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

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(54) **DUST SEPARATOR**
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6,783,563 B1 * 8/2004 Eckhoff B01D 46/02
55/356
6,875,248 B1 * 4/2005 Shelton B01D 46/002
55/341.1
7,044,991 B2 * 5/2006 Wang B01D 46/0057
55/356
D591,465 S * 4/2009 Lin D32/21
7,695,537 B2 * 4/2010 Cheng B01D 45/02
55/320
D629,576 S * 12/2010 Cheng D32/21
D632,854 S * 2/2011 Witter D32/21
D638,179 S * 5/2011 Witter D32/21
8,888,880 B2 * 11/2014 McGinnis B01D 46/0021
55/300
9,555,357 B2 * 1/2017 Lehman B01D 46/04
2006/0040596 A1 * 2/2006 Robinson B04C 1/00
451/87
2008/0203201 A1 * 8/2008 Deppermann B02C 18/12
241/25

(**) Term: **15 Years**
(21) Appl. No.: **29/542,856**
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* cited by examiner

Primary Examiner — Kevin Rudzinski

(30) **Foreign Application Priority Data**
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(52) **U.S. Cl.**
USPC **D23/355**
(58) **Field of Classification Search**
USPC D23/364, 366, 333, 332, 355, 356, 359,
D23/209; D32/18
CPC B01D 46/02; B01D 46/00
See application file for complete search history.

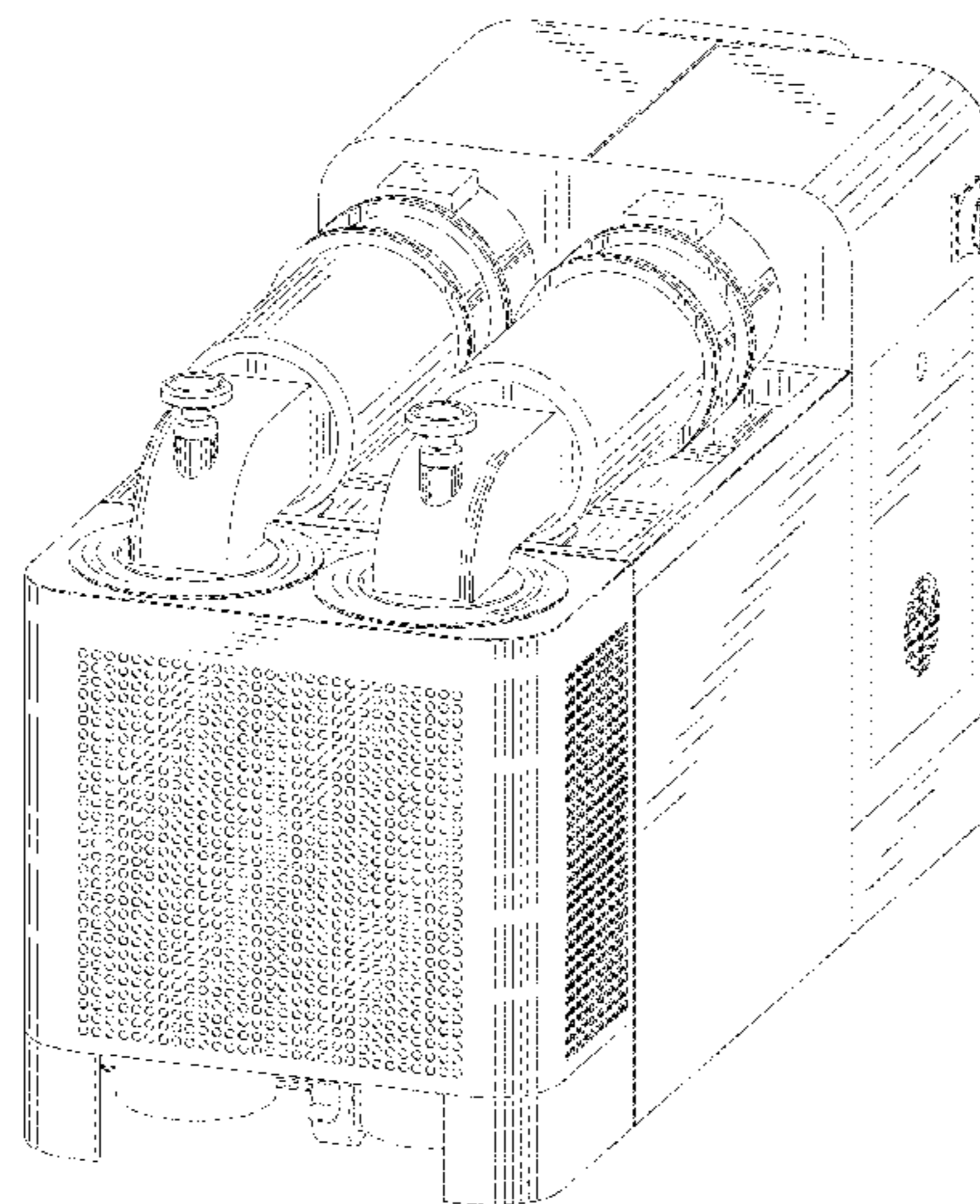
(57) **CLAIM**
The ornamental design for a dust separator, as shown and described.

(56) **References Cited**
U.S. PATENT DOCUMENTS
1,729,527 A * 9/1929 Titgen B01D 46/002
406/168
3,387,433 A * 6/1968 Mackey B01D 46/02
55/356
4,323,377 A * 4/1982 Jolin A47L 9/106
15/352
4,718,924 A * 1/1988 DeMarco A47L 9/0081
55/302

DESCRIPTION

FIG. 1 is a front elevational view of a dust separator showing our new design;
FIG. 2 is a rear elevational view thereof;
FIG. 3 is a left side view thereof;
FIG. 4 is a right side view thereof;
FIG. 5 is a top plan view thereof;
FIG. 6 is a bottom plan view thereof;
FIG. 7 is a first perspective view thereof;
FIG. 8 is a second perspective view thereof; and,
FIG. 9 is a third perspective view thereof.
The broken lines illustrating portions of the dust separator form no part of the claimed design.

1 Claim, 9 Drawing Sheets



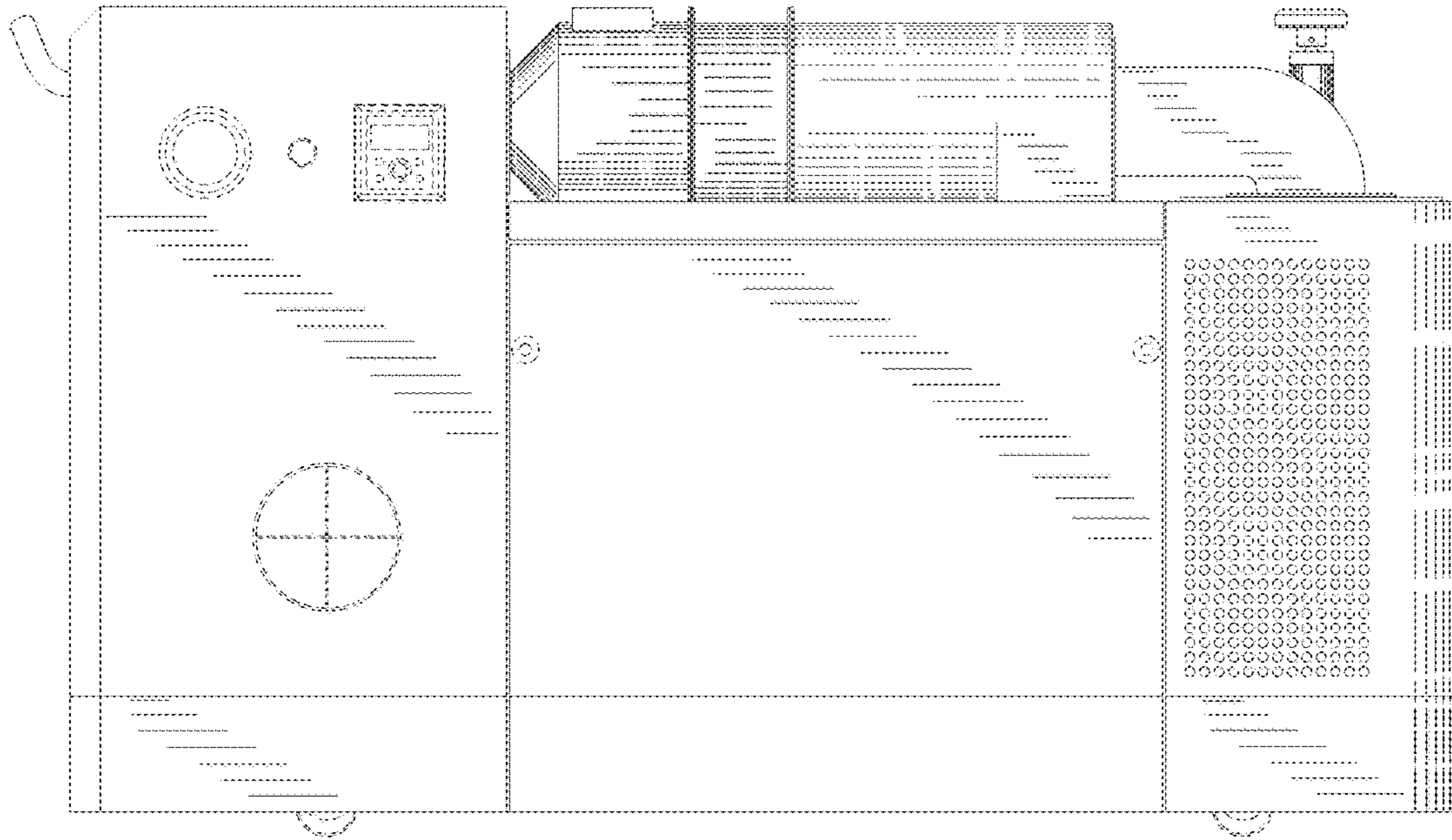


Fig. 1

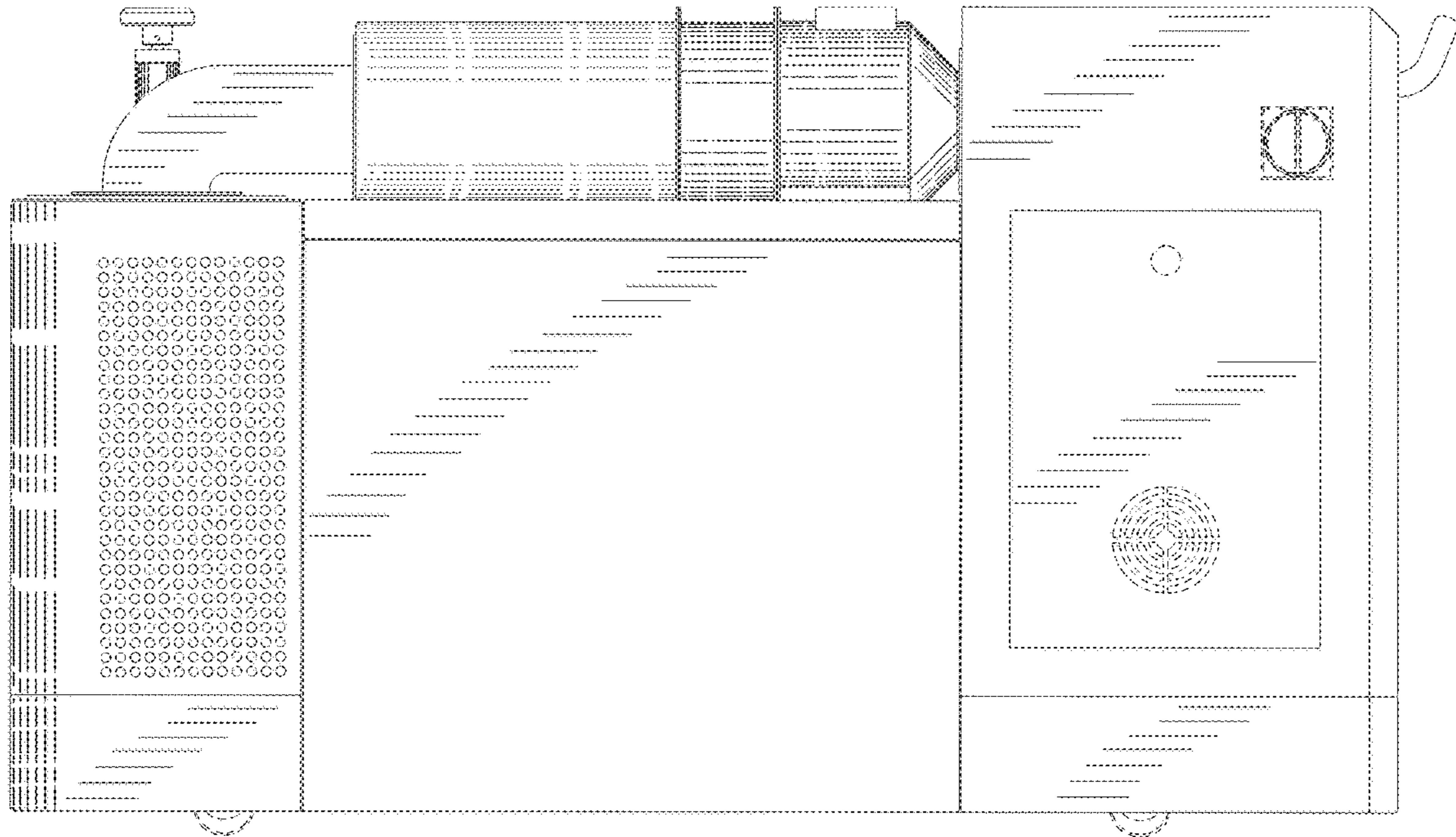


Fig. 2

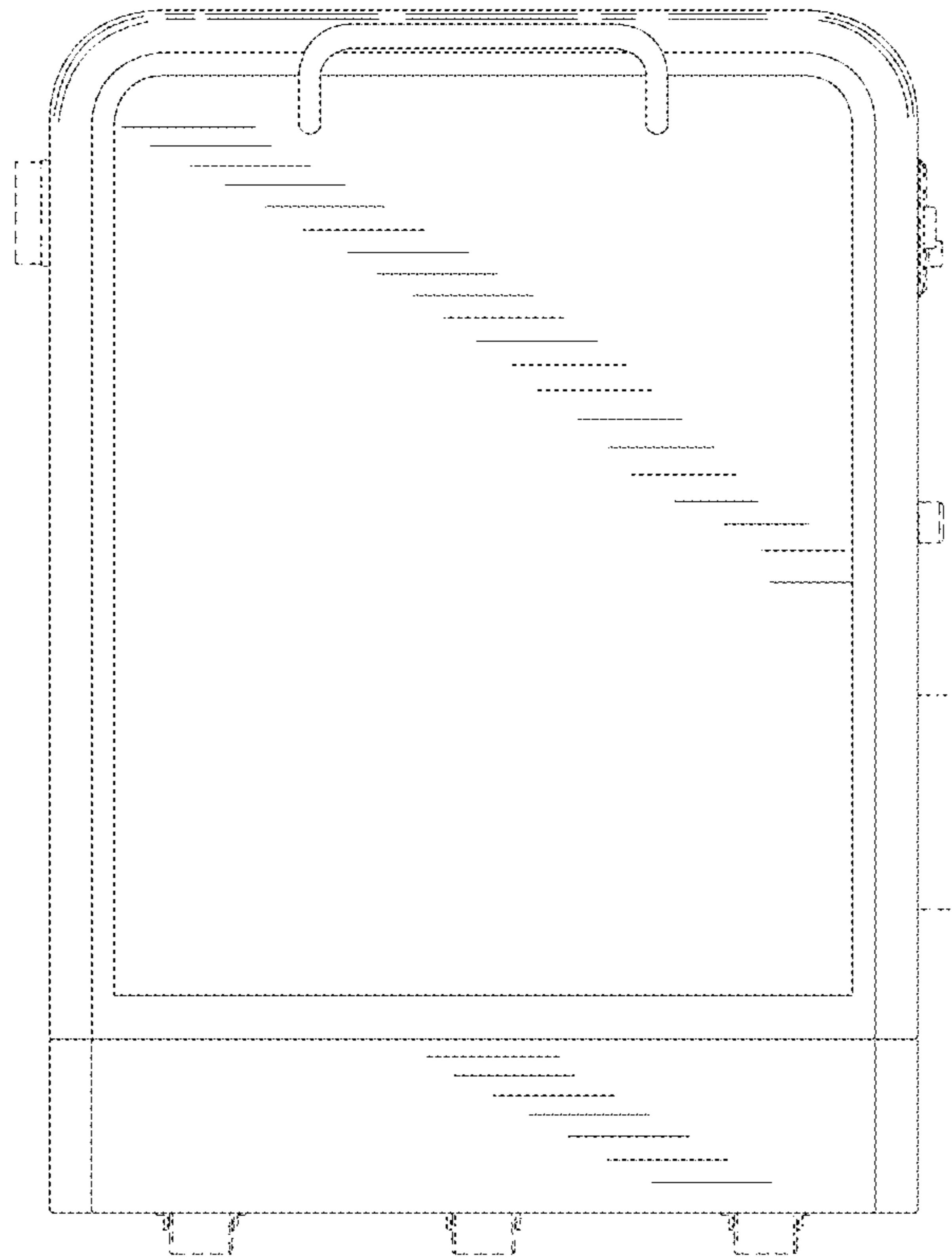


Fig. 3

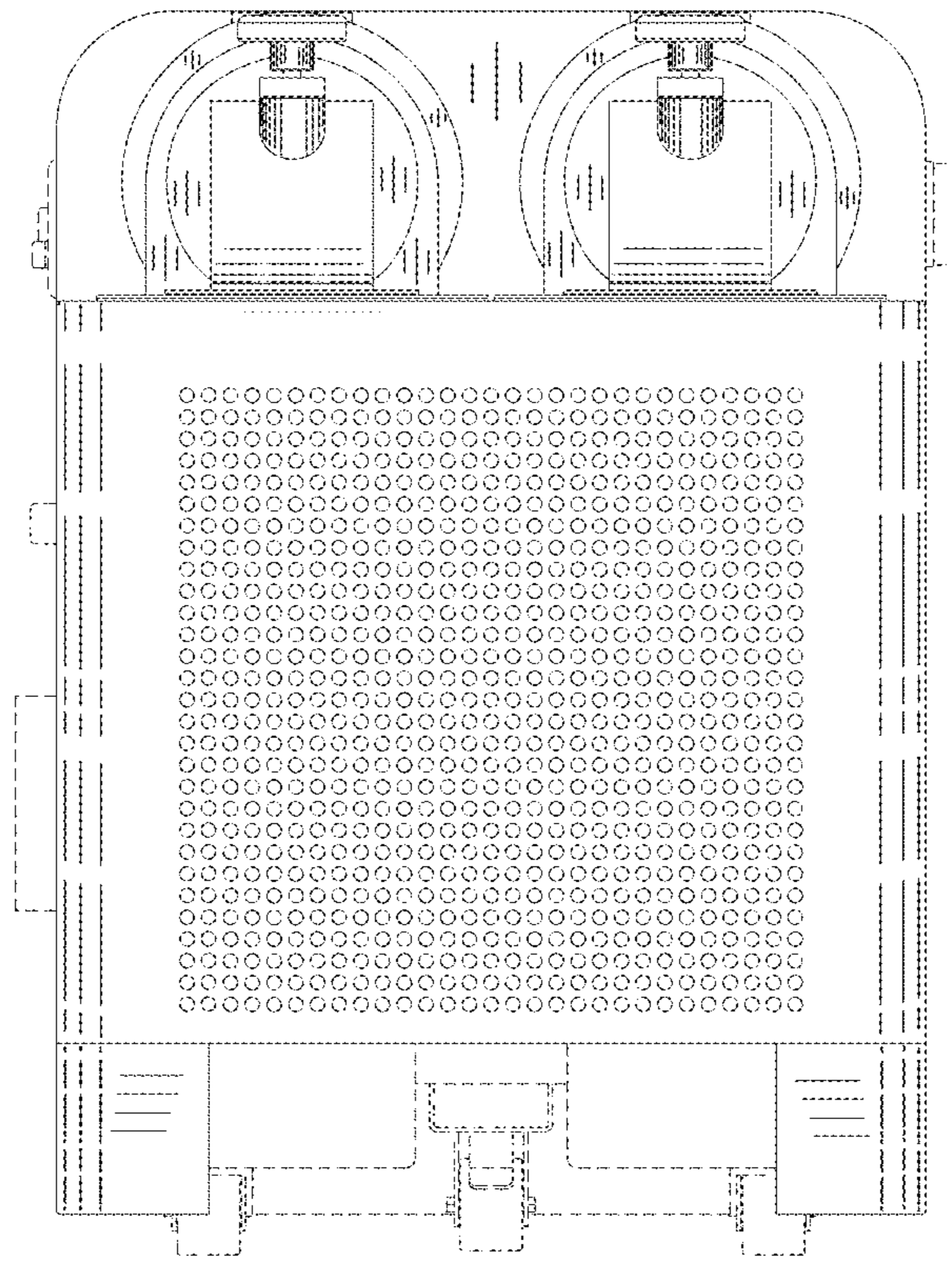


Fig. 4

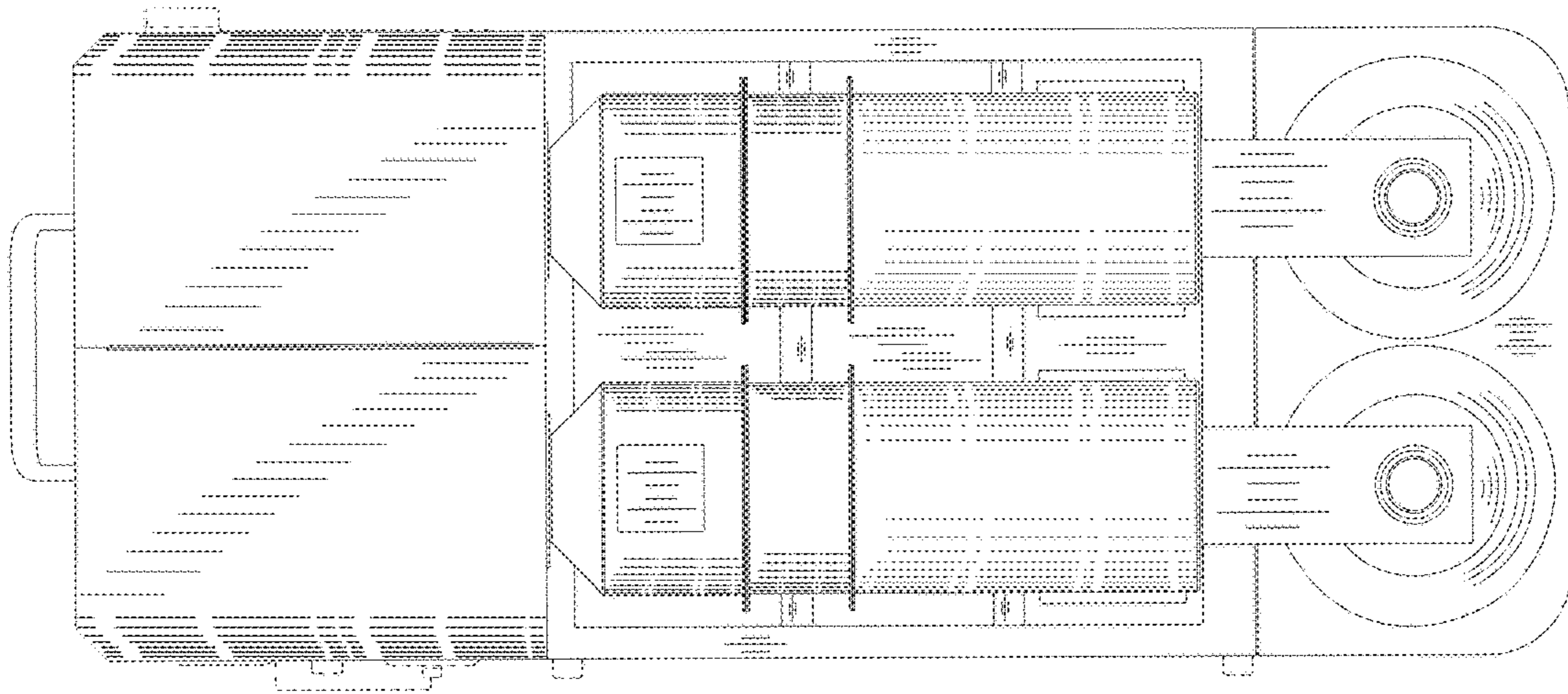


Fig. 5

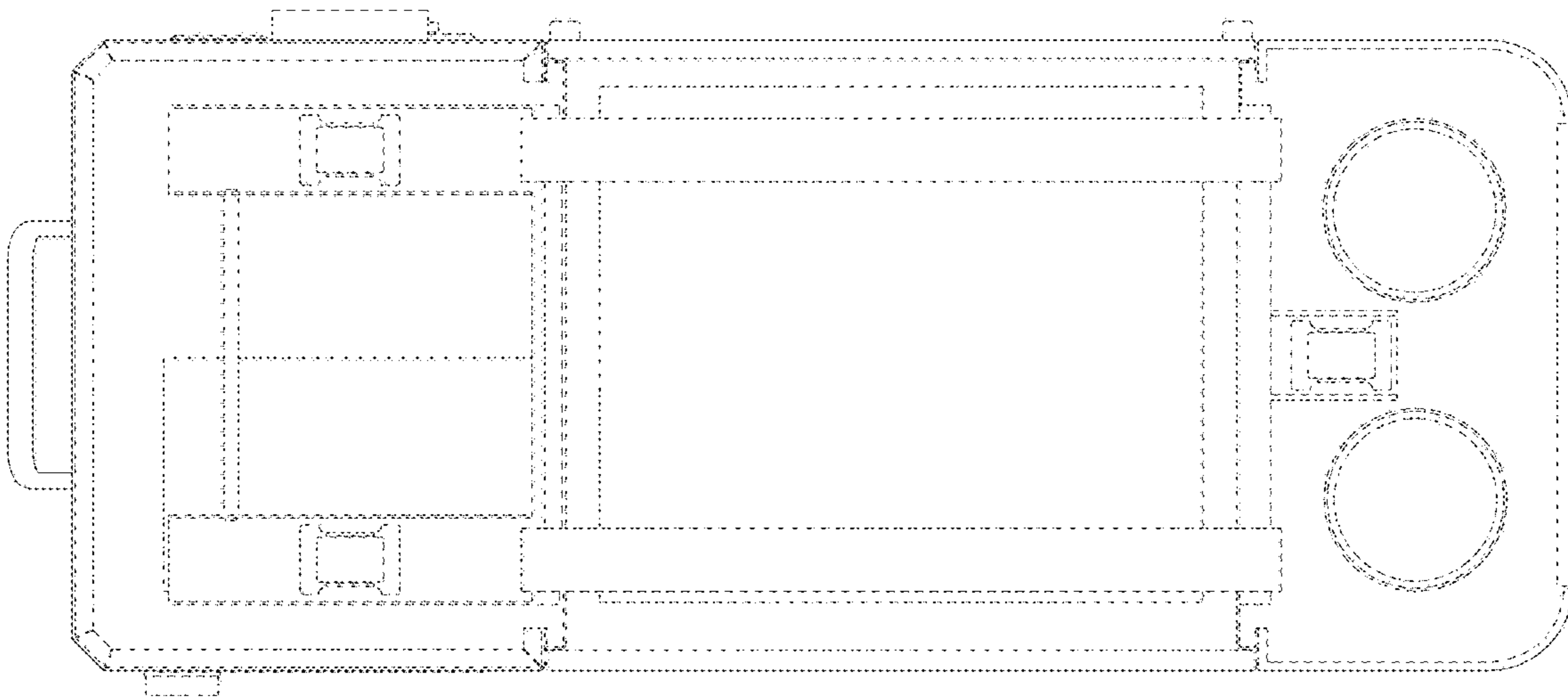


Fig. 6

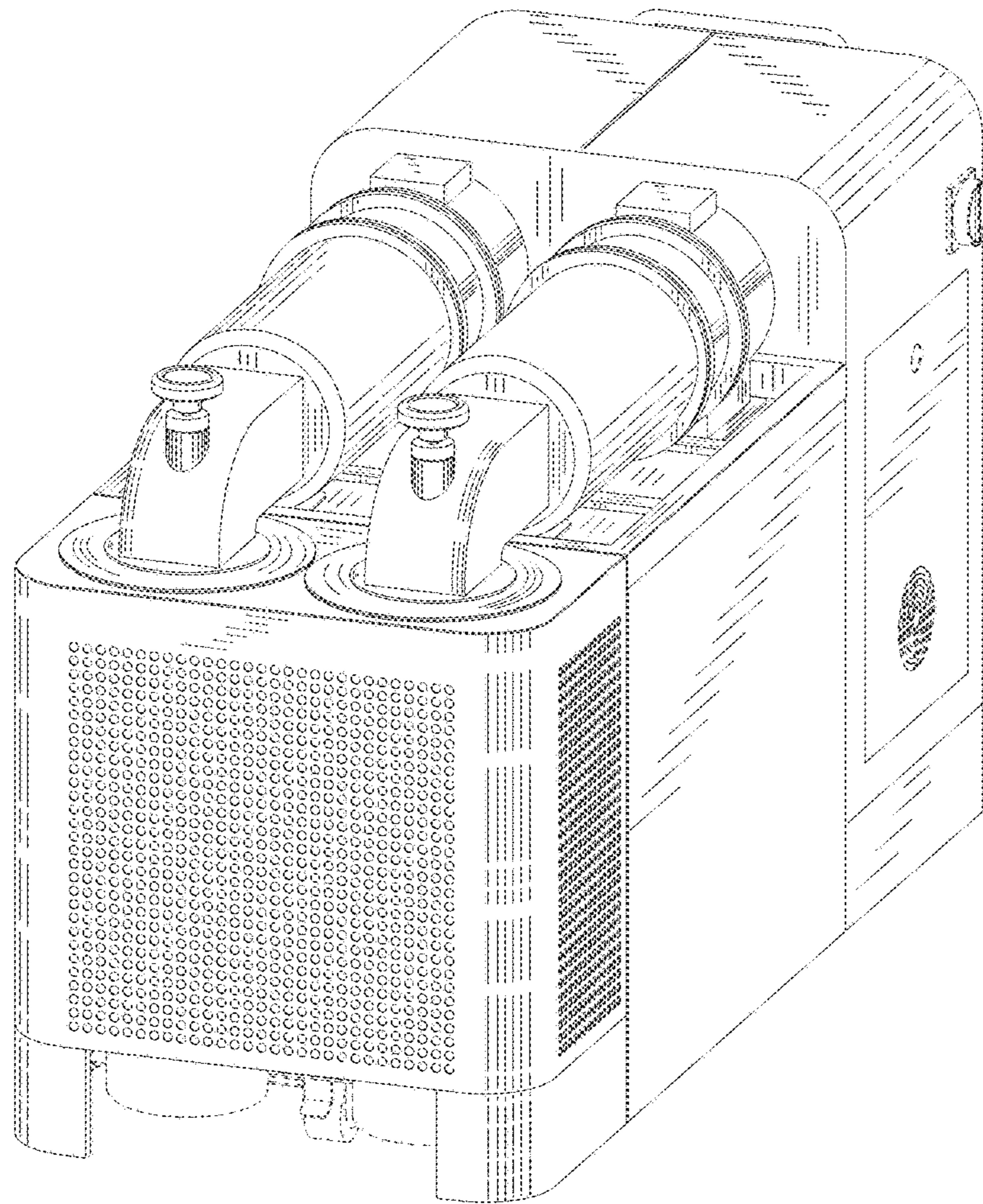


Fig. 7

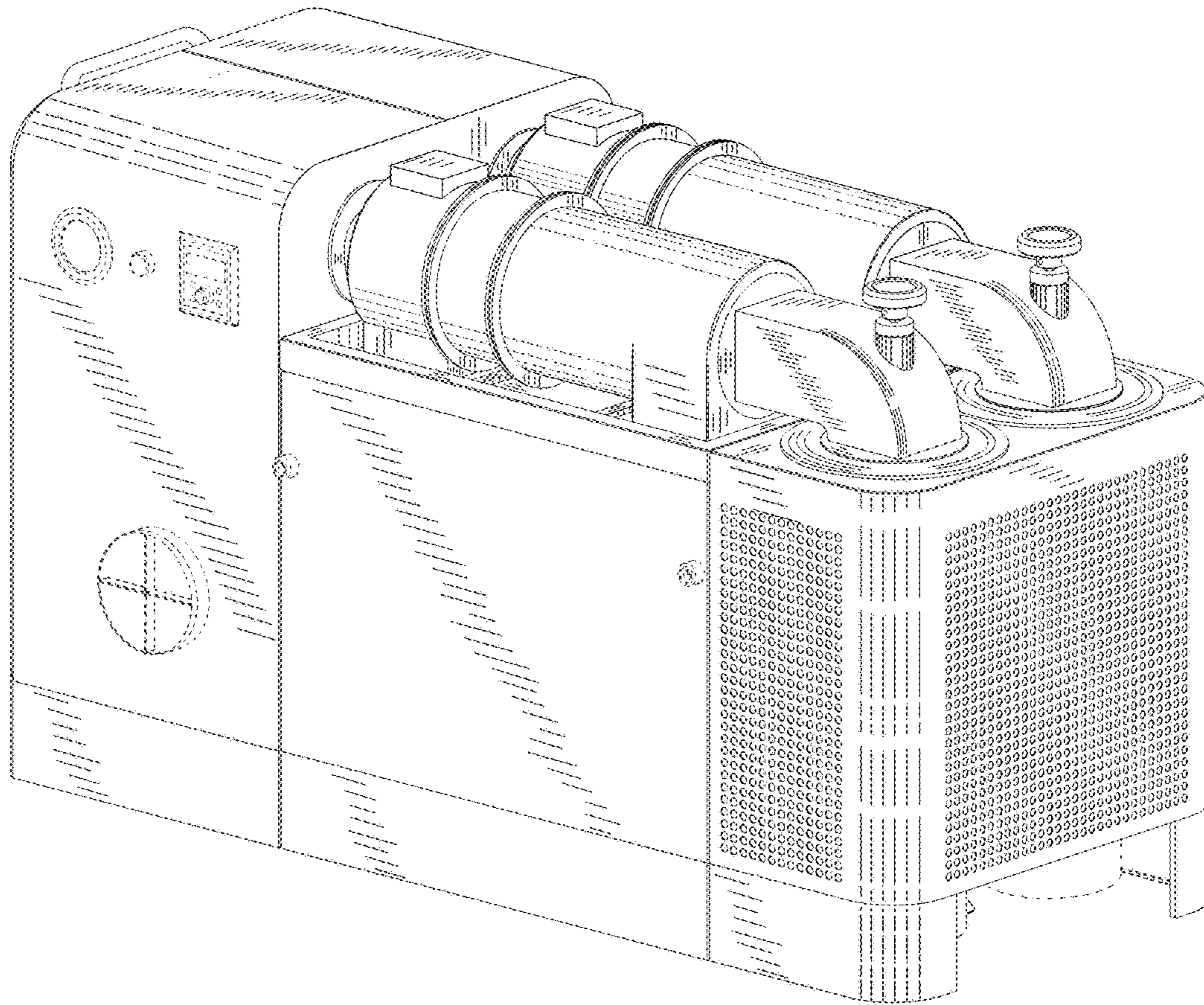


Fig. 8

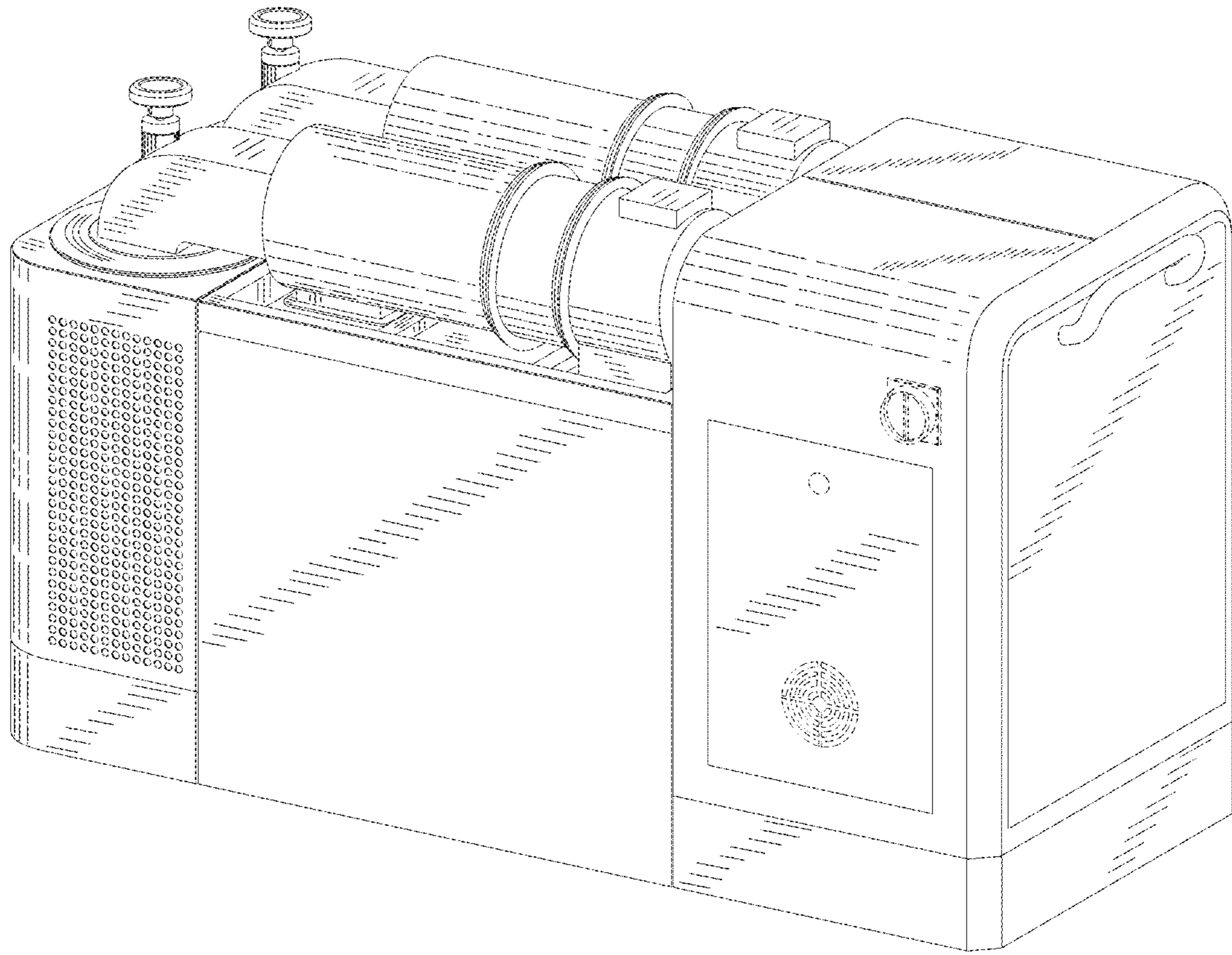


Fig. 9