



US00D764629S

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

(10) **Patent No.:** **US D764,629 S**

(45) **Date of Patent:** **\*\* Aug. 23, 2016**

(54) **VALVE HOUSING**

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

(21) Appl. No.: **29/501,651**

(22) Filed: **Sep. 5, 2014**

**Related U.S. Application Data**

(63) Continuation-in-part of application No. 29/484,353,  
filed on Mar. 7, 2014, now Pat. No. Des. 731,621, and  
a continuation-in-part of application No. 29/498,207,  
filed on Jul. 31, 2014.

(51) **LOC (10) Cl.** ..... **23-01**

(52) **U.S. Cl.**  
USPC ..... **D23/233**

(58) **Field of Classification Search**

USPC ..... D23/233–250; 220/560.03, 373, 374,  
220/367.1; 137/533, 197, 198, 587, 12,  
137/202, 588, 513.5; 123/518, 516; 141/59;  
D24/162; 210/167.22, 266; 55/497  
CPC ... F16K 27/00; F16K 27/003; F16K 11/0712;  
F16K 17/105; F16K 27/12; F16K 31/0603;  
F16K 31/0613; F16K 31/0665

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

1,787,135 A \* 12/1930 Barnes ..... F02M 35/022  
55/385.1  
2,090,454 A 8/1937 Mayer  
2,329,356 A \* 9/1943 Moore ..... B01D 37/02  
210/447

2,973,833 A 3/1961 Cook  
3,144,315 A \* 8/1964 Hunn ..... F02M 35/024  
55/486  
3,556,298 A \* 1/1971 Werner ..... B01D 29/016  
210/131  
3,701,433 A 10/1972 Krakauer et al.  
3,712,033 A \* 1/1973 Gronholz ..... B01D 46/0016  
210/493.1  
3,815,754 A \* 6/1974 Rosenberg ..... A61M 5/165  
128/205.29  
D232,174 S 7/1974 La Borde  
D232,238 S 7/1974 La Borde  
D244,530 S 5/1977 Bell

(Continued)

**FOREIGN PATENT DOCUMENTS**

CN 201152206 Y 11/2008

**OTHER PUBLICATIONS**

Written Opinion, PCT/US2014/054423, mailed Dec. 17, 2014, pp.  
1-6.

(Continued)

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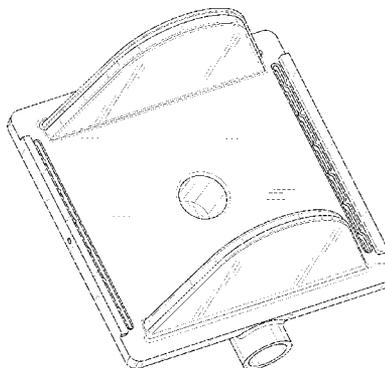
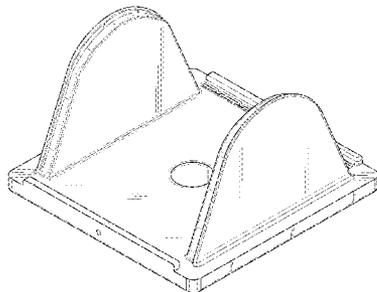
(57) **CLAIM**

The ornamental design for a valve housing, as shown and  
described.

**DESCRIPTION**

FIG. 1 is a perspective view of a valve housing showing our  
new design;  
FIG. 2 is another perspective view thereof;  
FIG. 3 is a back elevational view thereof;  
FIG. 4 is a front elevational view thereof;  
FIG. 5 is a left elevational view thereof;  
FIG. 6 is a right elevational view thereof;  
FIG. 7 is a top plan view thereof; and,  
FIG. 8 is a bottom plan view thereof.

**1 Claim, 8 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

4,053,414 A 10/1977 in'tVeld  
 4,187,182 A 2/1980 Rosenberg  
 4,203,738 A \* 5/1980 Kerman ..... B01D 46/0065  
 55/287  
 4,228,011 A \* 10/1980 Cote, Jr. .... B01D 29/01  
 210/232  
 4,411,783 A 10/1983 Dickens  
 4,490,254 A 12/1984 Gordon  
 4,552,657 A 11/1985 Ogawa  
 D307,461 S 4/1990 Kim  
 5,019,141 A 5/1991 Granville et al.  
 D317,814 S 6/1991 Tomlinson  
 5,035,729 A 7/1991 Hodgkins  
 5,253,668 A 10/1993 Mills  
 D354,796 S 1/1995 Smith, Sr.  
 D360,464 S 7/1995 Murray  
 5,558,244 A 9/1996 Akaike et al.  
 5,620,505 A \* 4/1997 Koch ..... B01D 46/0024  
 210/493.3  
 D402,349 S 12/1998 Gavin  
 D410,734 S 6/1999 Pingel

6,895,943 B1 5/2005 Taxon  
 7,448,365 B2 11/2008 Mills  
 8,272,398 B2 9/2012 Erdmann  
 8,485,214 B2 7/2013 Erdmann et al.  
 8,596,311 B2 12/2013 Erdmann et al.  
 D702,320 S 4/2014 Pifer  
 8,685,149 B2 4/2014 Uchida  
 D731,621 S \* 6/2015 Mills ..... D23/233  
 2007/0175514 A1 8/2007 Tharp et al.  
 2010/0024898 A1 2/2010 Bansal et al.  
 2010/0319789 A1 12/2010 Erdmann et al.  
 2011/0088662 A1 4/2011 Erdmann  
 2011/0168715 A1 7/2011 Erdmann et al.  
 2012/0305099 A1 12/2012 Erdmann  
 2012/0318793 A1 12/2012 Uchida  
 2013/0269804 A1 10/2013 Erdmann et al.  
 2013/0341331 A1 12/2013 Bork

OTHER PUBLICATIONS

International Search Report, PCT/US2014/054423, mailed Dec. 17, 2014, pp. 1-3.

\* cited by examiner

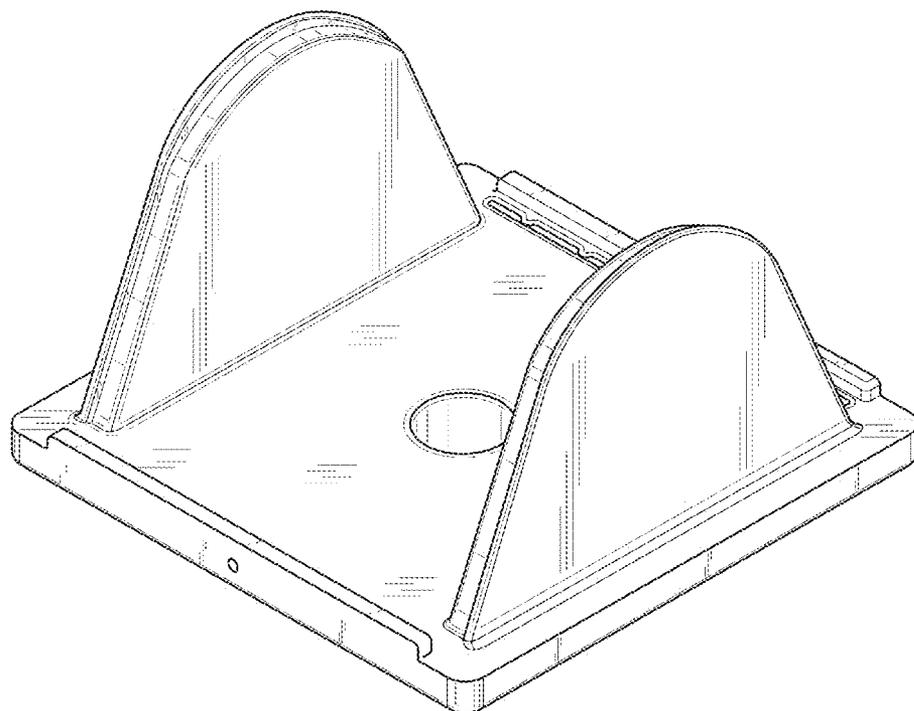


FIG. 1

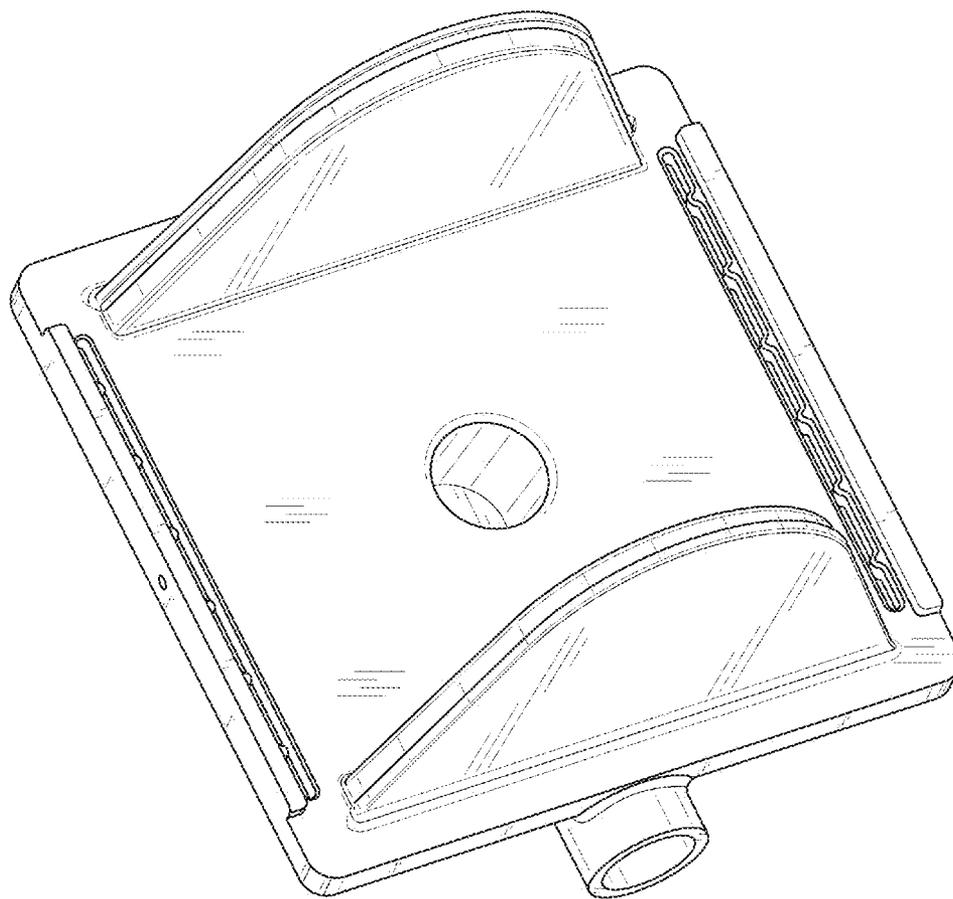


FIG. 2

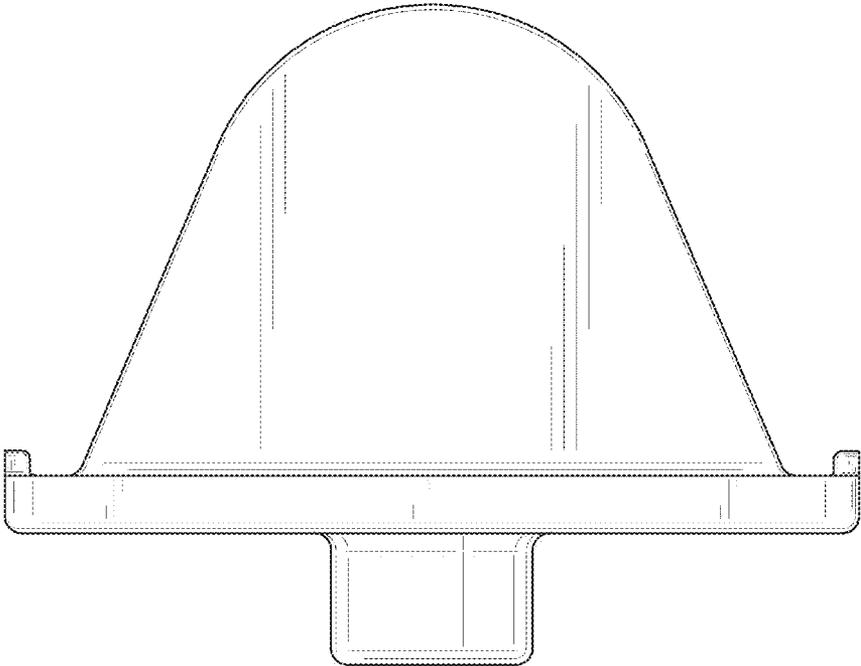


FIG. 3

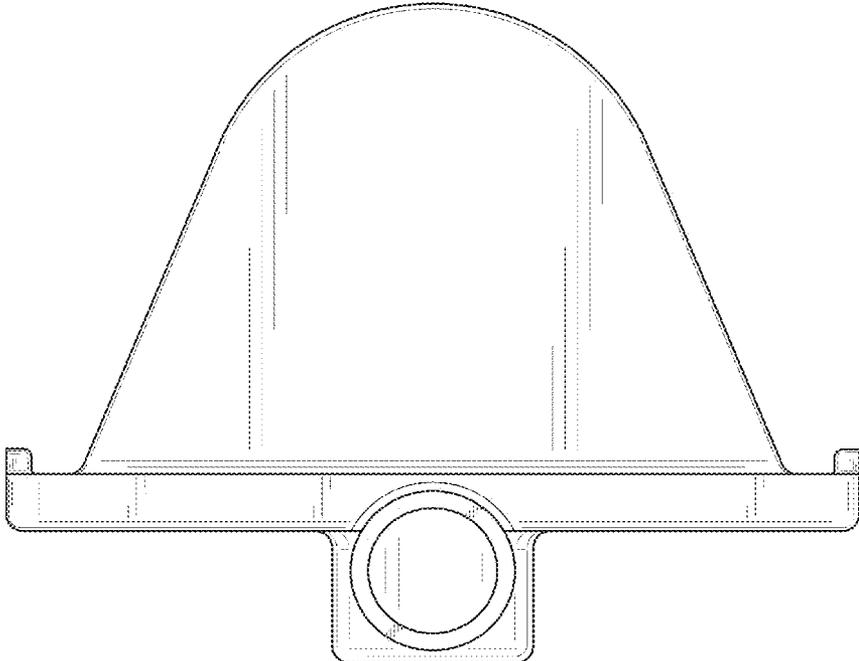


FIG. 4



FIG. 5

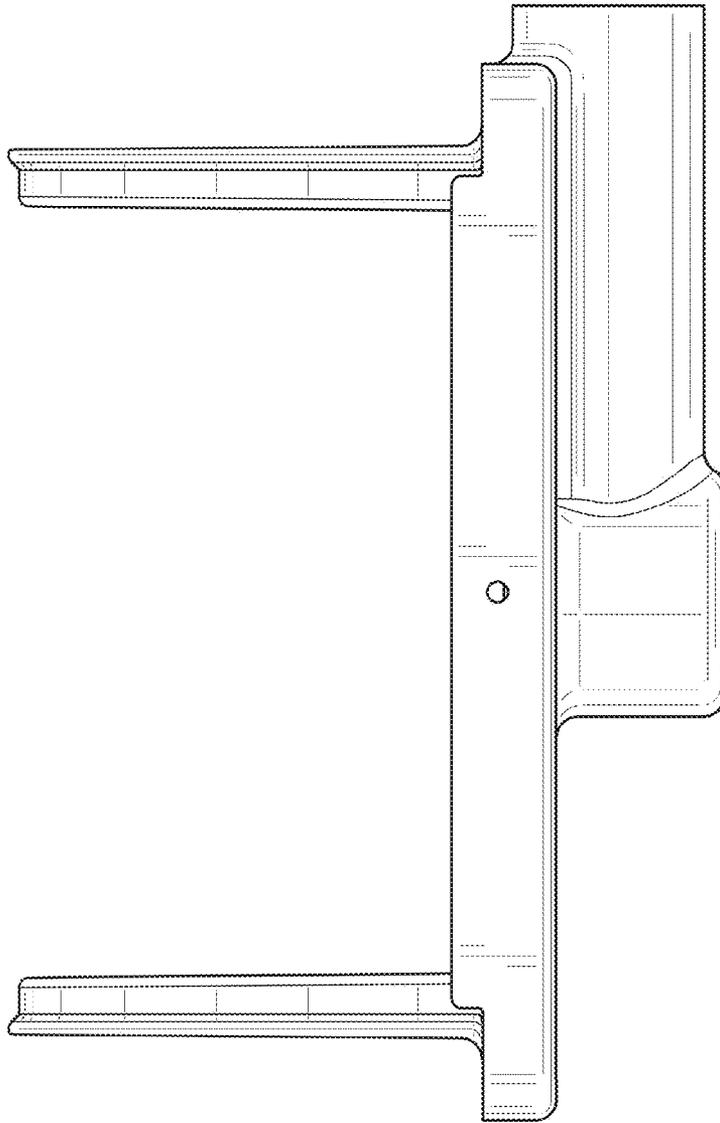


FIG. 6

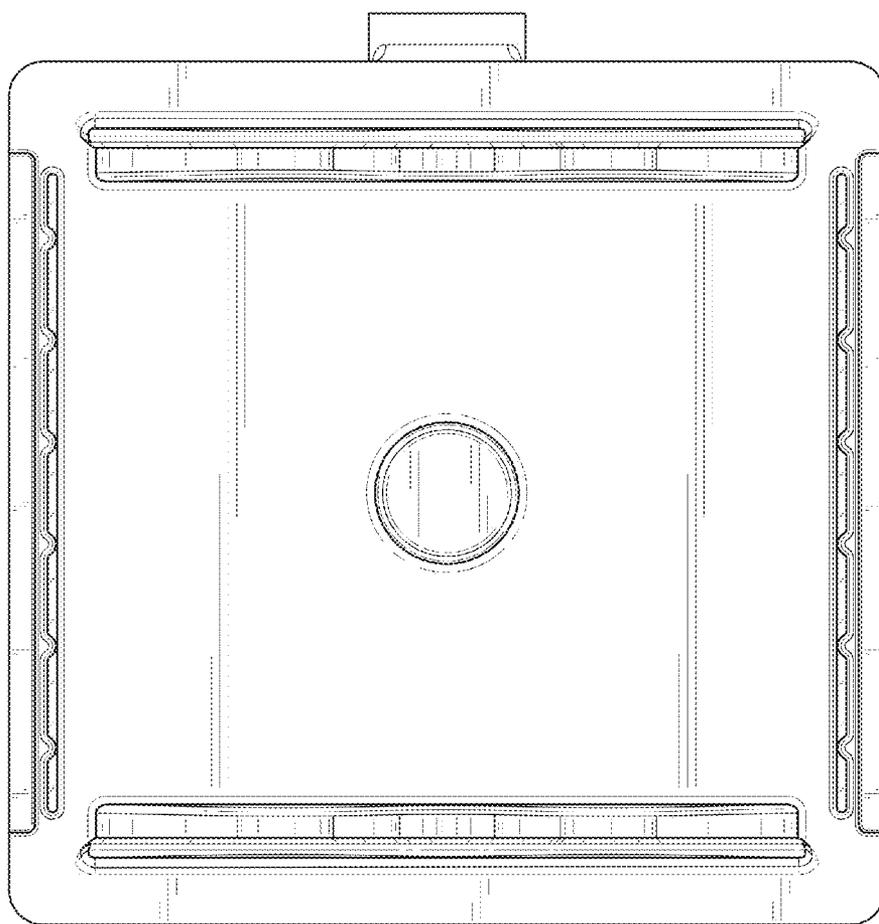


FIG. 7

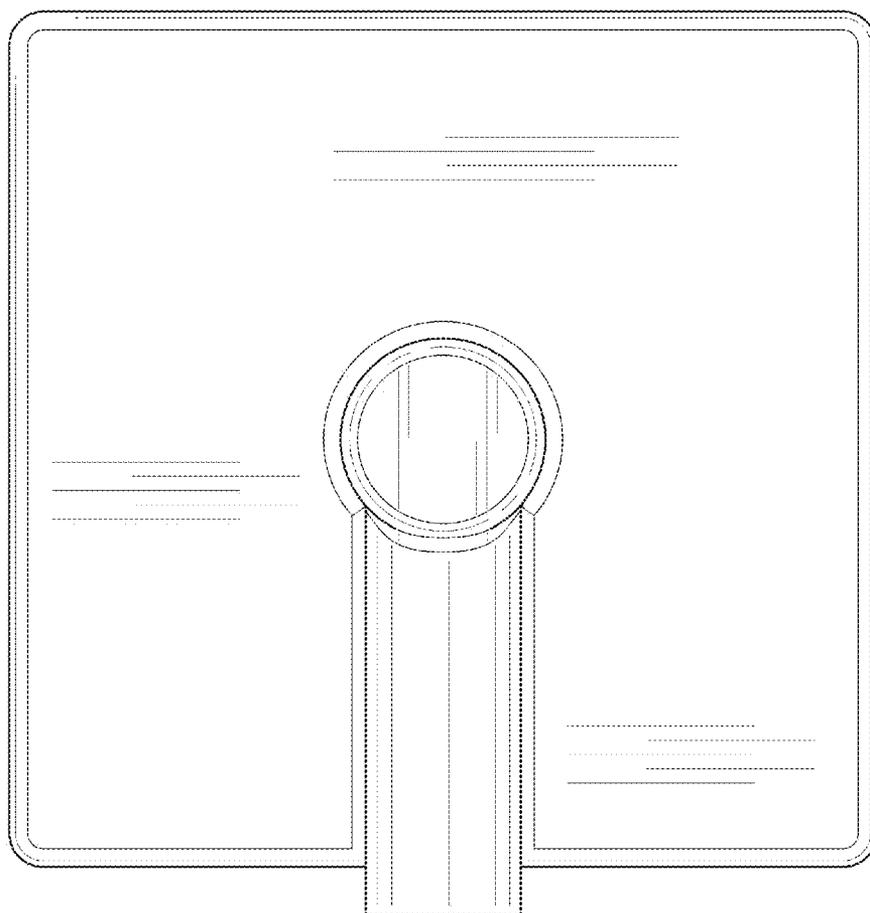


FIG. 8