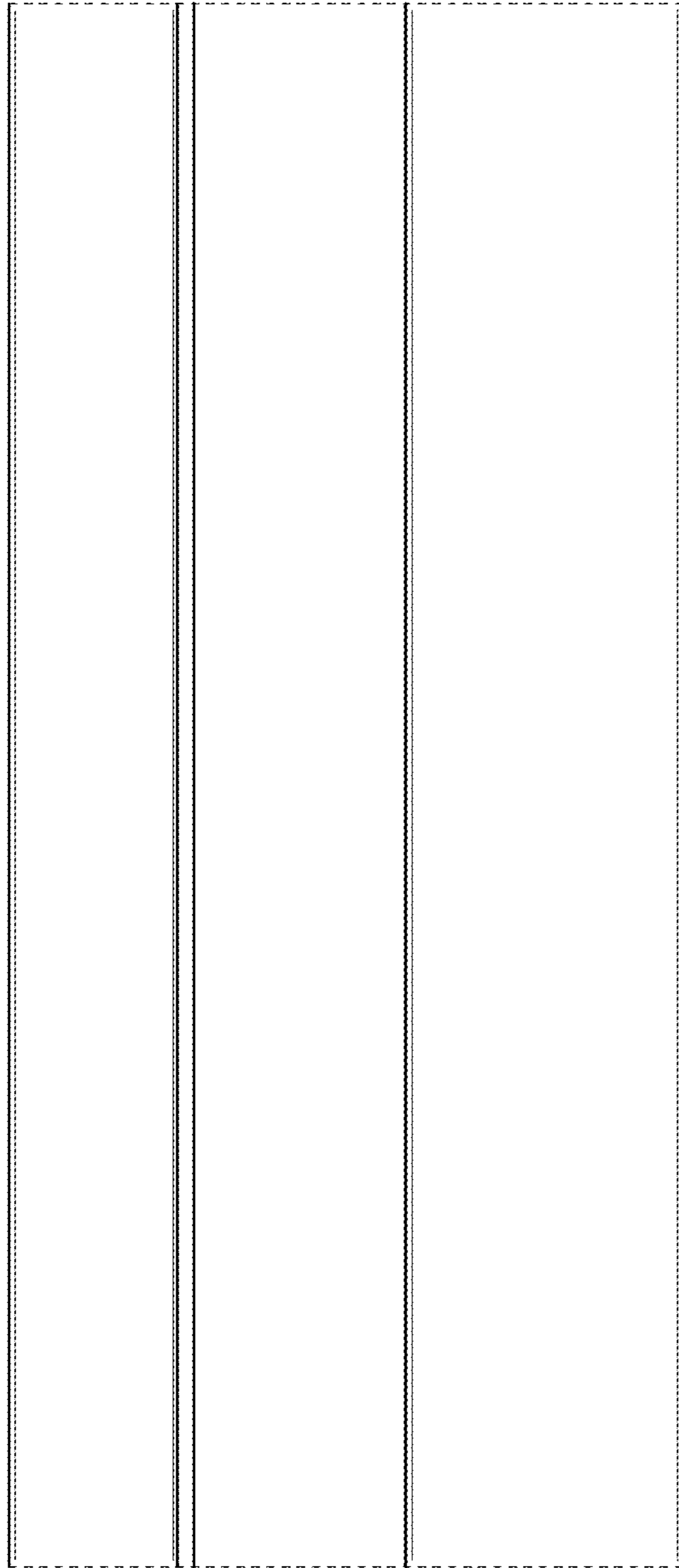


FIG. 2

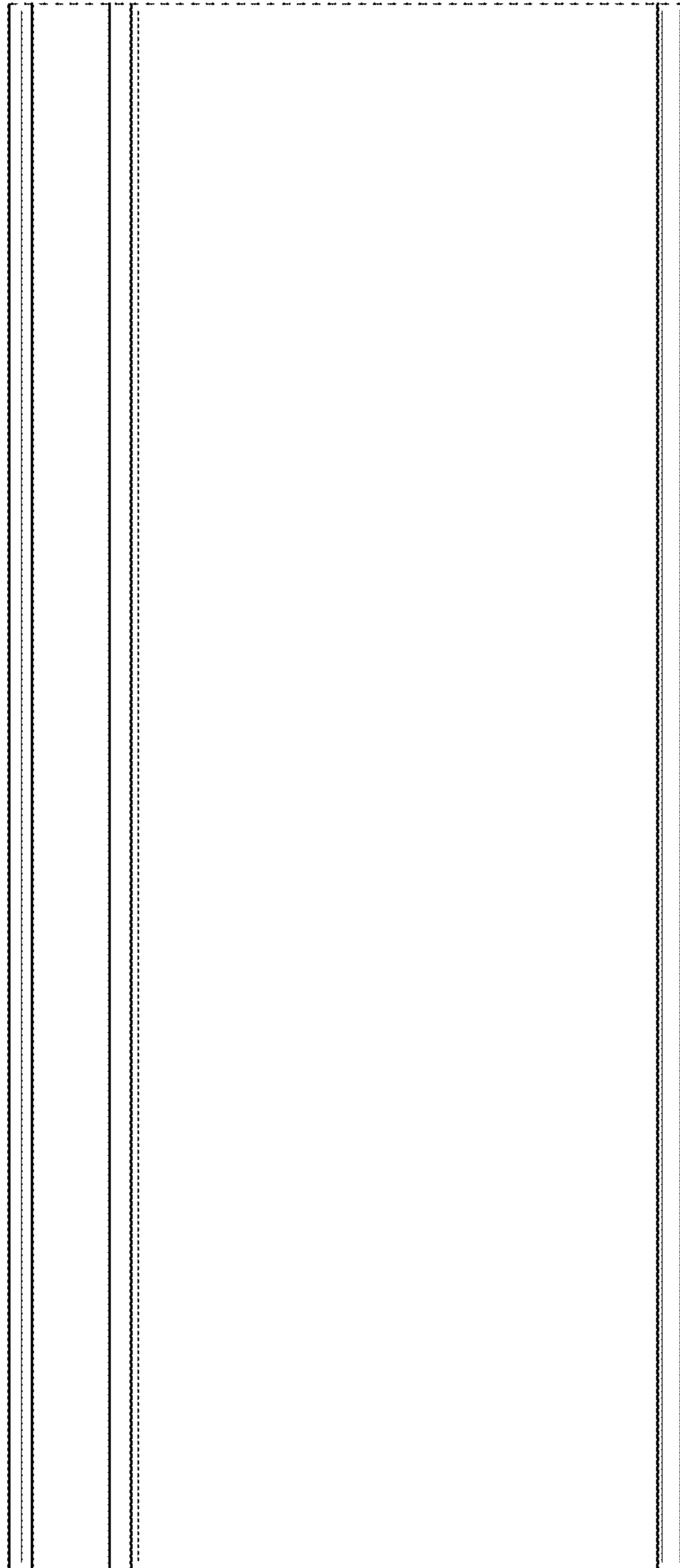


FIG. 3

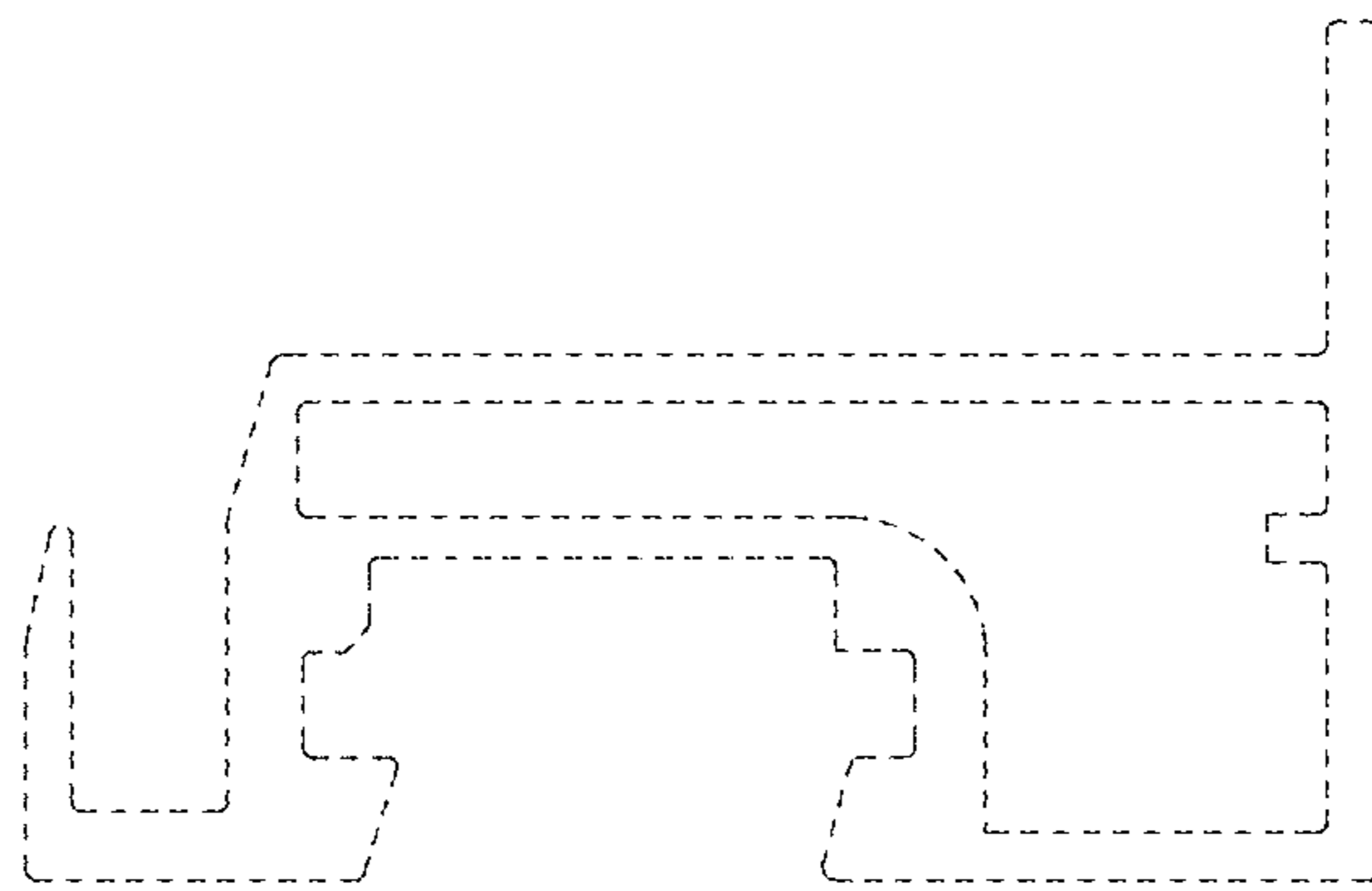


FIG. 4

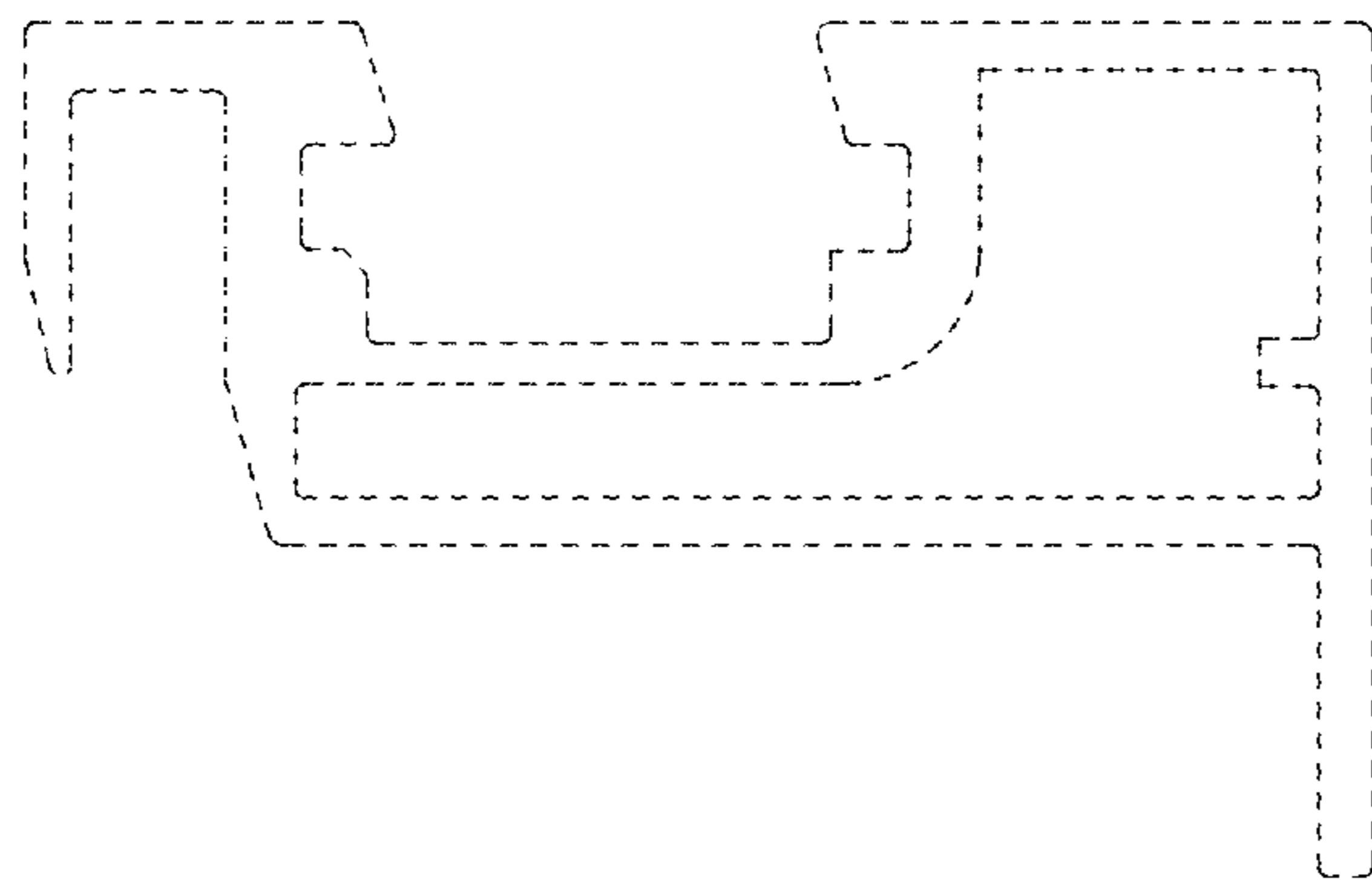


FIG. 5

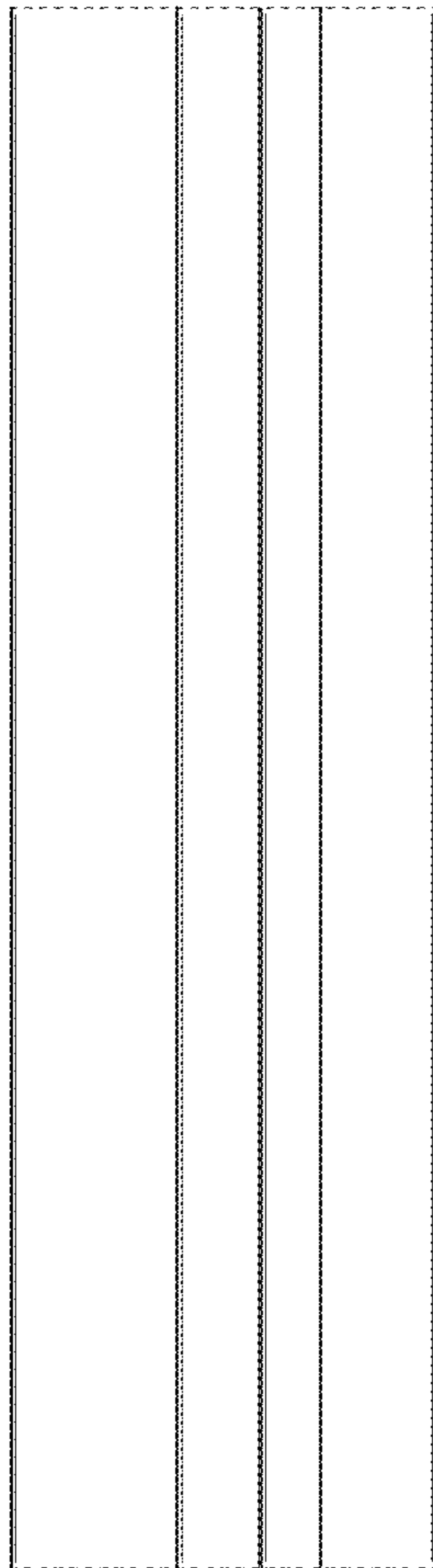


FIG. 6

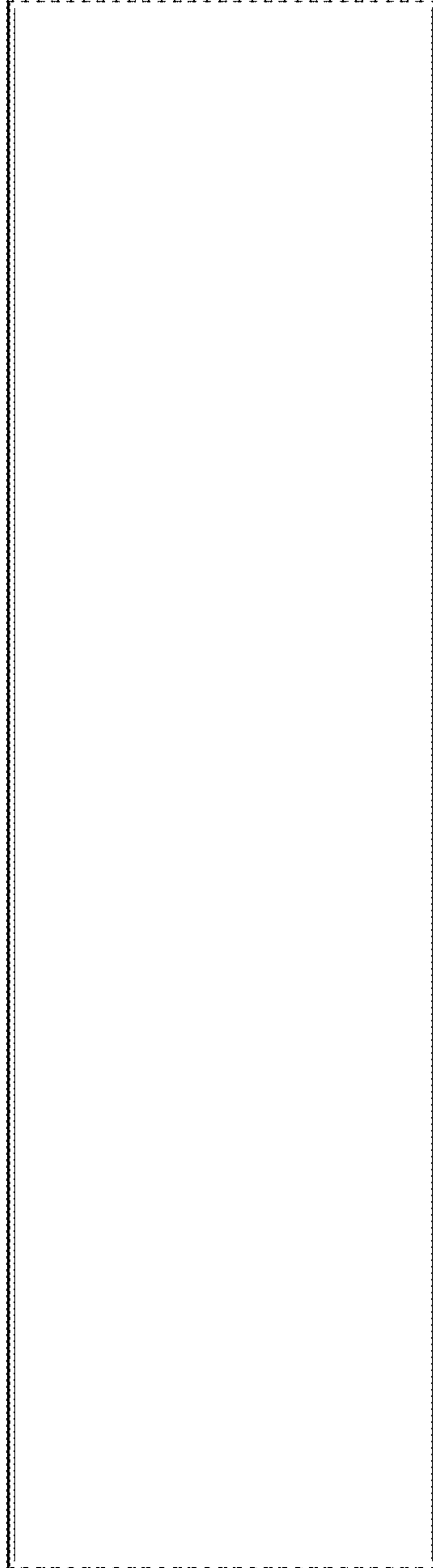


FIG. 7

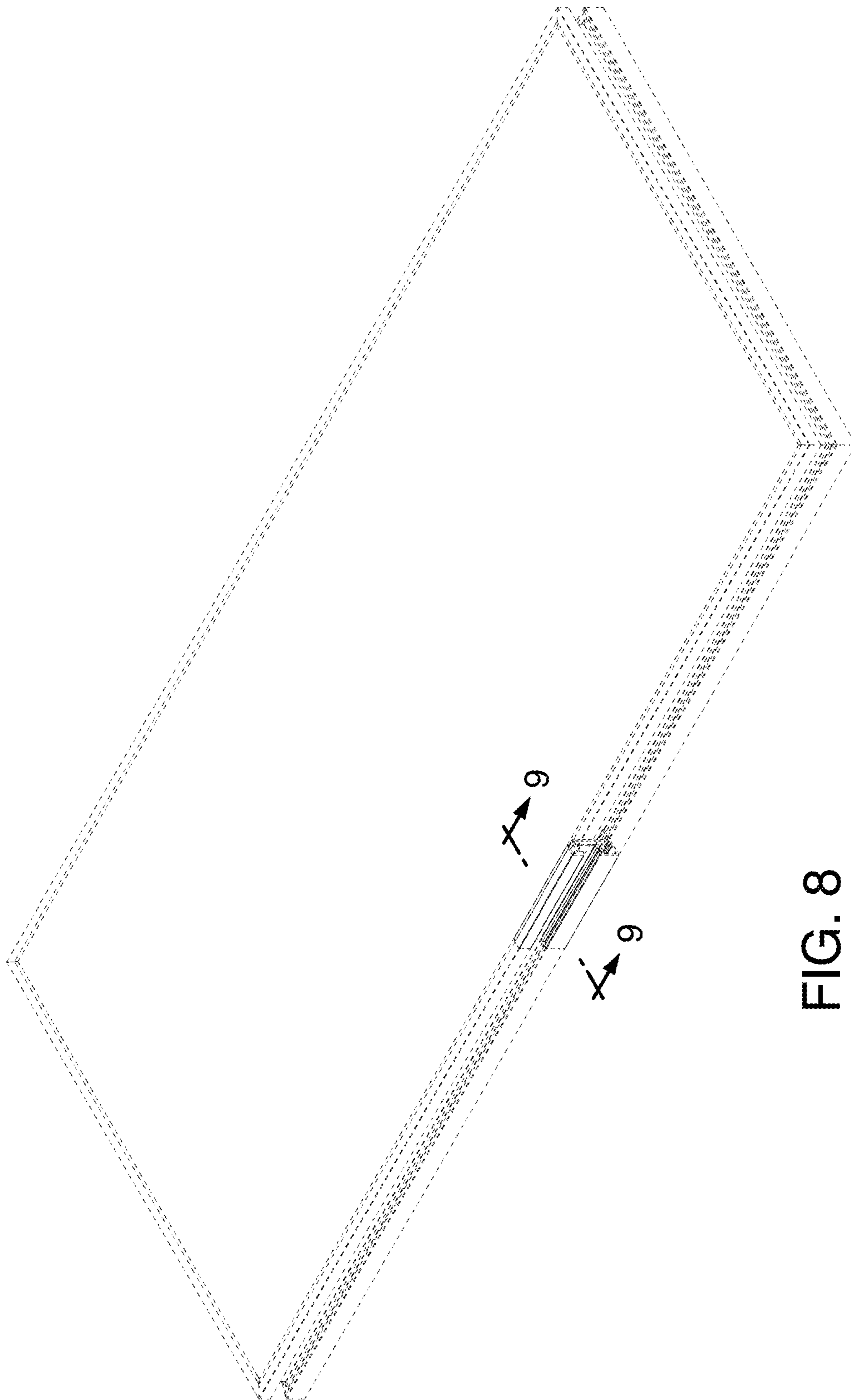


FIG. 8

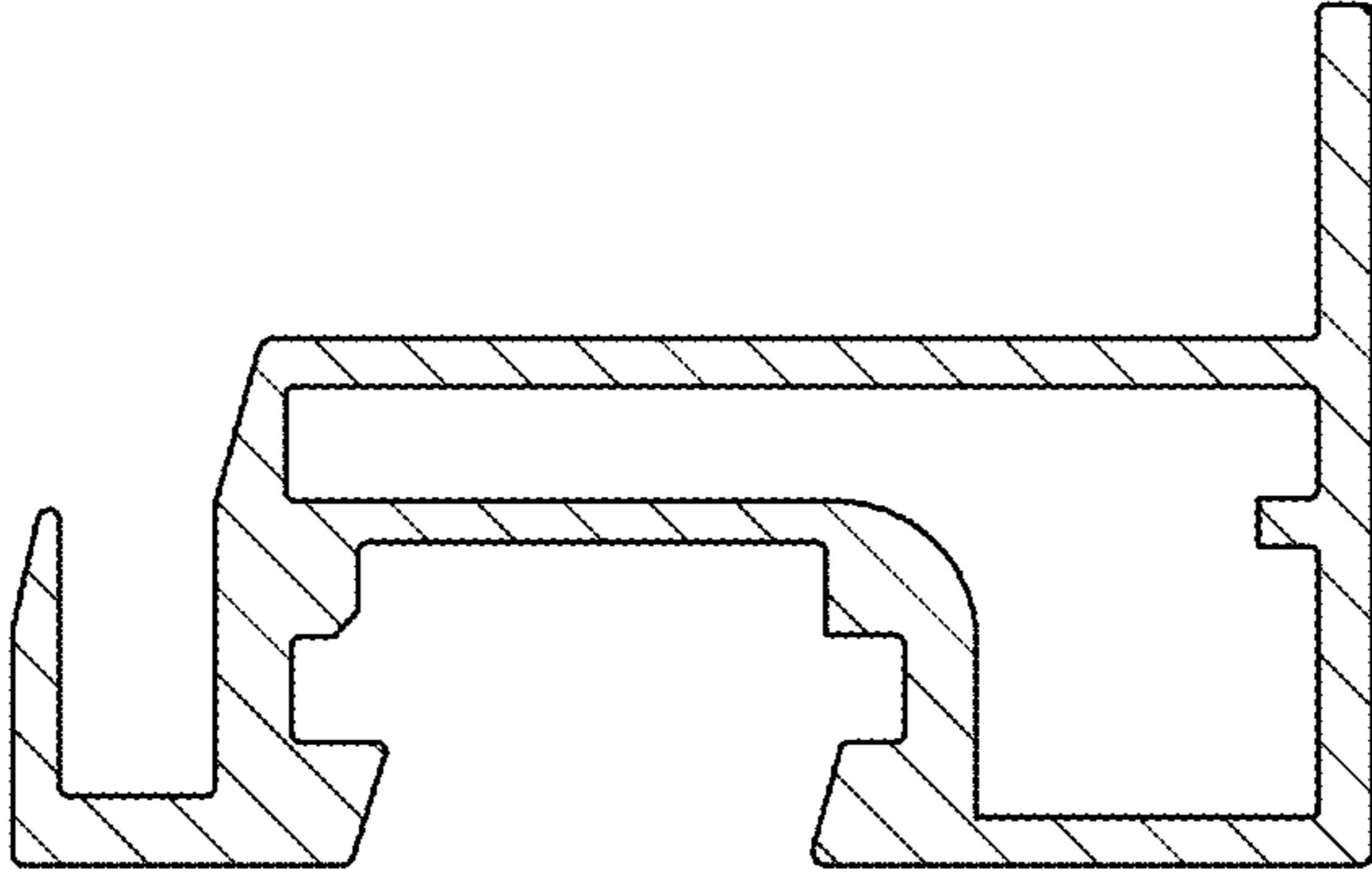


FIG. 9