



US00D736991S

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

(10) **Patent No.:** **US D736,991 S**

(45) **Date of Patent:** **\*\* Aug. 18, 2015**

(54) **LED LENS**

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

(21) Appl. No.: **29/495,056**

(22) Filed: **Jun. 26, 2014**

(51) **LOC (10) Cl.** ..... **26-99**

(52) **U.S. Cl.**  
USPC ..... **D26/120**

(58) **Field of Classification Search**  
USPC ..... D26/9, 10, 12, 13, 15, 16, 24, 51, 61,  
D26/72, 76, 80, 81, 85, 86, 88, 90, 113, 118,  
D26/119, 120, 122, 128, 129, 138, 143,  
D26/144; D13/180  
CPC ..... F21S 8/026; F21S 8/04; F21V 29/004;  
F21V 21/02; F21V 21/04; F21V 29/2212;  
F21Y 2101/02

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,519,596 A \* 5/1996 Woolverton ..... 362/249.01  
D378,698 S \* 4/1997 Ukai et al. .... D23/393  
D392,512 S \* 3/1998 Bennett et al. .... D7/619.1  
D406,143 S \* 2/1999 Montaldo ..... D14/220  
D430,953 S \* 9/2000 Freeman ..... D28/8.1  
D445,023 S \* 7/2001 Gaudet et al. .... D9/756  
D539,944 S \* 4/2007 Egawa et al. .... D26/24  
D545,487 S \* 6/2007 Bynum et al. .... D26/120  
7,241,038 B2 \* 7/2007 Naniwa et al. .... 362/525

D563,012 S \* 2/2008 Citterio et al. .... D26/63  
D565,207 S \* 3/2008 Uemoto et al. .... D26/24  
D572,387 S \* 7/2008 Uemoto et al. .... D26/24  
D576,760 S \* 9/2008 Ottobre ..... D26/118  
D581,579 S \* 11/2008 Ottobre ..... D26/118  
D582,064 S \* 12/2008 Mukai ..... D26/24  
D583,795 S \* 12/2008 Keenum et al. .... D14/140.5  
D590,100 S \* 4/2009 Boyer ..... D26/120  
D592,536 S \* 5/2009 Chan Chen ..... D10/114.2

(Continued)

**OTHER PUBLICATIONS**

Smart Egg Lamp, image post date Dec. 26, 2011, site visited Jan. 22, 2015, (online), <<http://inhabitat.com/smart-egg-lamp-a-quirky-lighting-solution-made-from-a-recycled-egg-carton/>>.\*

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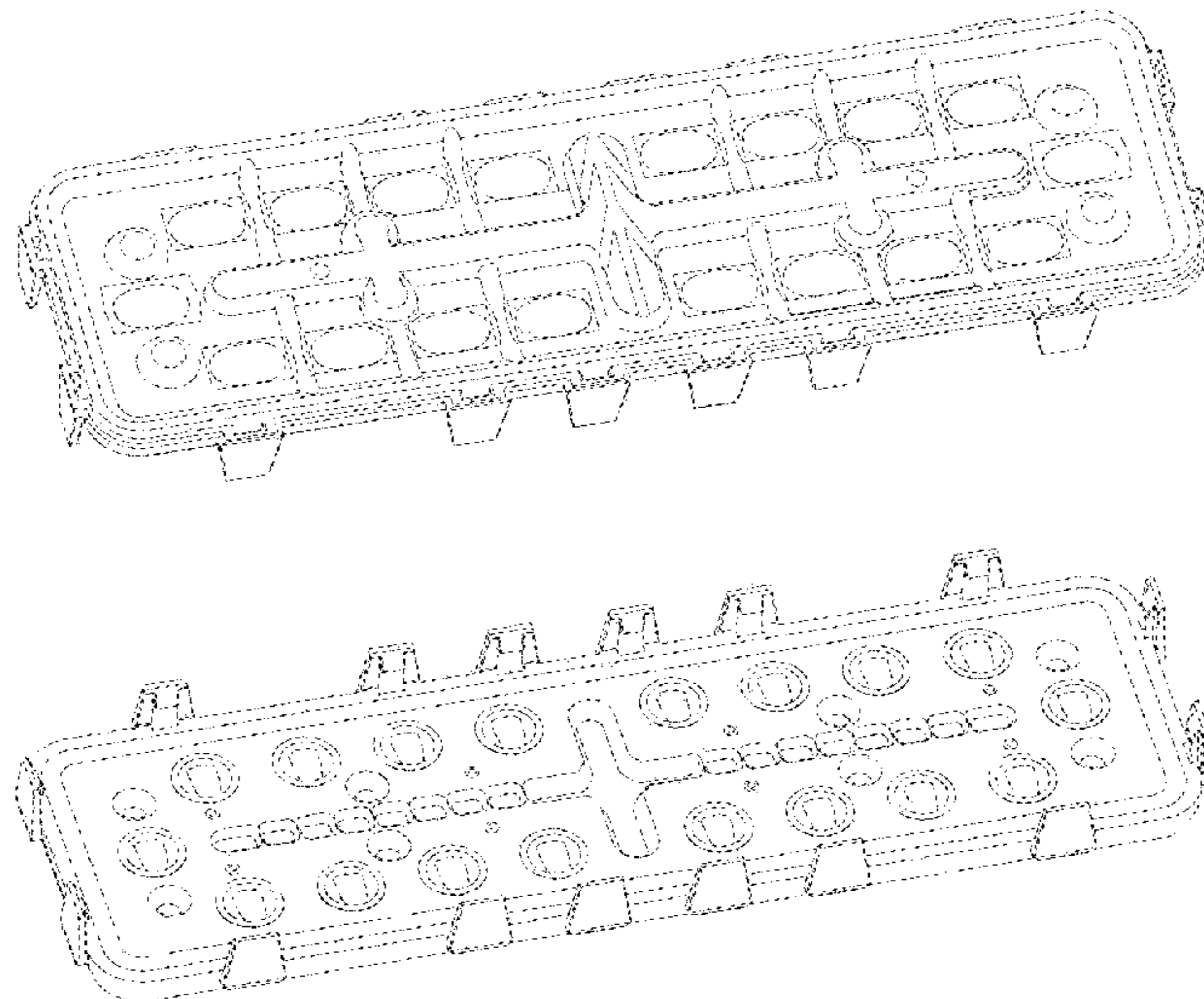
(57) **CLAIM**

The ornamental design for a LED lens, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of the LED lens of the present invention. FIG. 2 is a back view of the LED lens. FIG. 3 is a top view of the LED lens. FIG. 4 is a bottom view of the LED lens. FIG. 5 is a left side view of the LED lens. FIG. 6 is a right side view of the LED lens. FIG. 7 is a first perspective view of the LED lens. FIG. 8 is a second perspective view of the LED lens. FIG. 9 is a cross-sectional view of the LED lens along the lines 9-9 in FIG. 10; and, FIG. 10 is a front view of the LED lens.

**1 Claim, 5 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D618,845 S \* 6/2010 Mark ..... D26/113  
 D621,542 S \* 8/2010 Klus ..... D26/138  
 D623,346 S \* 9/2010 Tsai ..... D26/140  
 D623,781 S \* 9/2010 Uemoto et al. .... D26/24  
 D624,846 S \* 10/2010 Schick ..... D11/156  
 D626,268 S \* 10/2010 Santoro ..... D26/76  
 D627,921 S \* 11/2010 Chen ..... D26/138  
 D629,960 S \* 12/2010 Little et al. .... D26/120  
 D632,001 S \* 2/2011 Kong et al. .... D26/71  
 D640,162 S \* 6/2011 Hashimoto ..... D11/143  
 D640,822 S \* 6/2011 Wildner ..... D26/89  
 D641,914 S \* 7/2011 Sprengers ..... D26/89  
 D642,997 S \* 8/2011 Morikawa et al. .... D13/180  
 D645,418 S \* 9/2011 Morikawa et al. .... D13/180  
 D647,246 S \* 10/2011 Chadwick ..... D26/138  
 D654,211 S \* 2/2012 Melzner et al. .... D26/118  
 D657,757 S \* 4/2012 Morikawa et al. .... D13/180  
 D661,424 S \* 6/2012 Ferguson et al. .... D26/120  
 D663,886 S \* 7/2012 Alvarez et al. .... D26/118  
 D666,349 S \* 8/2012 Sprengers ..... D26/85  
 D668,168 S \* 10/2012 Chen ..... D10/114.4  
 D672,080 S \* 12/2012 Wauters ..... D26/85  
 D673,068 S \* 12/2012 Beghelli ..... D10/114.4  
 D675,370 S \* 1/2013 Lin et al. .... D26/120  
 D675,372 S \* 1/2013 Kim et al. .... D26/138  
 D676,185 S \* 2/2013 Piegras et al. .... D26/113  
 D677,421 S \* 3/2013 Lin et al. .... D26/120  
 D677,422 S \* 3/2013 Lin et al. .... D26/120  
 D677,831 S \* 3/2013 Lin et al. .... D26/120  
 D679,860 S \* 4/2013 Maxik et al. .... D26/141  
 D681,261 S \* 4/2013 Miyatake et al. .... D26/120  
 D681,866 S \* 5/2013 Lin et al. .... D26/120

D693,044 S \* 11/2013 Lu ..... D26/71  
 D699,778 S \* 2/2014 Li et al. .... D16/237  
 D700,992 S \* 3/2014 Hufford ..... D26/142  
 D702,868 S \* 4/2014 Patel ..... D26/74  
 D705,980 S \* 5/2014 Davidson et al. .... D26/118  
 D710,532 S \* 8/2014 Fletcher et al. .... D26/118  
 D710,533 S \* 8/2014 Fletcher et al. .... D26/118  
 D710,534 S \* 8/2014 Fletcher et al. .... D26/118  
 D710,926 S \* 8/2014 Li ..... D16/237  
 D713,584 S \* 9/2014 Maxik et al. .... D26/72  
 D716,995 S \* 11/2014 Zhu et al. .... D26/122  
 D718,487 S \* 11/2014 Hulse ..... D26/118  
 8,915,361 B2 \* 12/2014 Rayner ..... 206/320  
 2003/0189829 A1 \* 10/2003 Shimizu et al. .... 362/240  
 2005/0068786 A1 \* 3/2005 Ishida ..... 362/509  
 2005/0094414 A1 \* 5/2005 Ishida et al. .... 362/545  
 2009/0290345 A1 \* 11/2009 Shaner ..... 362/249.01  
 2010/0157596 A1 \* 6/2010 Wen et al. .... 362/235  
 2010/0165627 A1 \* 7/2010 Wung et al. .... 362/249.02  
 2010/0327767 A1 \* 12/2010 Fay ..... 315/294  
 2011/0013116 A1 \* 1/2011 Matsuki et al. .... 349/62  
 2011/0317425 A1 \* 12/2011 Jeon et al. .... 362/249.05  
 2012/0008304 A1 \* 1/2012 Lai ..... 362/84  
 2012/0188766 A1 \* 7/2012 Lu et al. .... 362/249.02  
 2013/0039054 A1 \* 2/2013 Yang et al. .... 362/234  
 2013/0093963 A1 \* 4/2013 Kasai ..... 348/739  
 2014/0043843 A1 \* 2/2014 Moser et al. .... 362/545

OTHER PUBLICATIONS

Rectangular LED Panel, image post date May 9, 2013, site visited Jan. 22, 2015, (online), <<http://ddeepakraja.blogspot.com/2013/05/diy-led-panel-rectangular-semi-circular.html>>.\*

\* cited by examiner

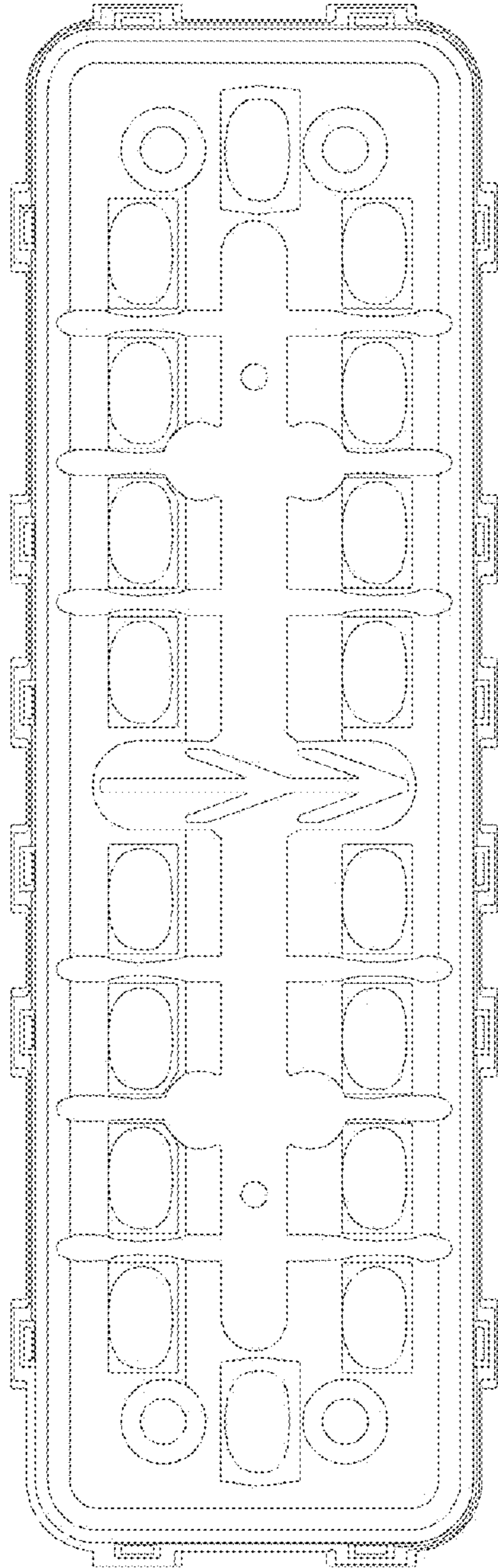


Fig. 1

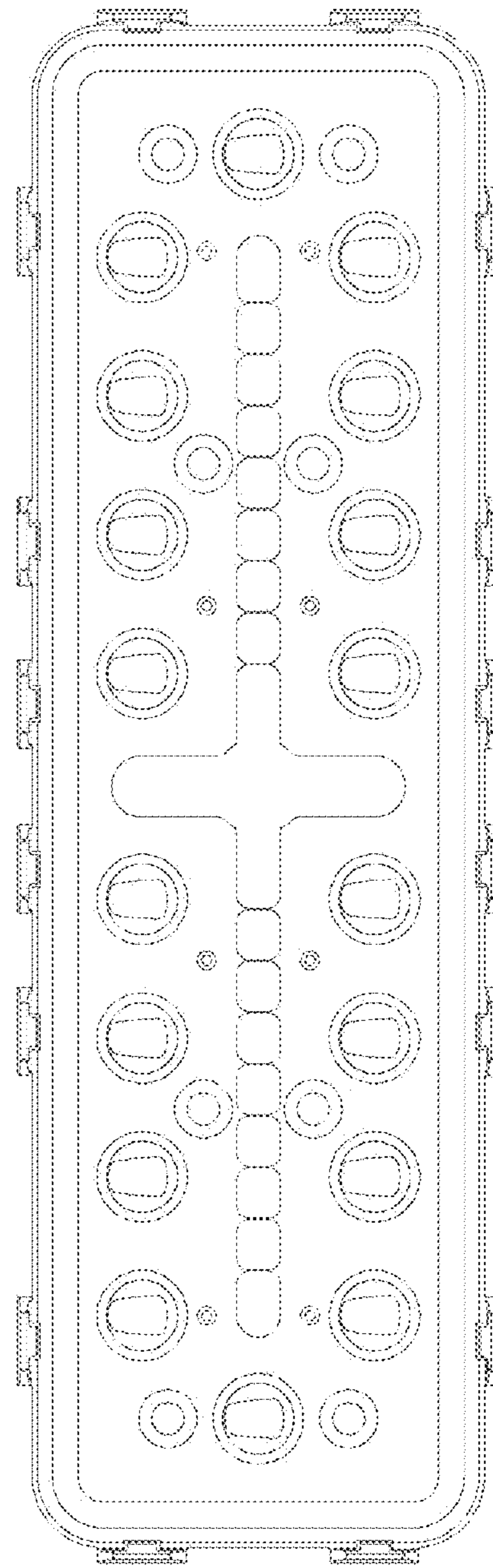


Fig. 2

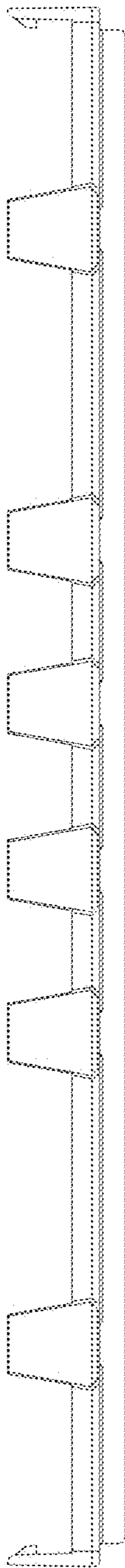


Fig. 3

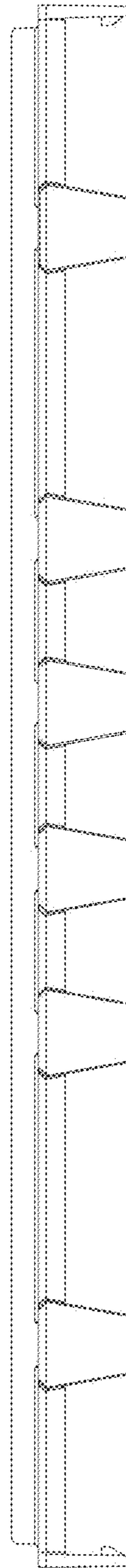


Fig. 4

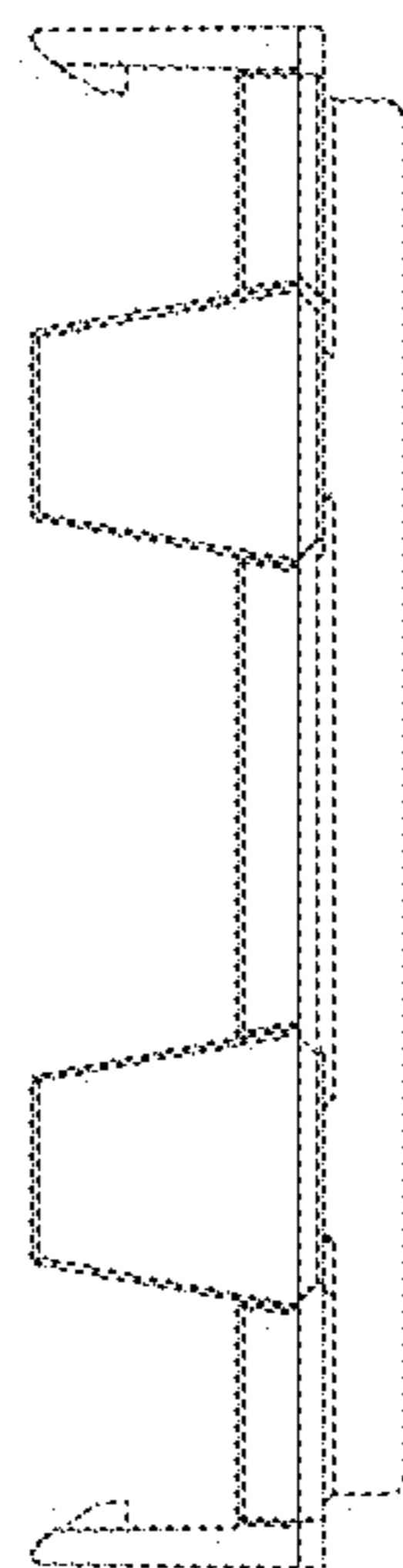


Fig. 5

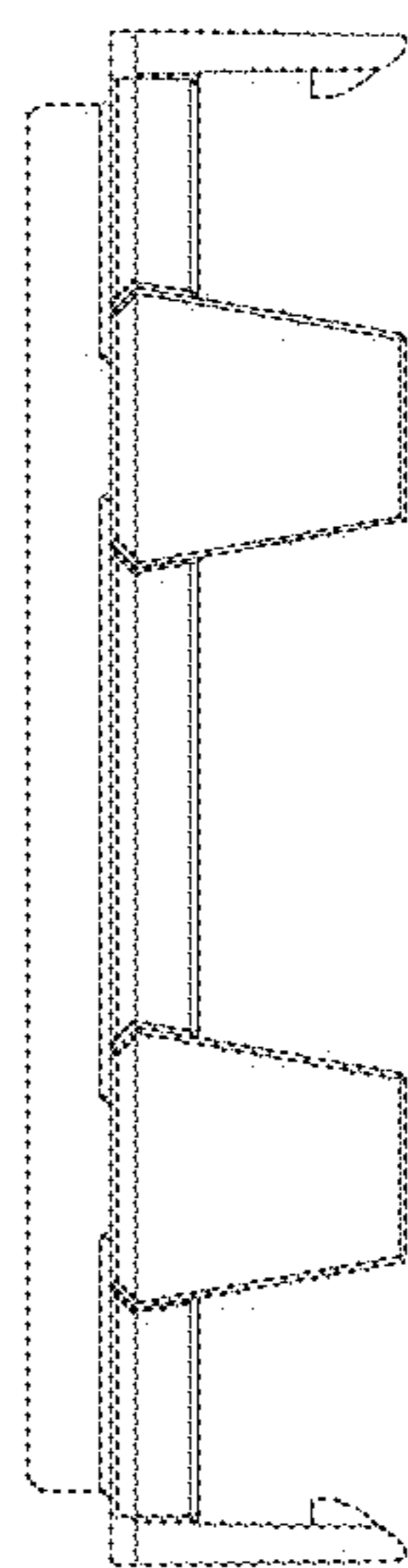


Fig. 6

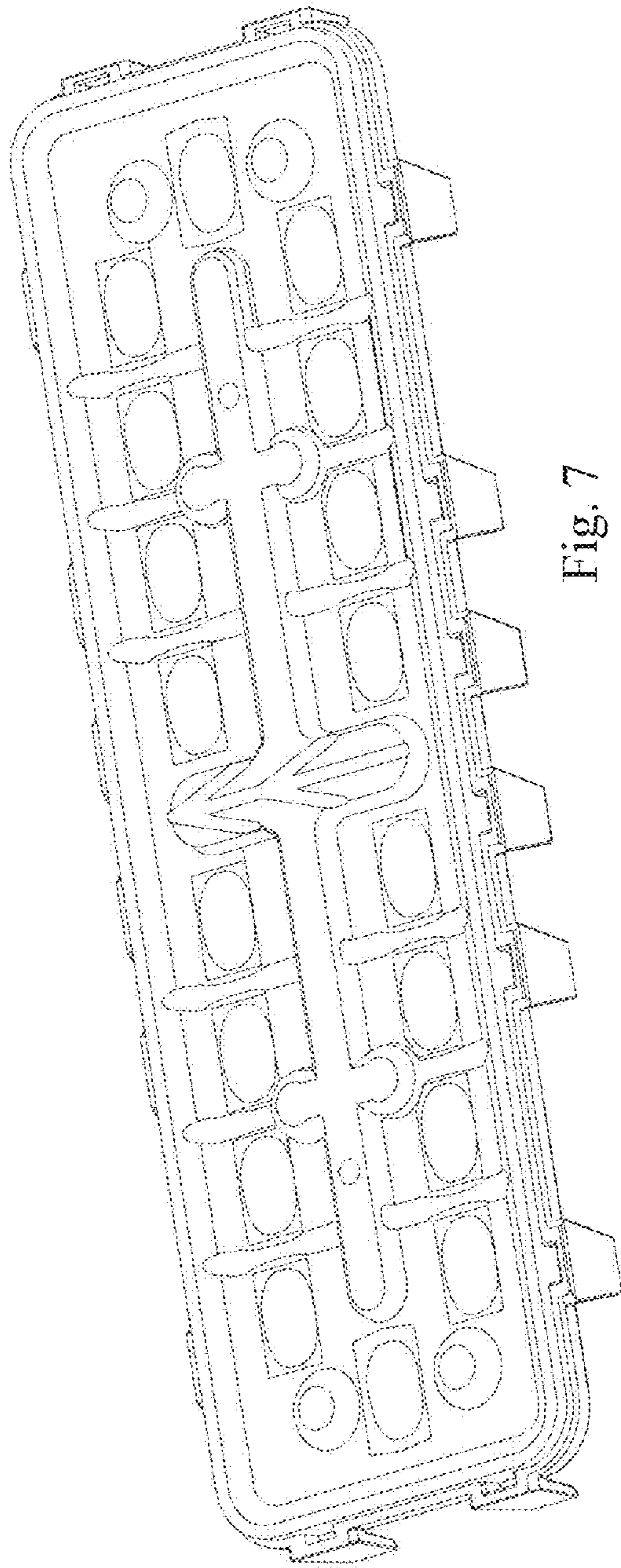


Fig. 7

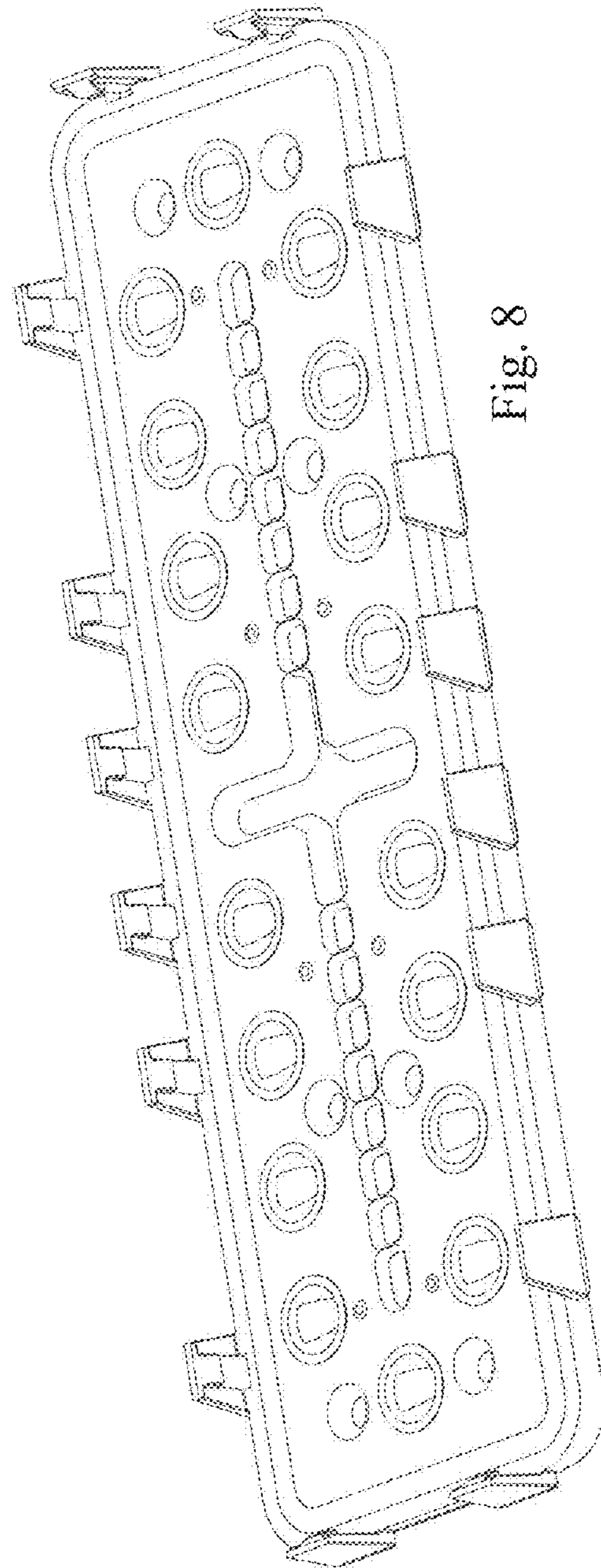


Fig. 8

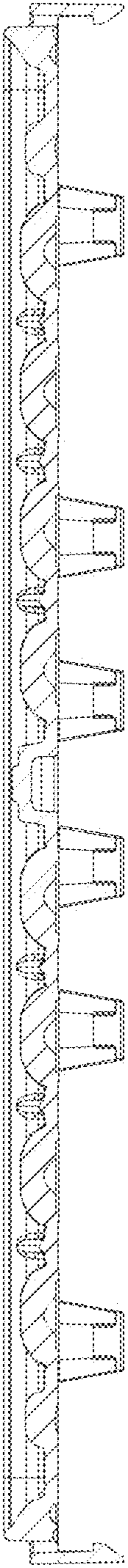


Fig. 9

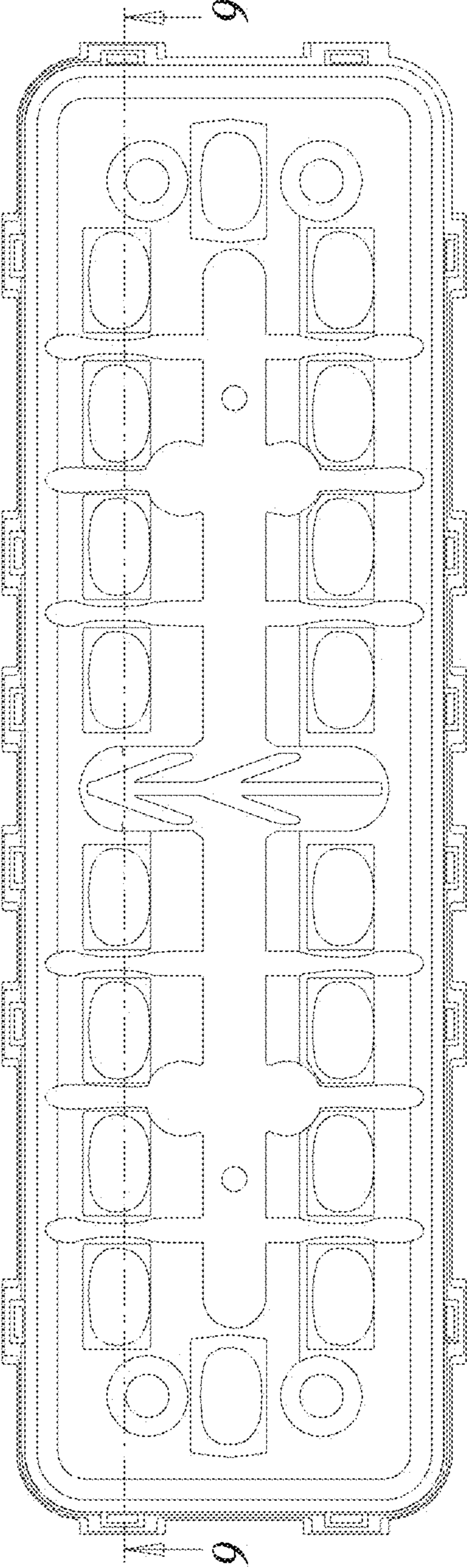


Fig. 10