



US00D904951S

(12) **United States Design Patent**
Morgan, Jr. et al.

(10) **Patent No.:** **US D904,951 S**

(45) **Date of Patent:** **** Dec. 15, 2020**

(54) **AERODYNAMIC MUD FLAP**

D615,468 S * 5/2010 Harris D12/185
7,708,315 B1 * 5/2010 Dumitrascu B62D 25/188
280/848
8,146,949 B2 * 4/2012 Surti B62D 25/188
280/847
D680,929 S * 4/2013 Hanson D12/185

(71) Applicant: **Compagnie Generale des Etablissements Michelin**,
Clermont-Ferrand (FR)

(Continued)

(72) Inventors: **Justin Kane Morgan, Jr.**, Anderson,
SC (US); **Parker Baxter**, Greenville,
SC (US); **Calvin Rhett Bradley**,
Greenville, SC (US)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **Compagnie Generale des Etablissements Michelin**,
Clermont-Ferrand (FR)

WO 2019066941 A1 4/2019
WO 2019066942 A1 4/2019
WO 2019068089 A1 4/2019

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

Primary Examiner — Darlington Ly

(74) *Attorney, Agent, or Firm* — Neal P. Pierotti

(21) Appl. No.: **29/682,457**

(57) **CLAIM**

The ornamental design for an aerodynamic mud flap, as shown and described.

(22) Filed: **Mar. 5, 2019**

DESCRIPTION

(51) **LOC (12) Cl.** **12-16**

(52) **U.S. Cl.**
USPC **D12/185**

(58) **Field of Classification Search**
USPC D12/90-92, 93, 96, 181, 184, 185, 196,
D12/202

CPC B62D 25/18; B62D 25/188
See application file for complete search history.

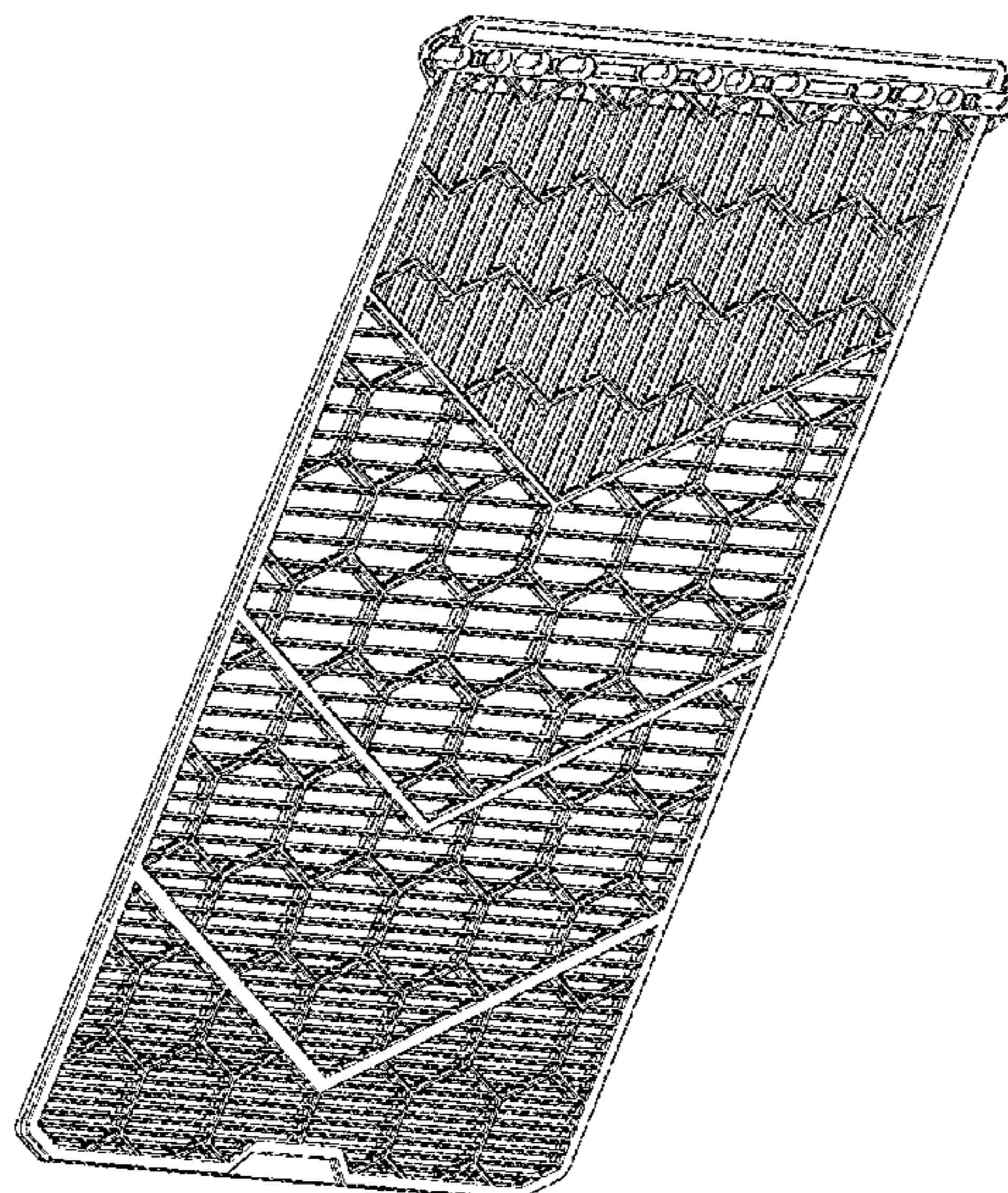
FIG. 1 is a rear perspective view of an aerodynamic mud flap showing our new design;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a cross-sectional view thereof taken along line A-A in FIG. 2;
FIG. 4 is a cross-sectional view thereof taken along line B-B in FIG. 2;
FIG. 5 is a cross-sectional view thereof taken along line C-C in FIG. 2;
FIG. 6 is a rear elevation view thereof;
FIG. 7 is a right side elevation view thereof;
FIG. 8 is a left side elevation view thereof;
FIG. 9 is a top plan view thereof;
FIG. 10 is a bottom plan view thereof; and,
FIG. 11 is a perspective view thereof in the context of an environmental structure of a wheel and tire.
The broken line showing of the wheel and tire are provided for the purpose of illustrating environmental structure and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D272,336 S * 1/1984 Lightle D12/185
D279,560 S * 7/1985 Jensen D12/185
D281,966 S * 12/1985 Lockwood D12/185
D284,461 S * 7/1986 Stahel D12/185
D290,593 S * 6/1987 Stahel D12/185
D308,958 S * 7/1990 Knox D12/185
D309,724 S * 8/1990 Jurgens D12/185
D330,692 S * 11/1992 Hammond, Jr. D12/185
D338,863 S * 8/1993 Nakayama D12/185
D398,570 S * 9/1998 Bollman D12/185
D441,702 S * 5/2001 Baker D12/185

1 Claim, 11 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D685,306 S *	7/2013	Eklund	280/847
9,004,538 B2 *	4/2015	Eklund	B62D 25/188 280/762
9,221,390 B1	12/2015	Begley		
2002/0043797 A1 *	4/2002	Cicansky	B62D 25/188 280/847
2011/0042932 A1 *	2/2011	Vogel	B62D 25/188 280/848
2013/0320658 A1	12/2013	Eklund		

* cited by examiner

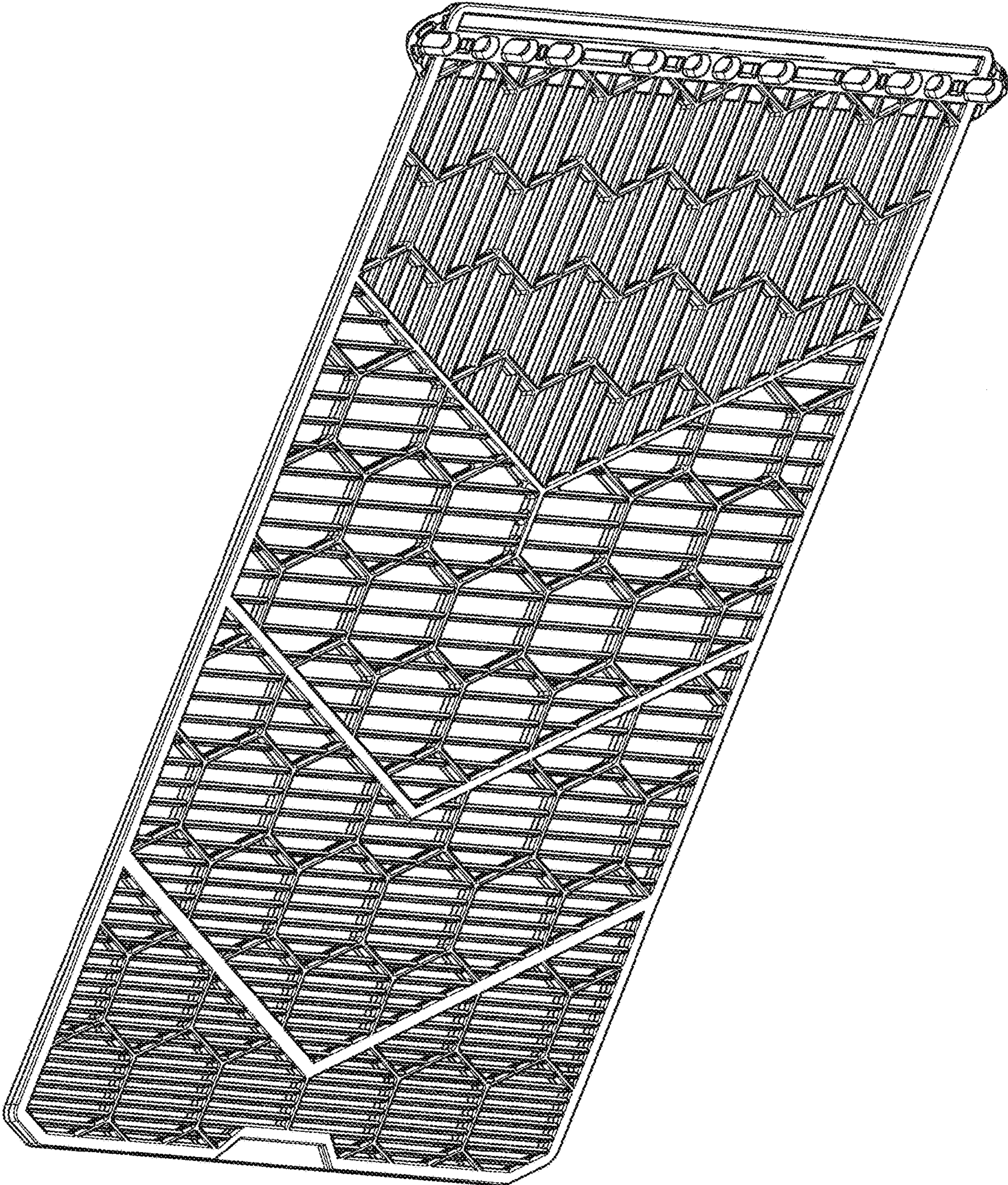


FIG. 1

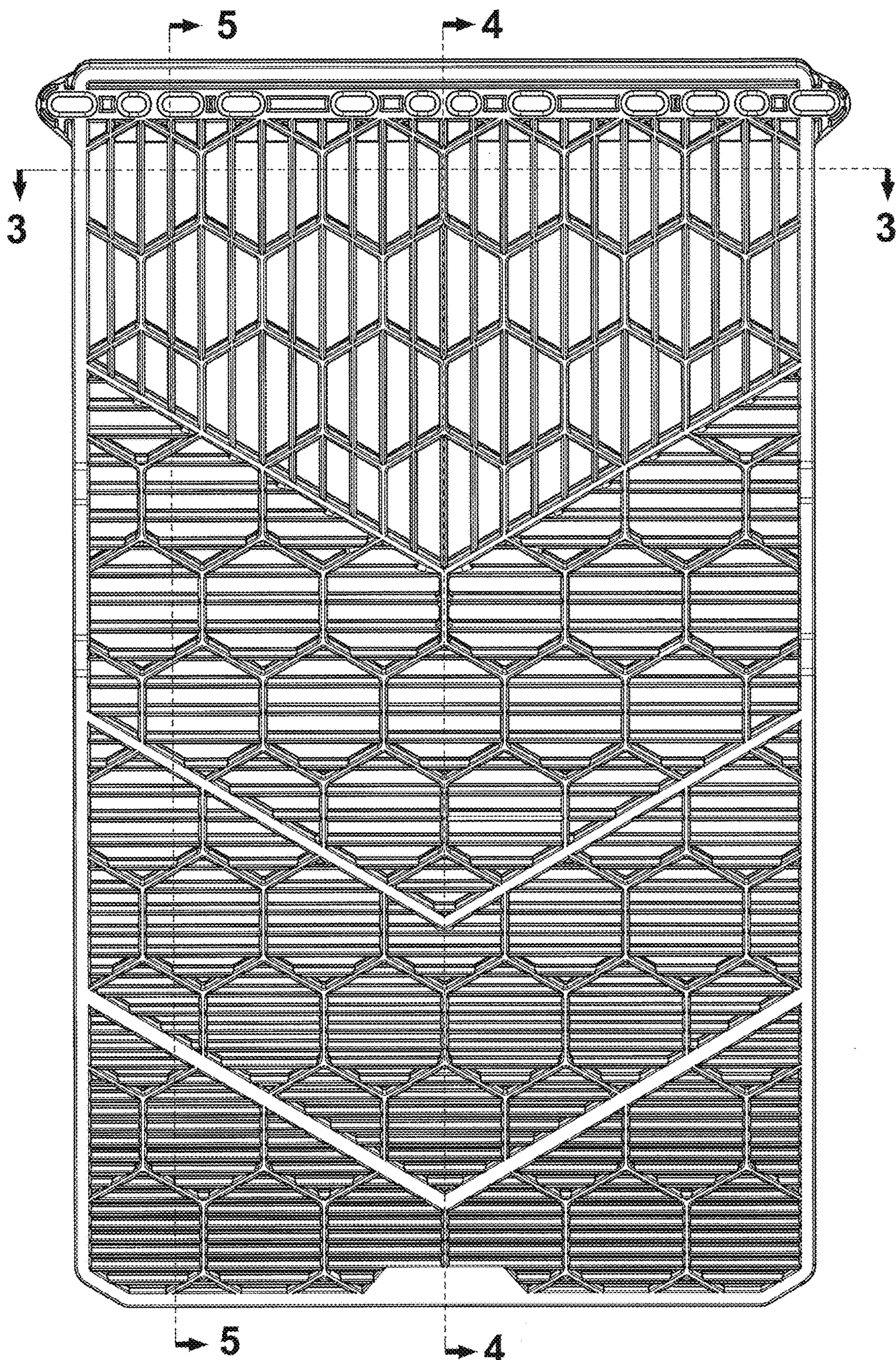


FIG. 2



FIG. 3



FIG. 4



FIG. 5

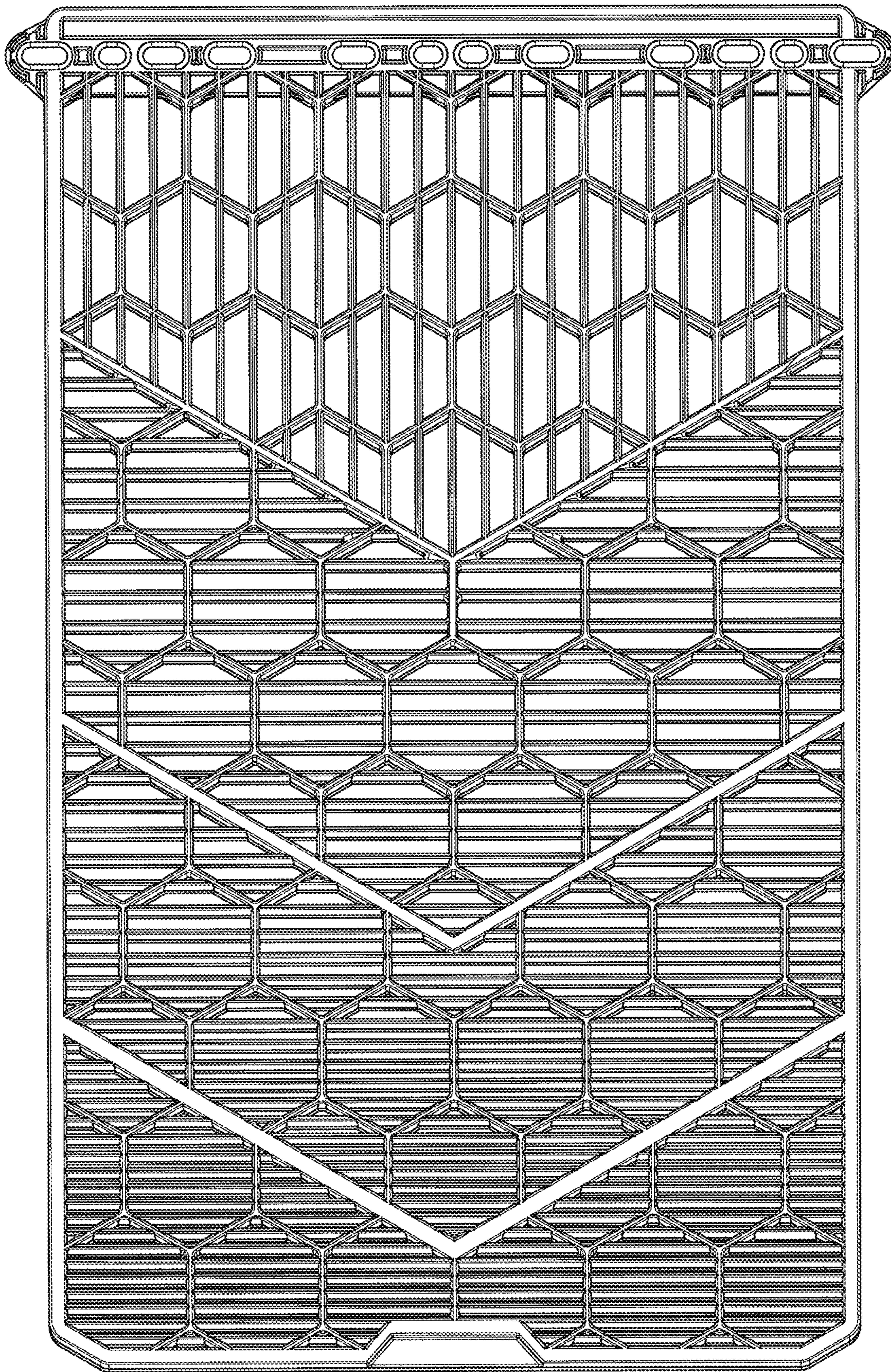


FIG. 6

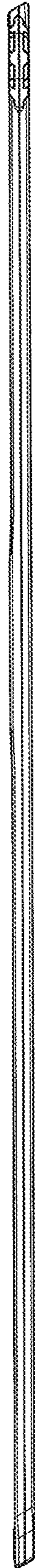


FIG. 7

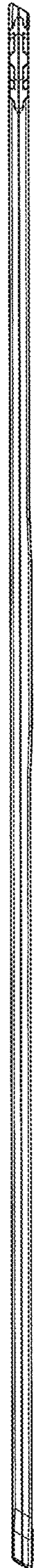


FIG. 8

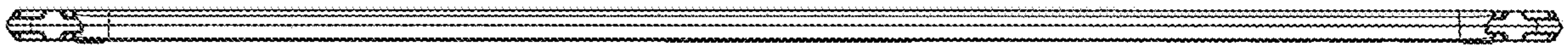


FIG. 9

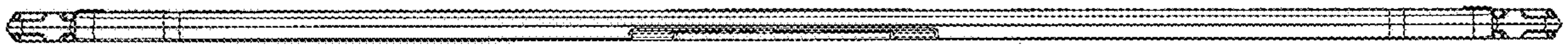


FIG. 10

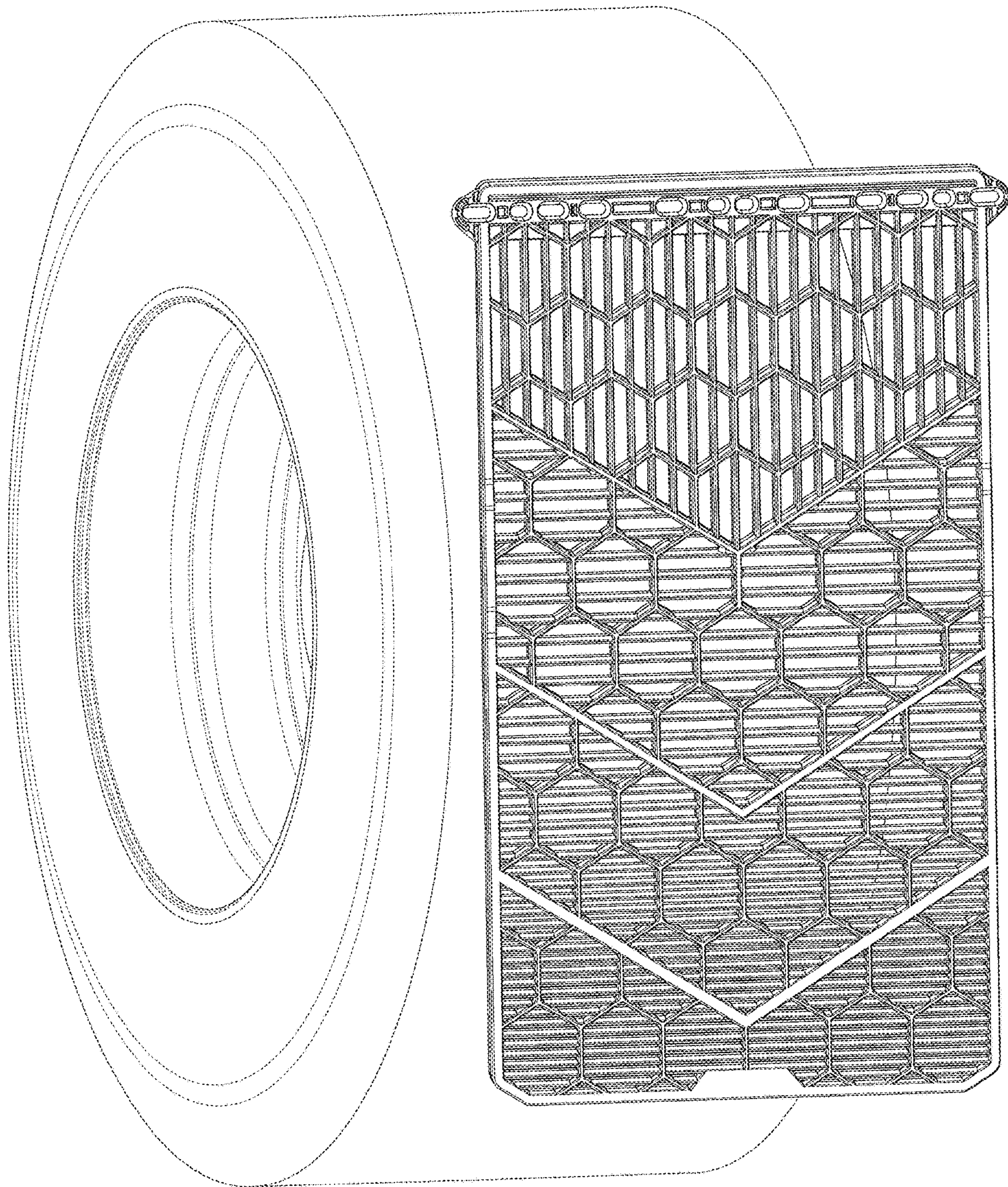


FIG. 11