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(12) **United States Design Patent** (10) **Patent No.:** **US D802,023 S**
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(54) **CATALYST CARRIER FOR EXHAUST GAS PURIFICATION**

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(52) **U.S. Cl.**
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(58) **Field of Classification Search**
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D23/354, 341, 364
CPC F01M 13/00; F01M 2013/0038; F02D
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B01D 53/00; B01D 53/0407

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,495,606	A	2/1970	Phillips	
5,769,045	A *	6/1998	Edwards F02M 35/10032 123/184.61
D398,046	S	9/1998	Gillingham	
D425,189	S	5/2000	Gillingham	
7,879,427	B2	2/2011	Ohno	
7,939,157	B2	5/2011	Tsunekawa	
D709,919	S *	7/2014	Fairchild D15/5
9,126,144	B2	9/2015	Aoyama	
D748,236	S	1/2016	Shibata	
D748,237	S	1/2016	Shibata	
D749,714	S	2/2016	Shibata	
2003/0145732	A1 *	8/2003	Leffel B01D 53/02 96/134
2005/0263199	A1 *	12/2005	Meheen F01D 9/06 138/44
2008/0245040	A1	10/2008	Riley	
2009/0090089	A1	4/2009	Phelps	

(Continued)

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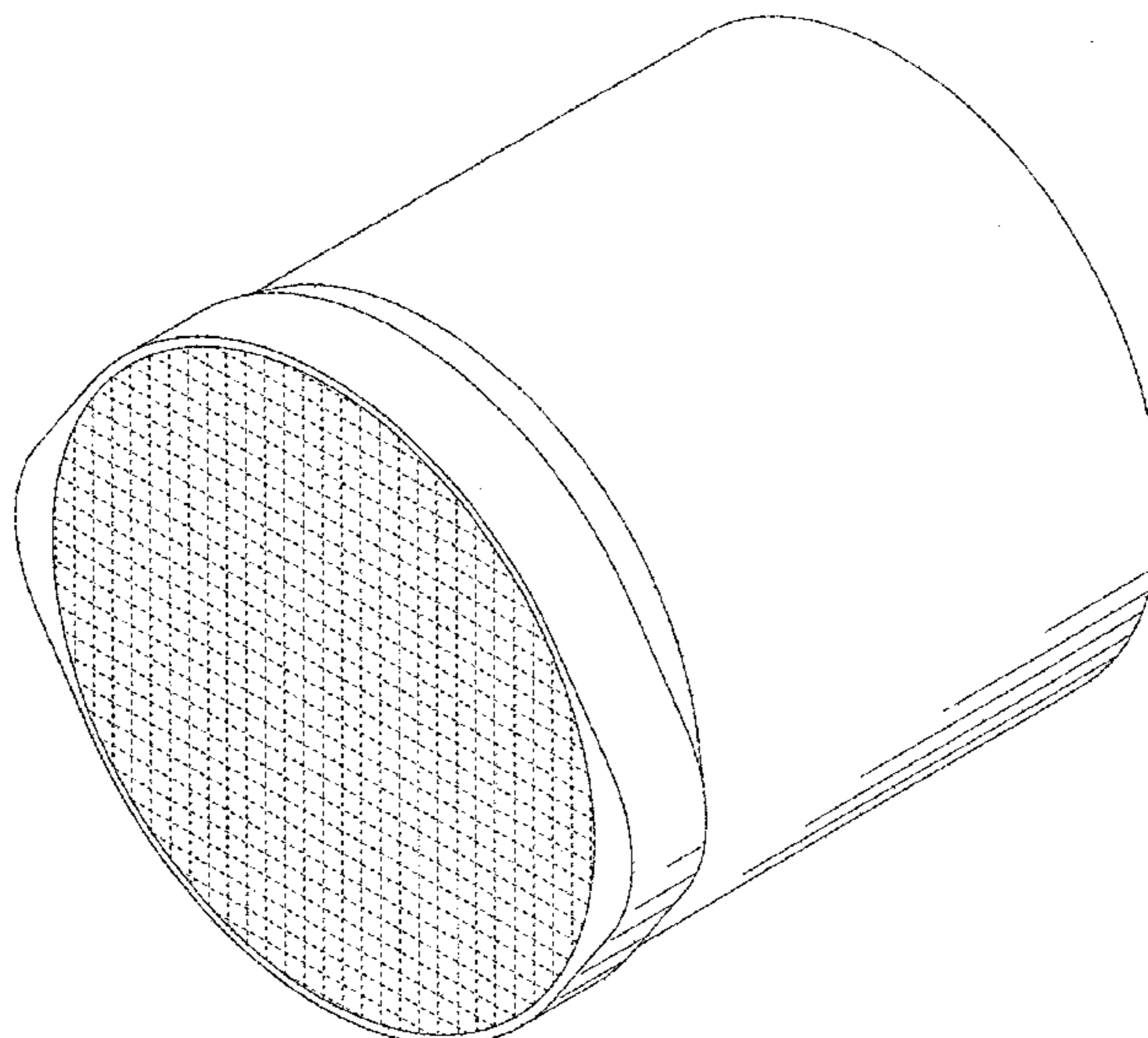
(57) **CLAIM**

The ornamental design for a catalyst carrier for exhaust gas purification, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a catalyst carrier for exhaust gas purification illustrating my new design;
FIG. 2 is a front view thereof;
FIG. 3 is a right view thereof, the left view thereof being a right-and-left reversed image;
FIG. 4 is a top view thereof, the bottom view thereof being a mirror image; and,
FIG. 5 is a rear view thereof.
The broken lines in the drawings depict unclaimed subject matter only and form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2010/0124519	A1	5/2010	Kohli
2011/0000199	A1	1/2011	Ezawa
2011/0023472	A1	2/2011	Saito
2014/0087080	A1	3/2014	Fujioka
2014/0087128	A1	3/2014	Yanase
2014/0087636	A1	3/2014	Fujioka
2014/0123612	A1	5/2014	Yamada
2015/0238951	A1	8/2015	Aoki
2016/0115835	A1	4/2016	Daido
2016/0194991	A1	7/2016	Clayton, Jr.

* cited by examiner

Fig. 1

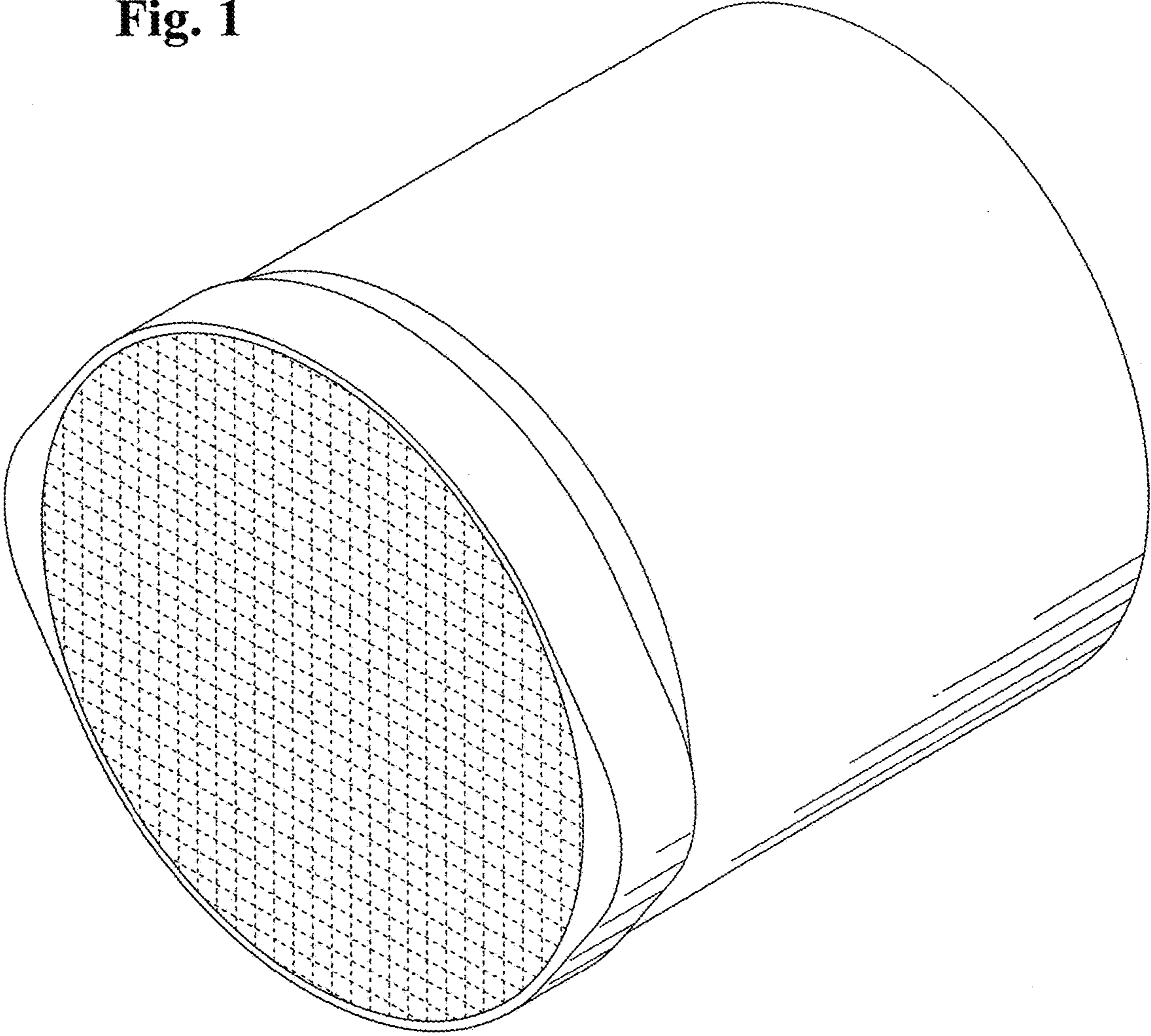


Fig. 2

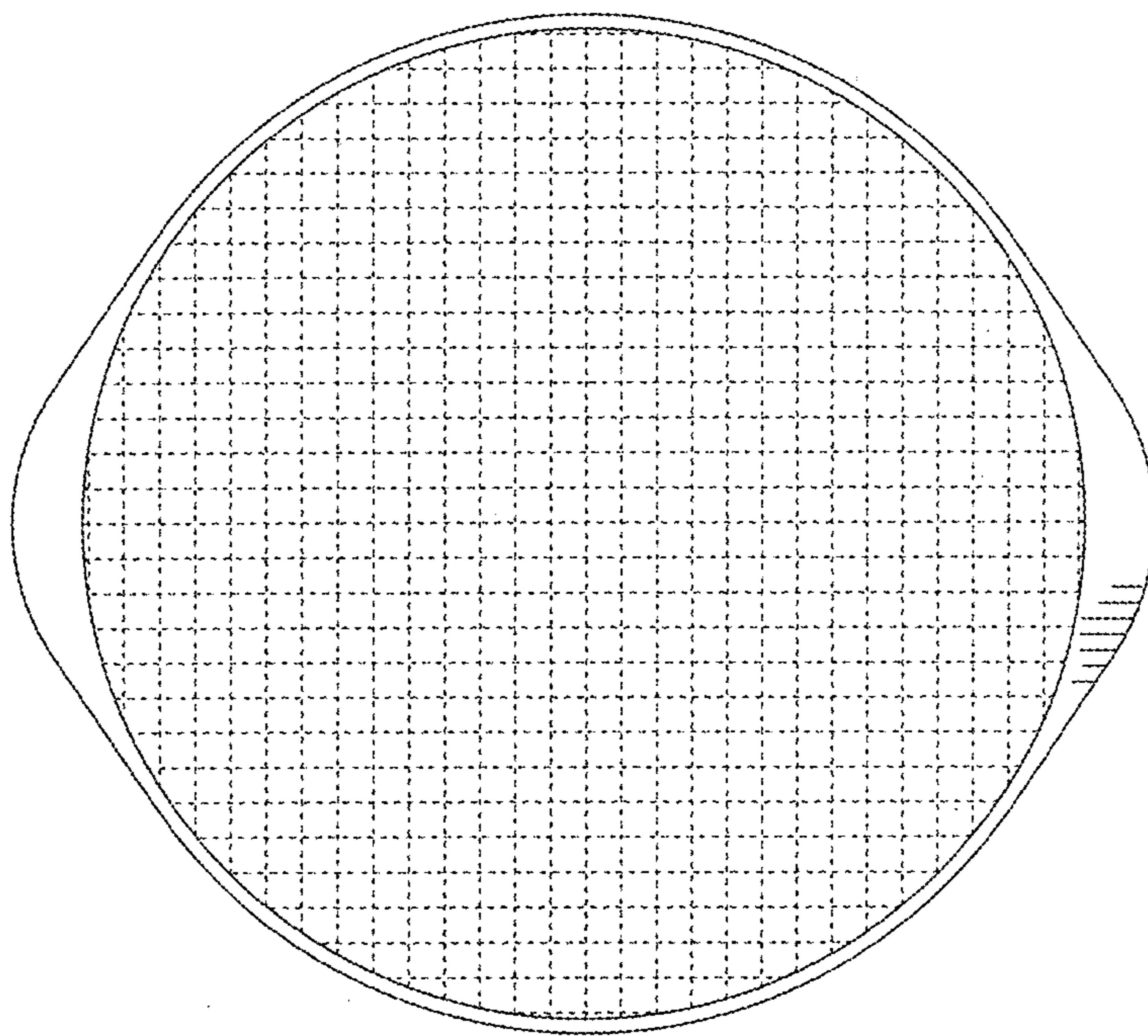


Fig. 3

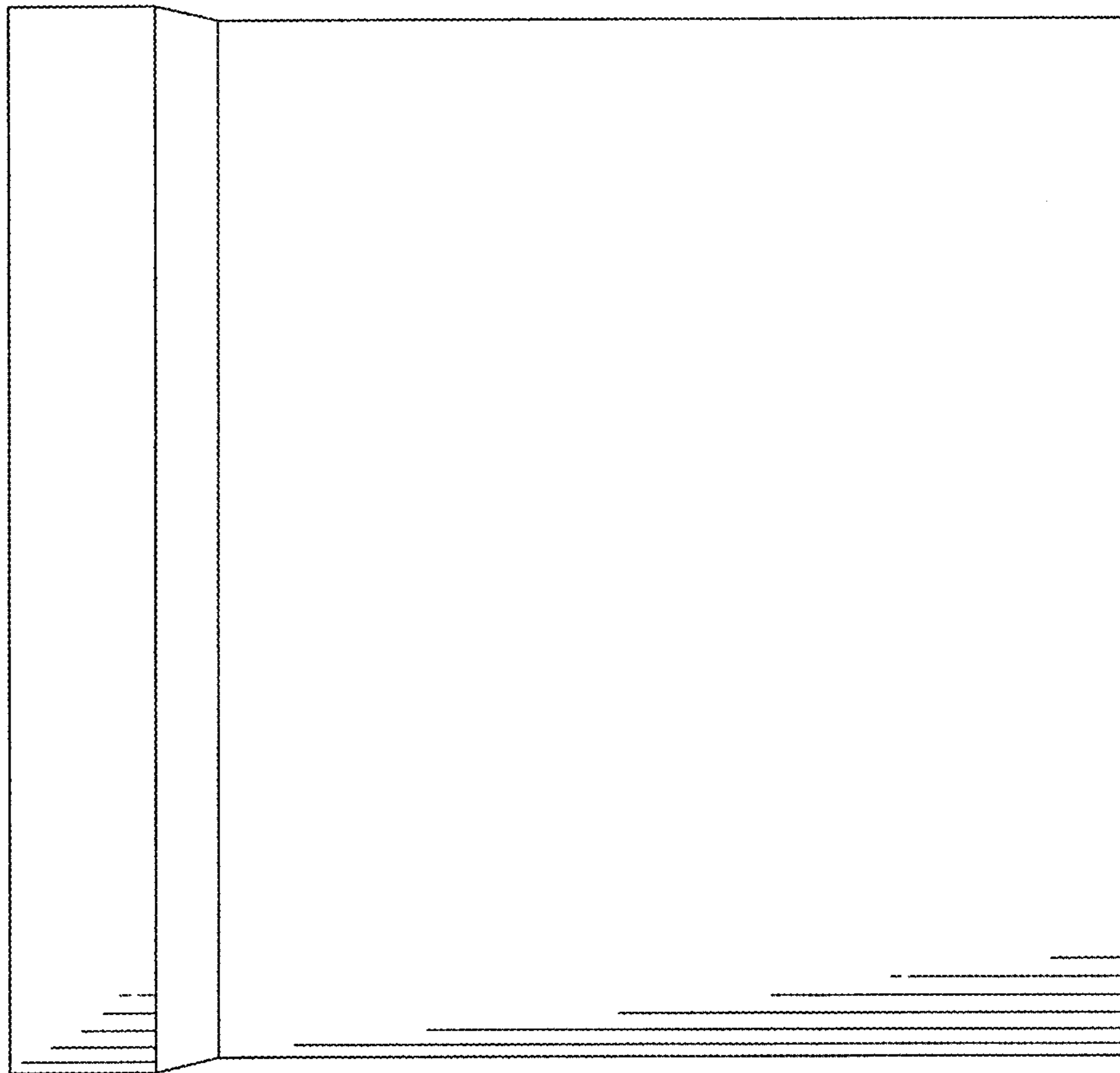


Fig. 4

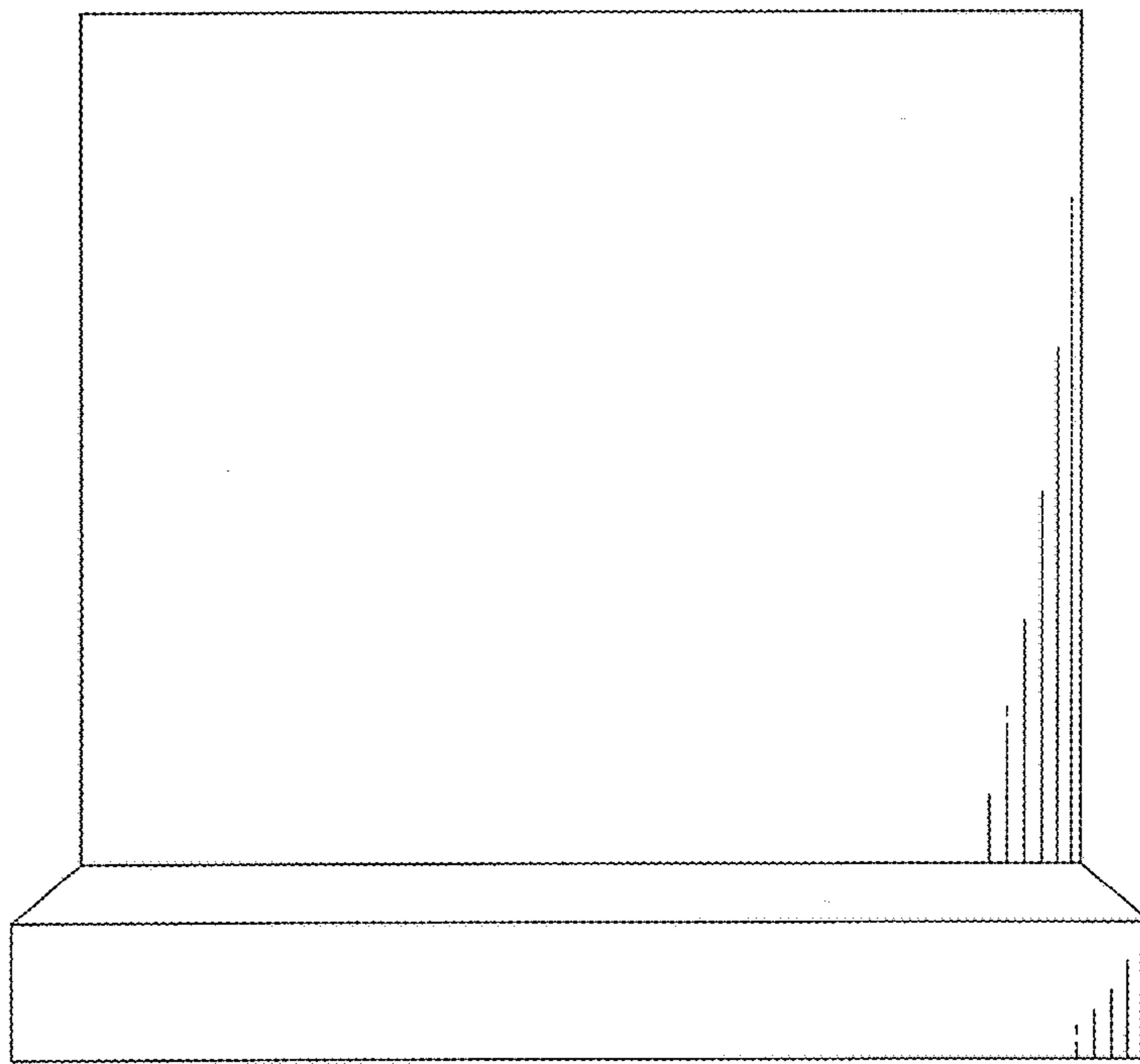


Fig. 5

