



US00D684597S

(12) **United States Design Patent**  
**Ball**

(10) **Patent No.:** **US D684,597 S**

(45) **Date of Patent:** **\*\* Jun. 18, 2013**

(54) **GRANULAR FILTER MEDIA RETAINER**

(75) Inventor: **Christopher J. Ball**, Cranberry Township, PA (US)

(73) Assignee: **Xylem Water Solutions Zelienople LLC**, Zelienople, PA (US)

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

(21) Appl. No.: **29/409,477**

(22) Filed: **Dec. 23, 2011**

(51) **LOC (9) Cl.** ..... **15-03**

(52) **U.S. Cl.**  
USPC ..... **D15/21**

(58) **Field of Classification Search**

USPC ..... D15/21, 28, 199; D23/397, 209, D23/261, 35, 499, 207, 365; D25/35, 48.8, D25/199; 404/4; 210/792, 281, 282, 793, 210/265, 293, 295, 348, 767, 791, 291, 263, 210/274, 275, 279, 292, 163, 164

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

1,773,417	A *	8/1930	Whitacre	.....	210/293
2,874,844	A *	2/1959	Wanner	.....	210/150
3,456,804	A *	7/1969	McGivern	.....	210/292
3,613,888	A	10/1971	Harris		
3,632,978	A	1/1972	Wrob		
3,762,559	A	10/1973	Knoy et al.		
3,831,761	A	8/1974	Chantereau		
3,840,117	A	10/1974	Ross		
RE28,458	E	7/1975	Ross		
3,956,134	A	5/1976	Sturgill		
4,013,021	A *	3/1977	Steinlein et al.	.....	108/57.25

(Continued)

Primary Examiner — Mark Goodwin

(74) *Attorney, Agent, or Firm* — The Webb Law Firm, PC

(57) **CLAIM**

The ornamental design for a granular filter media retainer, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of a granular filter media retainer in accordance with an embodiment of the present invention.

FIG. 2 is a rear view of the granular filter media retainer of FIG. 1 in accordance with an embodiment of the present invention.

FIG. 3 is a right side view of the granular filter media retainer of FIG. 1 in accordance with an embodiment of the present invention.

FIG. 4 is a left side view of the needle hub of FIG. 1 in accordance with an embodiment of the present invention.

FIG. 5 is a top view of the granular filter media retainer of FIG. 1 in accordance with an embodiment of the present invention.

FIG. 6 is a bottom view of the granular filter media retainer of FIG. 1 in accordance with an embodiment of the present invention.

FIG. 7 is a front perspective view of the granular filter media retainer of FIG. 1 in accordance with an embodiment of the present invention.

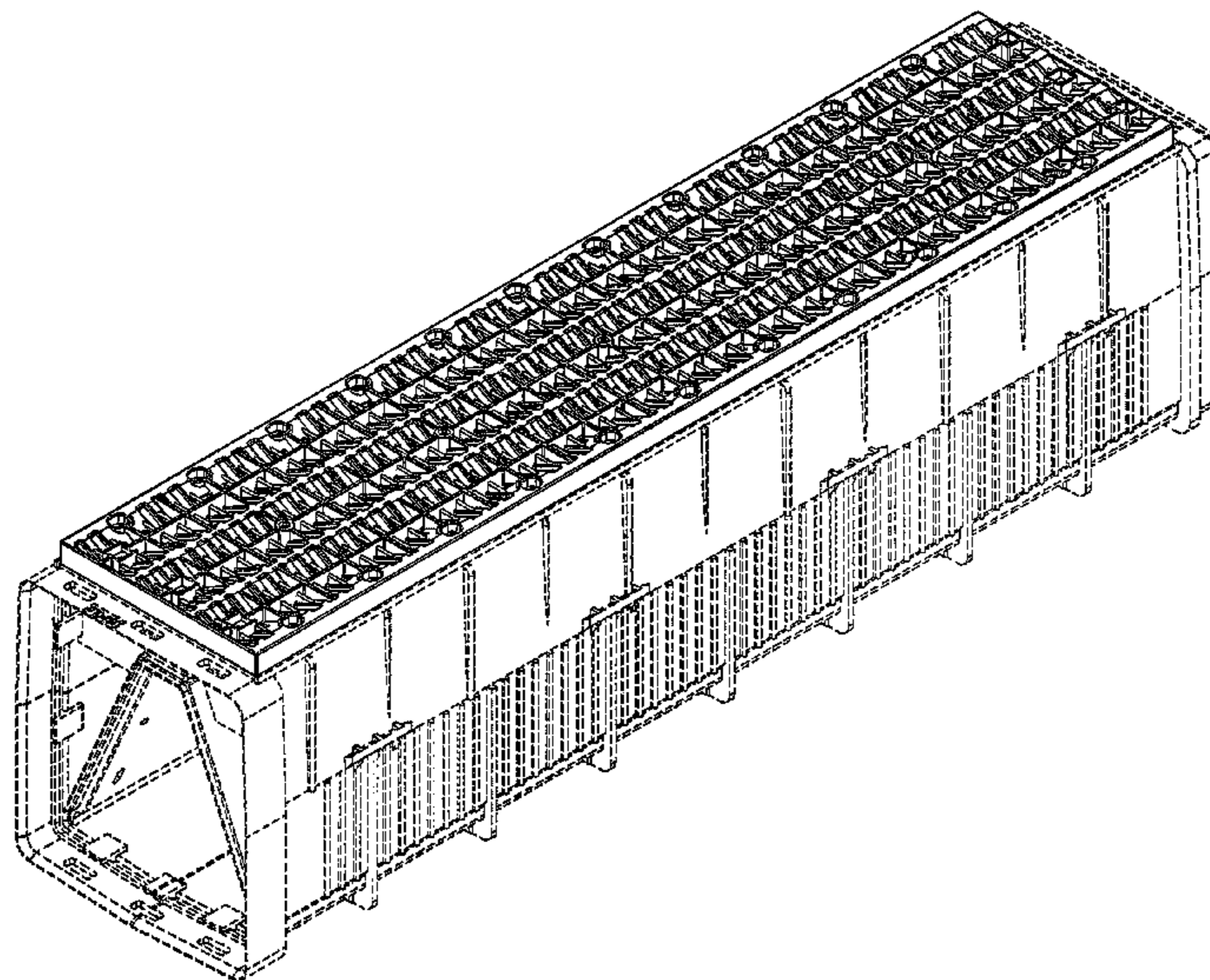
FIG. 8 is a front perspective view of the granular filter media retainer of FIG. 1 engaged with an underdrain in accordance with an embodiment of the present invention.

FIG. 9 is a right side cross-sectional view of the granular filter media retainer of FIG. 1 taken along a longitudinal centerline in accordance with an embodiment of the present invention; and,

FIG. 10 is a detailed view of a portion of the cross-sectional view of the granular filter media retainer of FIG. 9 in accordance with an embodiment of the present invention.

The broken lines shown in FIG. 8 are provided for the purpose of showing environment only, and form no portion of the claimed design.

**1 Claim, 7 Drawing Sheets**



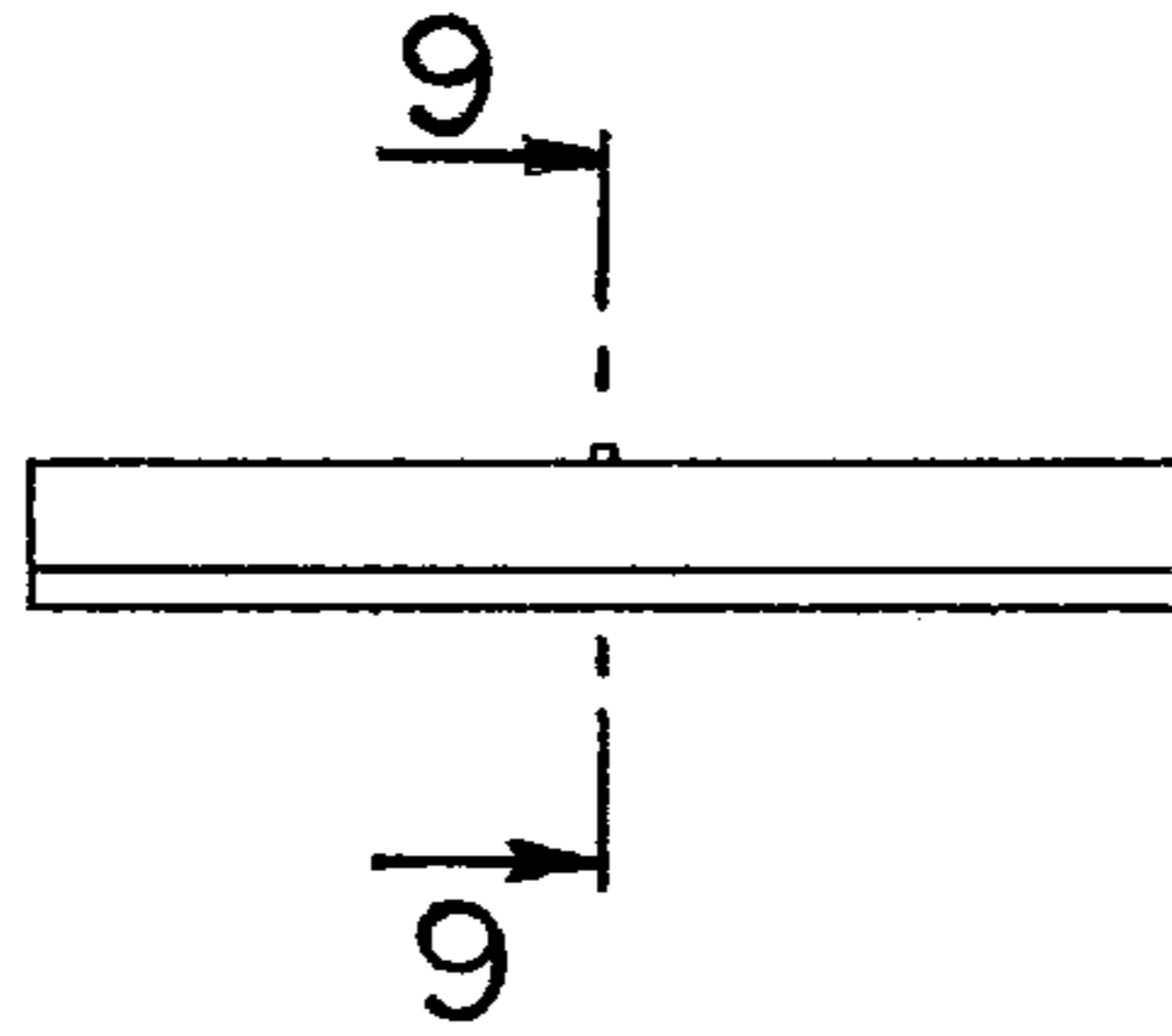
# US D684,597 S

Page 2

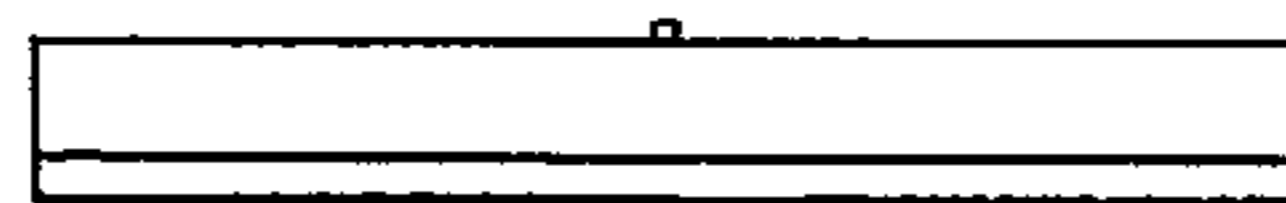
## U.S. PATENT DOCUMENTS

4,065,391	A	12/1977	Farabaugh				
4,082,664	A	4/1978	Lindstol				
4,191,652	A	3/1980	Whitmore				
4,196,079	A	4/1980	Ward				
4,331,542	A	5/1982	Emrie				
4,340,478	A *	7/1982	Stannard et al.	210/286			
4,367,142	A *	1/1983	Blecher	210/163			
4,478,726	A	10/1984	Moore				
4,564,450	A	1/1986	Piper et al.				
RE32,248	E *	9/1986	Blecher	210/163			
4,743,382	A	5/1988	Williamson et al.				
4,750,999	A	6/1988	Roberts et al.				
D299,543	S *	1/1989	Phillips	D25/35			
4,933,524	A	6/1990	Meurer				
4,940,359	A *	7/1990	Van Duyn et al.	405/118			
D312,696	S *	12/1990	Phillips	D25/35			
5,019,259	A	5/1991	Hambley				
5,108,627	A	4/1992	Berkebile et al.				
5,116,443	A	5/1992	Meurer				
5,130,016	A *	7/1992	Gavin	210/164			
5,149,427	A	9/1992	Brown et al.				
5,232,592	A	8/1993	Brown et al.				
5,269,920	A	12/1993	Brown et al.				
5,332,497	A	7/1994	Shea et al.				
5,489,388	A	2/1996	Brown et al.				
5,529,436	A *	6/1996	Meyers	405/119			
D377,389	S *	1/1997	Phillips et al.	D23/261			
5,618,421	A *	4/1997	Sorosinski	210/264			
5,639,384	A	6/1997	Brown et al.				
5,865,999	A	2/1999	Shea et al.				
5,916,104	A	6/1999	Lucenet et al.				
5,976,370	A	11/1999	Medworth				
D422,061	S *	3/2000	Lee	D23/261			
6,090,284	A	7/2000	Melber et al.				
6,190,568	B1	2/2001	Hunkele				
6,387,283	B1	5/2002	Lind				
6,569,328	B1	5/2003	Haggard				
6,797,166	B1	9/2004	Hambley et al.				
6,830,684	B2	12/2004	Stegge				
6,991,726	B2	1/2006	St. Germain				
D519,601	S *	4/2006	Addison	D23/209			
7,033,489	B2 *	4/2006	Thompson et al.	210/164			
7,063,787	B2	6/2006	Jackson et al.				
7,066,685	B2 *	6/2006	Humphries et al.	405/43			
7,090,771	B2	8/2006	Dyson et al.				
D528,193	S *	9/2006	Lee	D23/261			
7,138,056	B2	11/2006	Hambley et al.				
7,192,521	B2	3/2007	St. Germain				
7,288,193	B2	10/2007	Roberts et al.				
7,326,351	B2	2/2008	Hambley et al.				
D565,148	S *	3/2008	Addison	D23/209			
D572,358	S *	7/2008	Nattrass et al.	D23/397			
7,410,578	B2	8/2008	Hambley et al.				
7,481,930	B2	1/2009	Roberts				
7,494,592	B2	2/2009	Deskins				
7,556,236	B2 *	7/2009	Slappay	249/66.1			
7,736,506	B2	6/2010	Roberts et al.				
7,754,089	B2	7/2010	Roberts				
7,820,043	B2	10/2010	Roberts et al.				
D628,267	S *	11/2010	Dittmann et al.	D23/209			
7,897,040	B2	3/2011	Newcombe et al.				
7,922,903	B2	4/2011	Roberts et al.				
8,052,870	B2 *	11/2011	Roberts et al.	210/232			
8,123,436	B2 *	2/2012	Larach	405/36			
D655,803	S *	3/2012	Platt	D23/365			
D655,804	S *	3/2012	Platt	D23/365			
D657,858	S *	4/2012	Platt	D23/365			
D657,859	S *	4/2012	Platt	D23/365			
8,343,343	B2 *	1/2013	Kadokia et al.	210/232			
2003/0118404	A1 *	6/2003	Lee	405/43			
2004/0000512	A1 *	1/2004	Germain	210/293			
2004/0238424	A1 *	12/2004	Thompson et al.	210/163			
2005/0194302	A1	9/2005	Roberts et al.				
2005/0232701	A1 *	10/2005	Humphries et al.	405/43			
2006/0086653	A1 *	4/2006	St. Germain	210/293			
2007/0175832	A1	8/2007	Roberts				
2007/0217866	A1 *	9/2007	Oscar	405/36			
2008/0073256	A1	3/2008	Tezuka et al.				
2008/0099411	A1	5/2008	Roberts et al.				
2008/0110817	A1	5/2008	Sugiura et al.				
2008/0216437	A1 *	9/2008	Prevost et al.	52/589.1			
2009/0001011	A1	1/2009	Knipmeyer et al.				
2009/0071909	A1	3/2009	Newcombe et al.				
2009/0071914	A1	3/2009	Roberts et al.				
2010/0078394	A1	4/2010	Bennett				
2011/0073549	A1 *	3/2011	Geibel et al.	210/793			

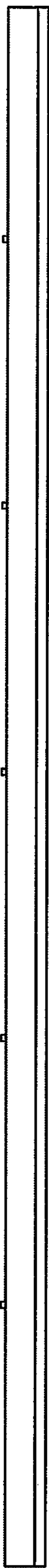
\* cited by examiner



**FIG. 1**



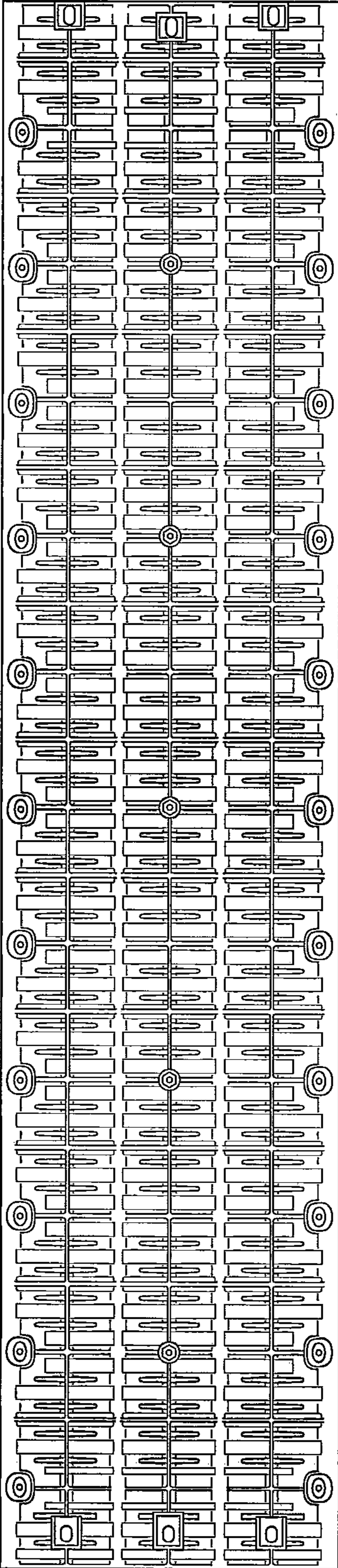
**FIG. 2**



**FIG. 3**



**FIG. 4**



**FIG. 5**

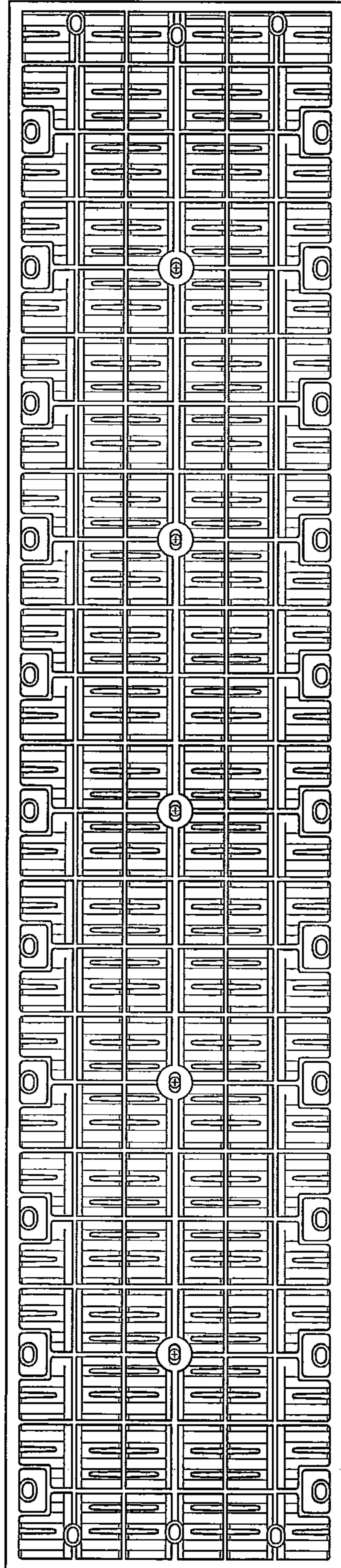


FIG. 6

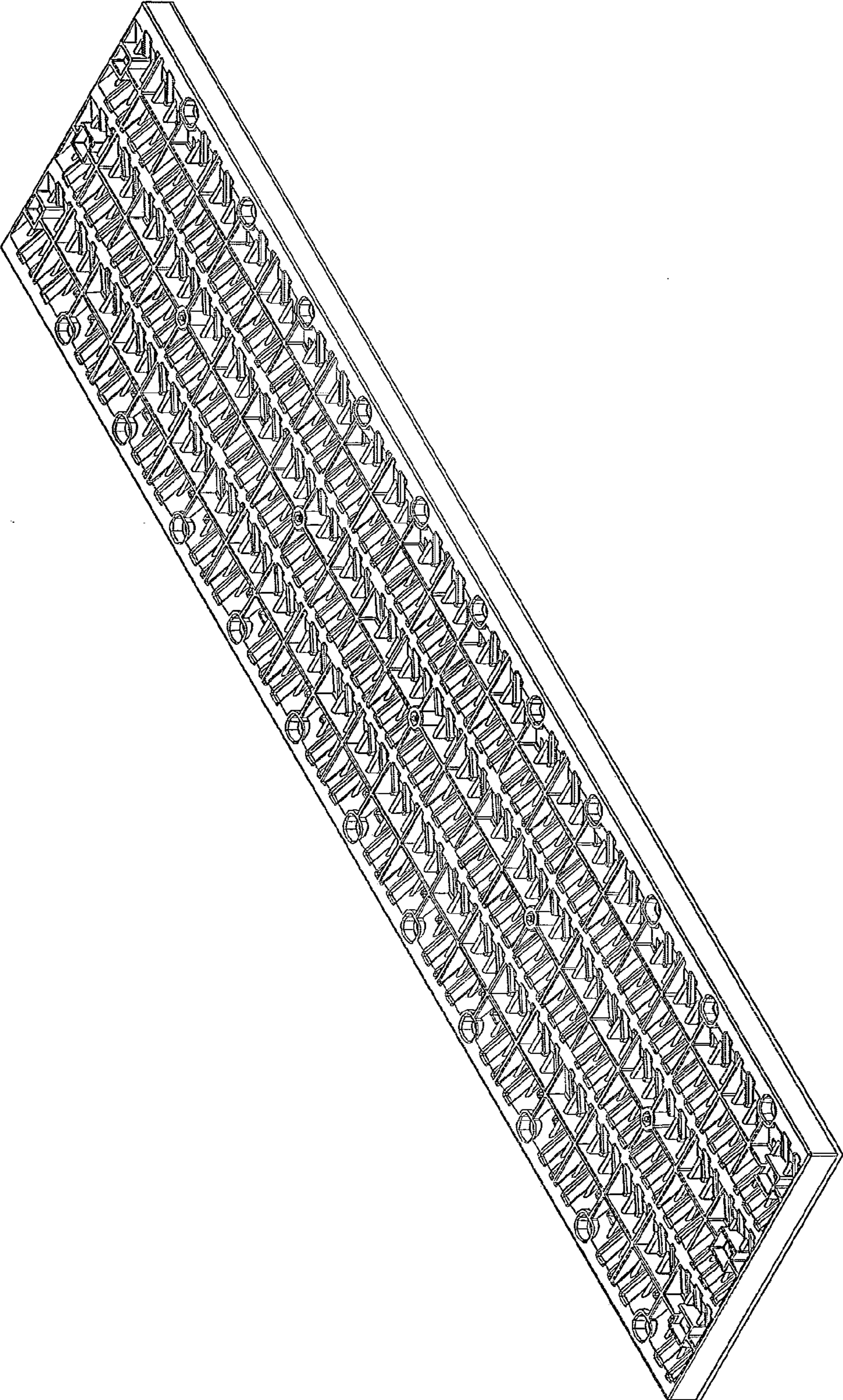


FIG. 7

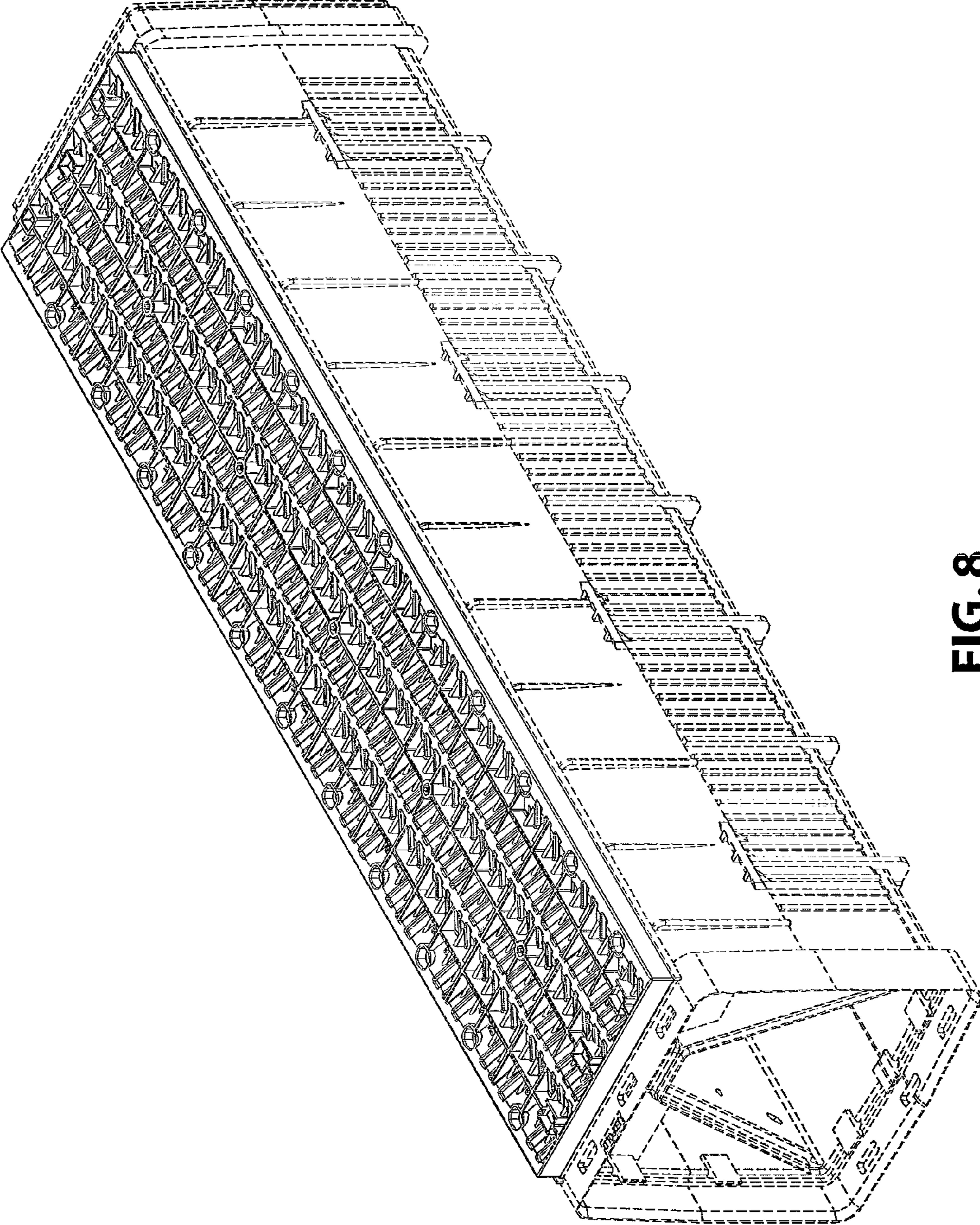
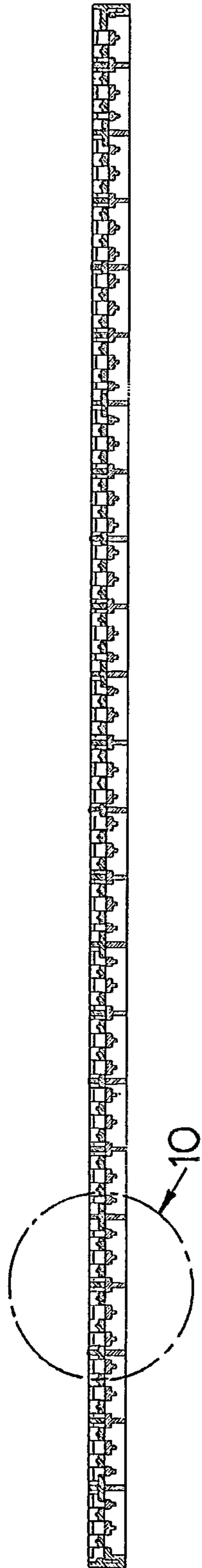
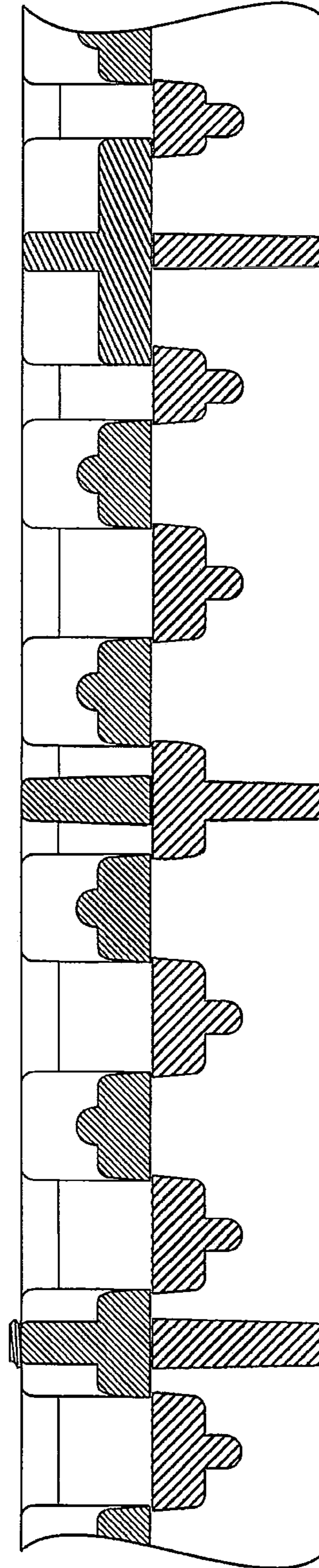


FIG. 8





**FIG. 9**



**FIG. 10**