



US00D807361S

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

(10) **Patent No.:** **US D807,361 S**  
(45) **Date of Patent:** **\*\* Jan. 9, 2018**

(54) **FRAME FOR IMAGE-SENSOR LIGHT SOURCE**

CPC .. D07G 1/0036; D07G 1/0045; D07G 1/0063;  
D07G 1/0072; D07G 1/009; G08B  
13/1427; G08B 13/1472; G08B 13/1481;  
(Continued)

(71) Applicant: **MITSUBISHI ELECTRIC CORPORATION**, Tokyo (JP)

(72) Inventors: **Akiko Fujiuchi**, Tokyo (JP); **Atsushi Ito**, Tokyo (JP); **Ichihiro Abe**, Tokyo (JP); **Koichiro Okamura**, Tokyo (JP)

(73) Assignee: **Mitsubishi Electric Corporation**, Tokyo (JP)

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

(21) Appl. No.: **29/548,447**

(22) Filed: **Dec. 14, 2015**

(30) **Foreign Application Priority Data**

Jun. 18, 2015 (JP) ..... 2015-013495

(51) **LOC (11) Cl.** ..... **14-02**

(52) **U.S. Cl.**  
USPC ..... **D14/420**; D14/421; D14/453

(58) **Field of Classification Search**  
USPC .... D14/421–425, 420, 453; D18/55, 49, 46, D18/40, 36–39, 41, 44, 45, 47, 48, 50–54, D18/56; 235/462, 455, 470, 462.43, 482, 235/483, 462.21, 472.01, 435, 439, 440, 235/446, 454, 461, 462.32, 462.35, 235/462.41, 462.42, 463; 358/474, 486, 358/488, 496, 497, 498, 452, 449, 451, 358/453, 1.13; 318/685, 696; 355/81, 355/75; 399/405, 367, 379, 380; 382/217; 715/209, 222, 226, 274; 400/613, 613.1–613.4, 690.1–690.4, 400/691–694; D26/1–3, 24, 56, 72, D26/74–86, 88–91, 25; D13/180, 182; 362/150, 217.01–217.09, 217.1, 217.12, 362/217.13, 260, 364, 365, 366, 404, 555, 362/576, 800, 14, 148, 296.01, 249.02, 362/240, 285, 244, 373; 250/208.1, 239; D25/119–125

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,718,816 A \* 2/1973 Seelbach ..... F21V 21/35  
174/99 B  
5,194,725 A \* 3/1993 Sawase ..... H04N 1/0312  
250/208.1

(Continued)

*Primary Examiner* — Susan Moon Lee

(74) *Attorney, Agent, or Firm* — Studebaker & Brackett PC

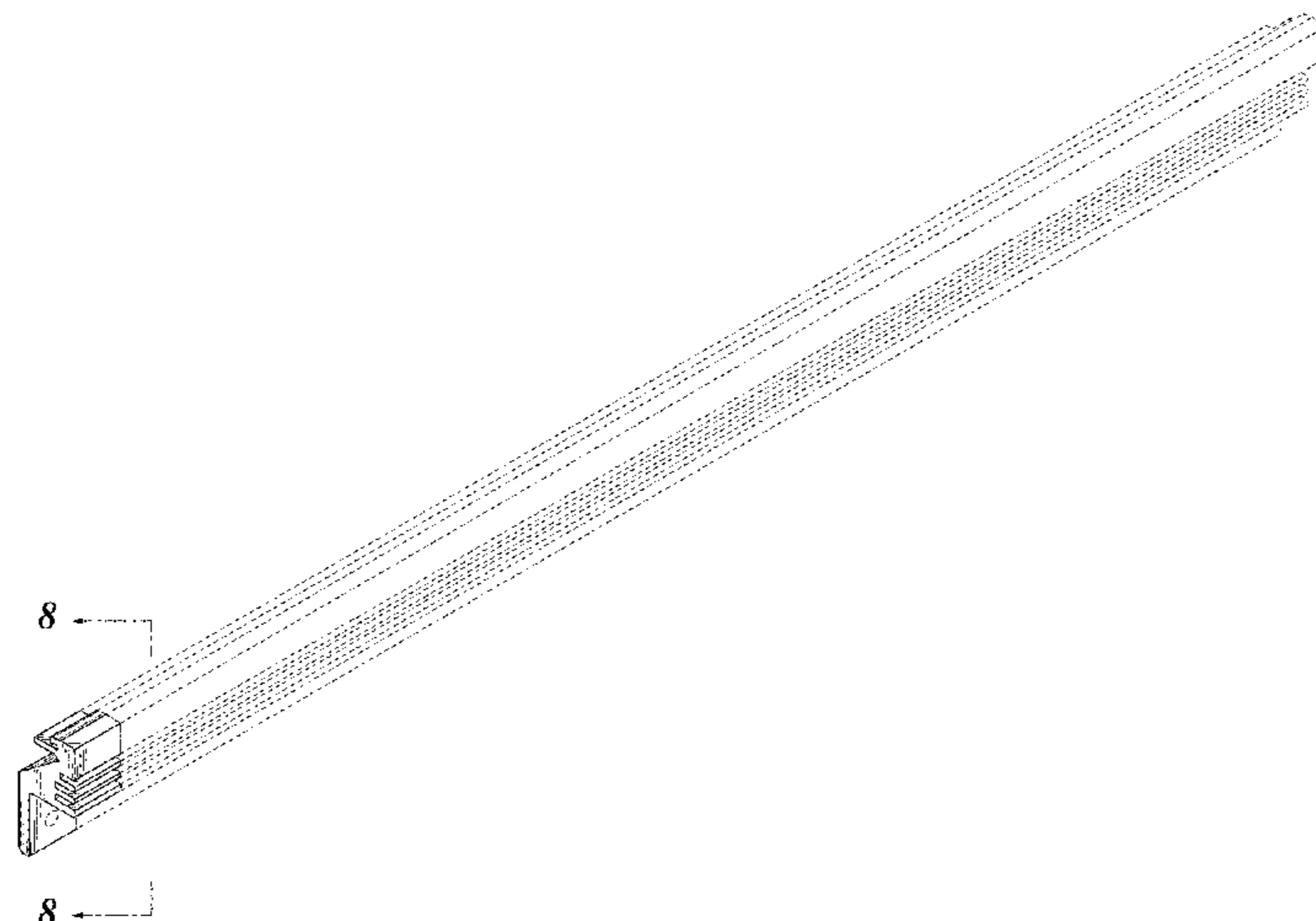
(57) **CLAIM**

The ornamental design for a frame for image-sensor light source, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of the front, left, and top sides of a frame for image-sensor light source 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 plan view thereof;  
FIG. 7 is a bottom view thereof; and  
FIG. 8 is an enlarged view at a part 8-8 of FIG. 1; and,  
FIG. 9 is an enlarged left side view thereof.  
Broken lines and unshaded portions contained within broken lines depict exemplary elements of the frame for image-sensor light source that are shown for illustrative purposes only and that form no part of the claimed design. The dash-dot lines represent the boundary between the claimed design and unclaimed design.

**1 Claim, 9 Drawing Sheets**



(58) **Field of Classification Search**

CPC ..... G08B 13/194; G08B 13/246; G08B 13/2462; G08B 13/2465; A47F 9/04; A47F 9/046; A47F 9/047; A47F 9/048; A47F 10/02; A47F 2010/005; A47F 2010/025; G06K 7/10792; G06K 7/10801; G06K 7/10811; G06K 7/1096; G06K 7/1097; G06K 7/1098; G06K 7/12; G06K 7/14; G06K 7/143; G06K 7/146; G06K 2007/10485; G06K 7/10544-7/10762; G06K 7/10821-7/10871; G06K 7/1404-7/1495; G06K 2207/00; G06K 2207/1011-2207/1018; G01G 19/4144; G01G 21/22; G01G 21/28; G01G 23/32; G01G 23/34; G01G 23/35; G01G 23/375; G01G 23/38; G01G 23/44; G07G 1/0063; G07G 1/0072; G07G 3/006; G02B 5/09; G02B 6/00; G06T 2211/00; H04N 1/0313-1/032; H04N 1/02815-1/02895; H04N 1/0249; H04N 1/02481; H04N 1/00; H04N 1/12; H04N 1/00013; H04N 1/00015; H04N 1/00018; H04N 1/00026; H04N 1/00557; H04N 1/00564; H04N 1/00567; H04N 1/0057; H04N 1/00572; H04N 1/00586; H04N 1/00588; H04N 1/00591; H04N 1/00594; H04N 1/00596; H04N 1/00604; H04N 1/00519; H04N 1/00559; H04N 1/00551; H04N 1/00278; H04N 1/1013; H04N 1/10; H04N 5/2251-5/2256; H04N 2201/02456; H04N 2201/02458; H04N 2201/02462; H04N 2201/03468; H04N 2201/02485; H04N 2201/0249; H04N 2201/02481; H04N 2201/0456; H04N 2201/0446; H04N 2201/00; H04N 2201/0094; H04N 1/0312; H04N 2201/02452; H04N 2201/02497; H04N 2201/03112; H04N 2201/0315; H04N 2201/03154; H04N 2201/03145; H04N 2201/03116; H04N 2201/03129; H04N 2201/03141; H01L 27/14618-27/14643; H01L 27/14649; H01L 27/14652; H01L 27/14658-27/1467; H01L 31/0232-31/02327; H01L 31/1055; H01L 31/14; G03G 15/0142; G03G 15/605; G03G 15/602; F21S 2/00; F21S 4/00; F21S 4/003; F21S 4/005; F21S 4/006;

F21S 4/007; F21S 4/008; F21S 6/00; F21S 8/00; F21S 8/024; F21S 8/026; F21S 8/031; F21S 8/033; F21S 8/035-8/037; F21S 8/04; F21S 8/043; F21S 8/063; F21S 4/28; F21V 11/10-11/186; F21V 15/013; F21V 15/015; F21V 17/02; F21V 17/104; F21V 19/0005; F21V 19/0045; F21V 21/35; H01R 25/14; F21W 2131/304; F21Y 2115/10

See application file for complete search history.

(56)

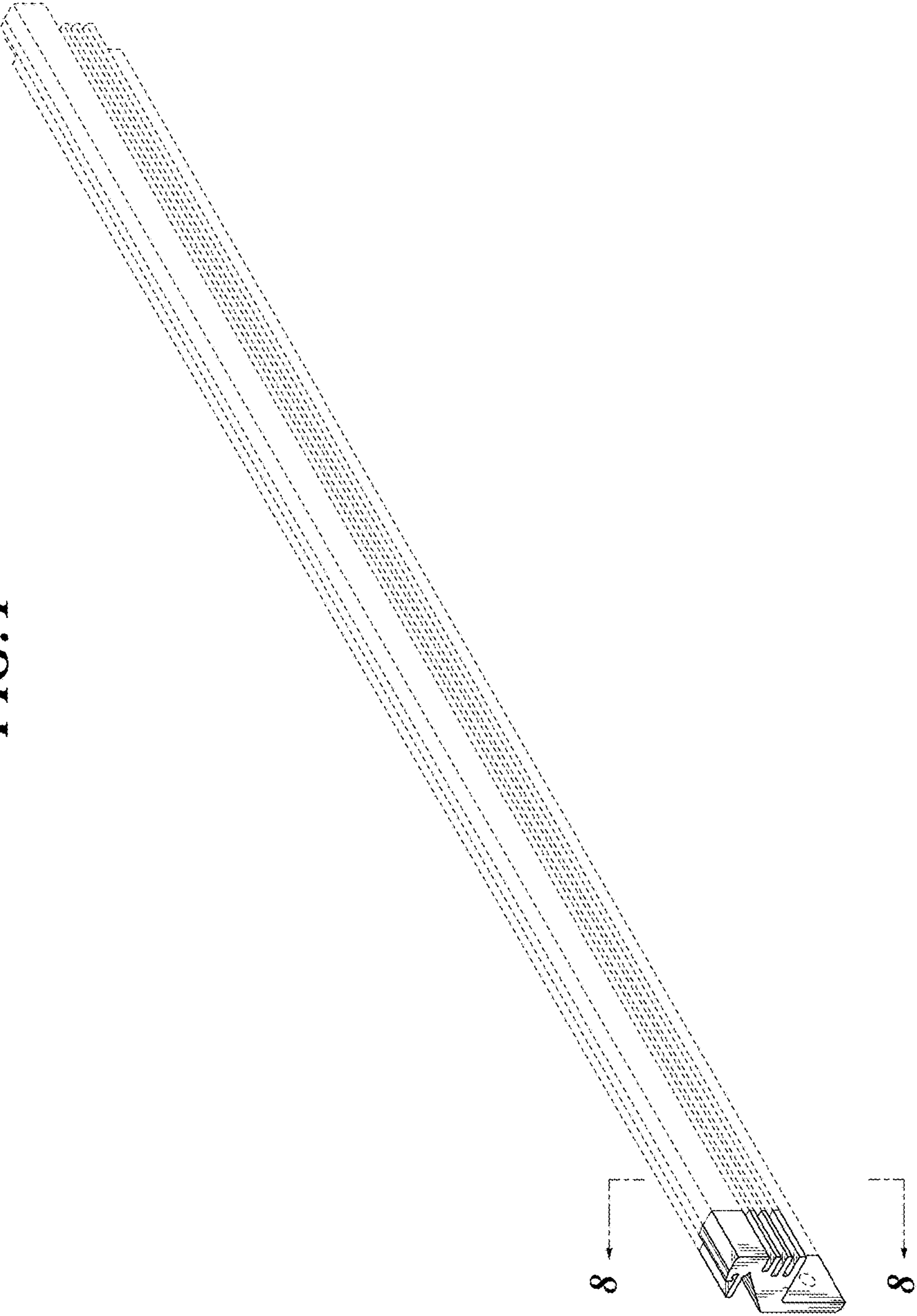
**References Cited**

U.S. PATENT DOCUMENTS

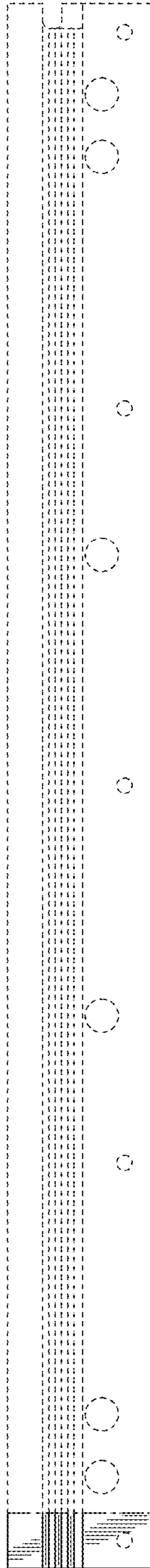
5,466,928 A \* 11/1995 Takahara ..... G02B 7/00 156/291  
 5,579,114 A \* 11/1996 Imamura ..... H04N 1/0312 250/208.1  
 6,612,717 B2 \* 9/2003 Yen ..... F21S 2/00 362/218  
 7,033,060 B2 \* 4/2006 Dubuc ..... A01G 7/045 362/218  
 7,101,056 B2 \* 9/2006 Pare ..... G09F 13/14 362/190  
 7,674,010 B2 \* 3/2010 Griffiths ..... F21V 11/10 362/240  
 8,157,420 B2 \* 4/2012 Song ..... F21V 15/013 362/218  
 8,430,523 B1 \* 4/2013 Smith ..... F21V 29/004 362/235  
 D704,375 S \* 5/2014 Bailey ..... D26/138  
 2005/0180159 A1 \* 8/2005 Wu ..... H04N 1/02815 362/555  
 2006/0146531 A1 \* 7/2006 Reo ..... F21V 5/008 362/244  
 2010/0027254 A1 \* 2/2010 Nakayama ..... H04N 1/02815 362/235  
 2010/0046045 A1 \* 2/2010 Nagao ..... H04N 1/00846 358/474  
 2013/0038914 A1 \* 2/2013 Yoshida ..... H04N 1/0285 358/474  
 2014/0320937 A1 \* 10/2014 Horiguchi ..... H04N 1/02835 358/475  
 2016/0017604 A1 \* 1/2016 White ..... E04B 9/006 52/28  
 2016/0377258 A1 \* 12/2016 Xu ..... F21V 5/04 362/223  
 2017/0101046 A1 \* 4/2017 Beiwen ..... B60Q 1/0064  
 2017/0211802 A1 \* 7/2017 Dellock ..... F21V 29/74  
 2017/0234508 A1 \* 8/2017 Hesse ..... F21V 7/04

\* cited by examiner

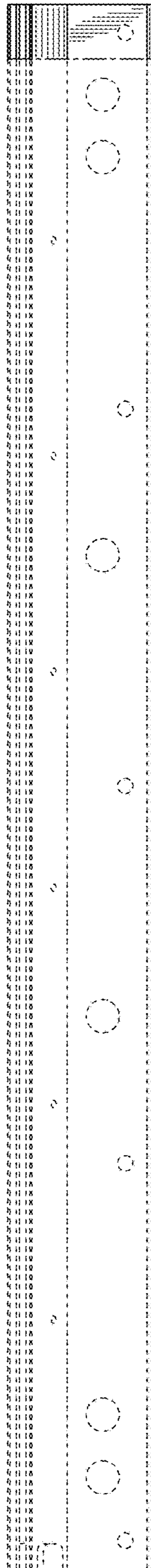
**FIG. 1**



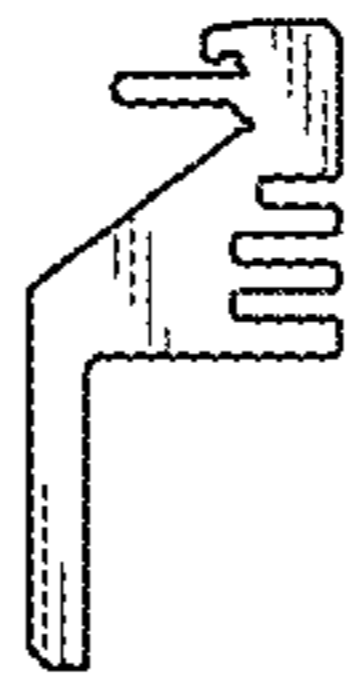
**FIG. 2**



**FIG. 3**



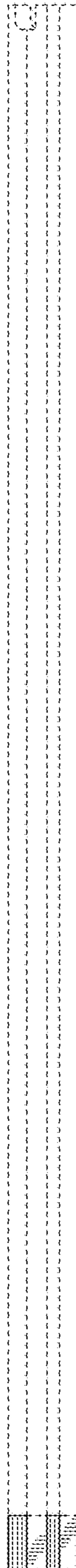
***FIG. 4***



***FIG. 5***

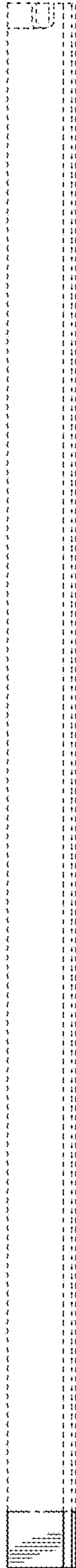


**FIG. 6**

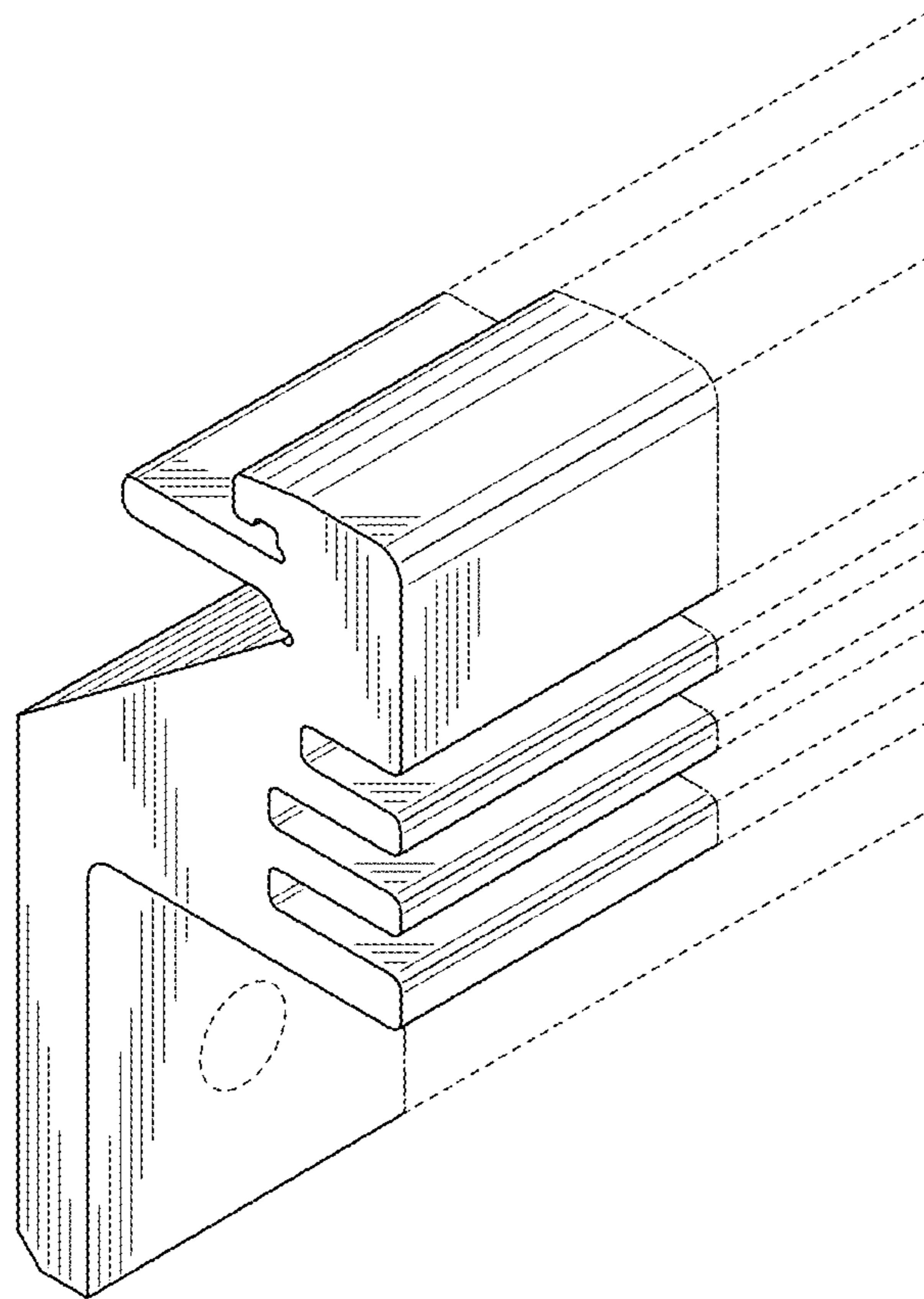




**FIG. 7**



*FIG. 8*



**FIG. 9**

