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(12) **United States Design Patent** (10) **Patent No.:** **US D968,581 S**
Somei (45) **Date of Patent:** **** Nov. 1, 2022**

- (54) **DEODORIZING APPARATUS**
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- (51) **LOC (13) Cl.** **23-04**
- (52) **U.S. Cl.**
 USPC **D23/366**
- (58) **Field of Classification Search**
 USPC D23/355, 356, 359, 364, 370, 38, 385, D23/366
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 See application file for complete search history.

- 6,405,983 B1 6/2002 Goj
- D544,081 S * 6/2007 Fujii D23/364
- D605,272 S * 12/2009 Chun D23/359
- D645,130 S * 9/2011 Goldstein D23/356
- 8,042,308 B2 10/2011 Sullivan et al.
- 8,434,730 B2 5/2013 Ahlstrom
- 9,328,754 B2 5/2016 Stokes
- 9,374,927 B2 6/2016 Byenon et al.
- D762,290 S * 7/2016 Jepson D23/342
- 9,642,480 B1 5/2017 Tanger et al.
- 10,139,720 B2 11/2018 Yu et al.
- D840,012 S * 2/2019 Zhou D23/359
- 10,237,384 B2 3/2019 Holder
- D873,398 S * 1/2020 Seo D23/364
- 10,663,106 B1 5/2020 Meskan et al.

(Continued)

FOREIGN PATENT DOCUMENTS

- CN 102506468 A 6/2012
- EP 2100626 9/2009

(Continued)

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(57) **CLAIM**

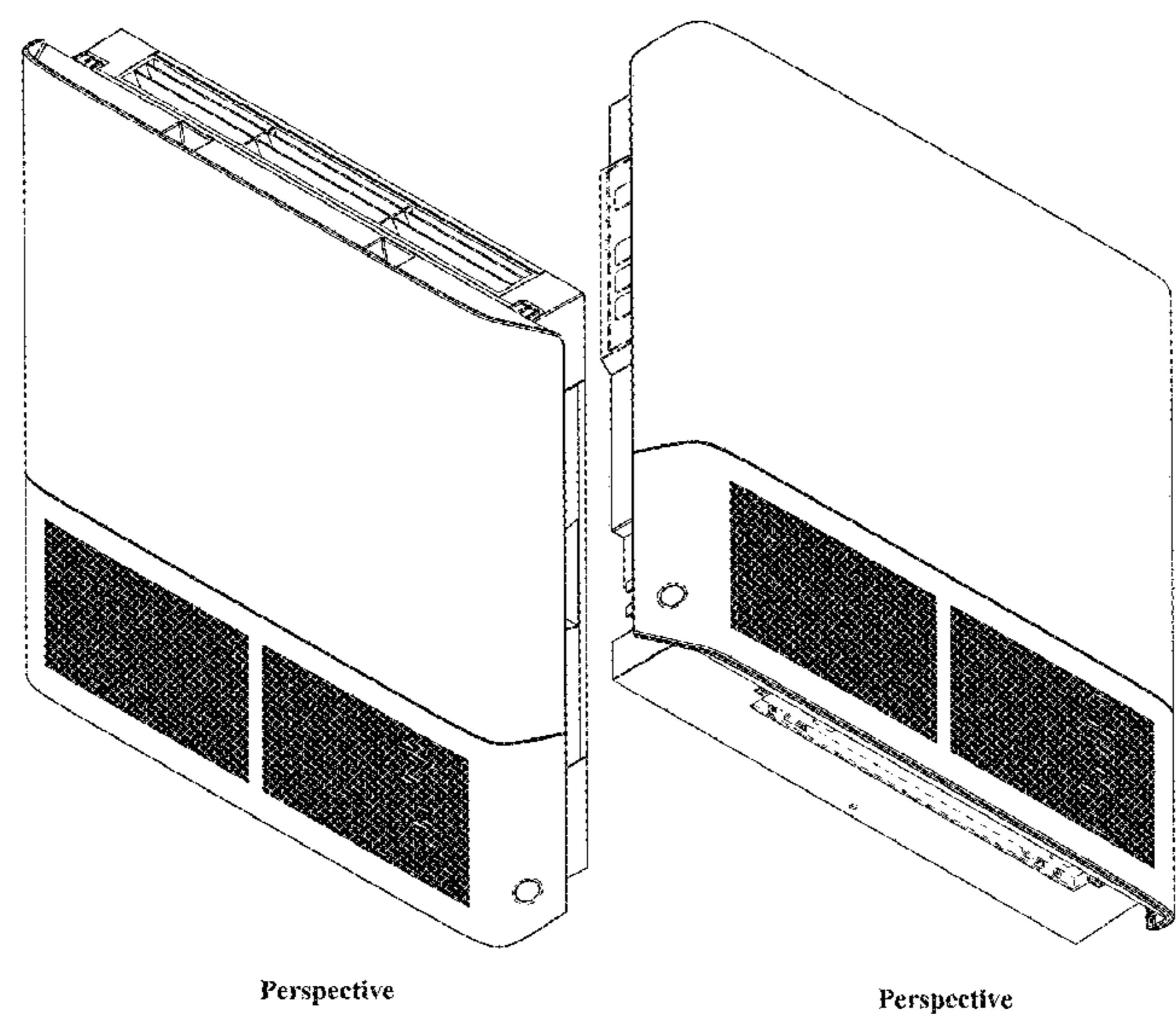
The ornamental design for a deodorizing apparatus, as shown and described.

DESCRIPTION

1. Deodorizing apparatus
 Figure 1.1 is a front view of a deodorizing apparatus.
 Figure 1.2 is a rear view thereof.
 Figure 1.3 is a top view thereof.
 Figure 1.4 is a bottom view thereof.
 Figure 1.5 is a left side view thereof.
 Figure 1.6 is a right side view thereof.
 Figure 1.7 is a first perspective view thereof.
 Figure 1.8 is a second perspective view thereof.
 Features shown in broken lines are disclaimed and form no part of the claimed design.

1 Claim, 8 Drawing Sheets

- (56) **References Cited**
U.S. PATENT DOCUMENTS
 3,827,020 A 7/1974 Okamoto
 4,211,382 A 7/1980 Bonfils
 4,605,292 A 8/1986 McIntosh
 4,852,284 A 8/1989 Faggiano
 4,875,654 A 10/1989 Chandonnet et al.
 5,269,083 A 12/1993 Vampatella et al.
 5,400,479 A 3/1995 Medina et al.
 D392,379 S * 3/1998 Nash D23/355
 D394,100 S * 5/1998 Promseeda D23/355



Perspective

Perspective

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(56)

References Cited

U.S. PATENT DOCUMENTS

D916,264 S * 4/2021 Jun D23/364
11,116,863 B2 9/2021 Kim et al.
2009/0229967 A1 9/2009 Sakatani
2011/0042542 A1 2/2011 Russo et al.
2012/0280098 A1 11/2012 Rink
2013/0052090 A1 2/2013 Bohlen
2013/0149504 A1 6/2013 Reingewirts
2013/0229802 A1 9/2013 Fukushima et al.
2014/0061409 A1 3/2014 Mayhew, Jr.
2014/0263908 A1 9/2014 Franklin
2016/0003270 A1 1/2016 Franklin
2016/0033194 A1 2/2016 Sumihiro et al.
2017/0130981 A1 5/2017 Willette et al.
2017/0318986 A1 11/2017 Santarelli
2017/0326264 A1 11/2017 Kim et al.
2017/0350147 A1 12/2017 Janko
2018/0154297 A1 6/2018 Maletich et al.
2018/0344890 A1 12/2018 Watanabe et al.
2019/0125917 A1 5/2019 Kim et al.

2020/0340507 A1 10/2020 Kehdy
2021/0060199 A1 3/2021 Somei et al.
2021/0180624 A1* 6/2021 Somei F16B 1/00

FOREIGN PATENT DOCUMENTS

JP S57-087208 U 5/1982
JP S60-001360 U 1/1985
JP H04-091495 U 8/1992
JP 3097434 U 1/2004
JP 2012-095972 5/2012
JP 2014-219130 11/2014
JP 2017-148484 8/2017
JP 2019-017855 2/2019
JP 2019-513970 5/2019
KR 10-2009-0078908 7/2009
TW M553220 U 12/2017
WO 2015/177842 11/2015
WO 2017/088356 6/2017
WO 2017/209776 12/2017

* cited by examiner

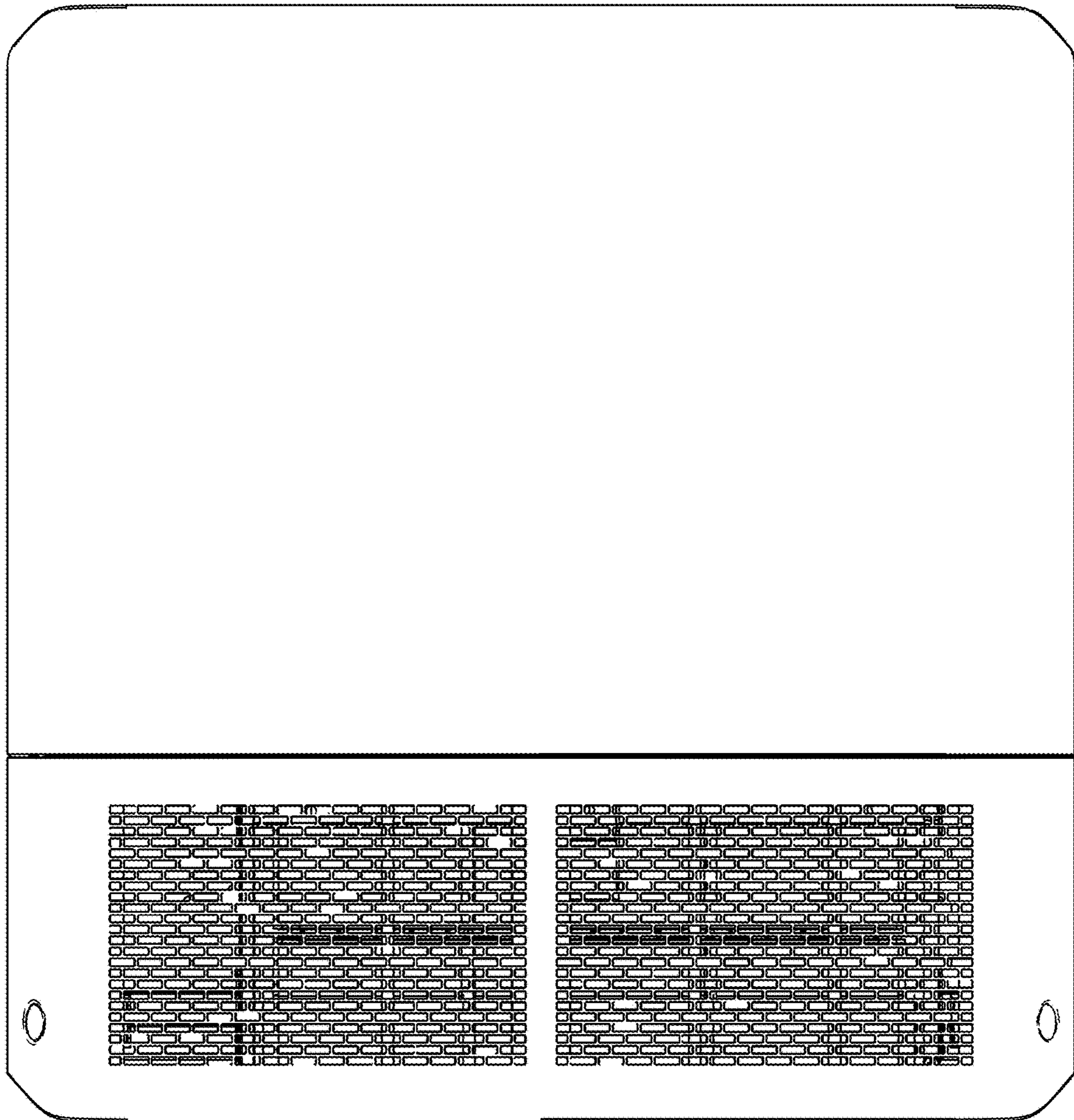


FIG. 1.1) Front

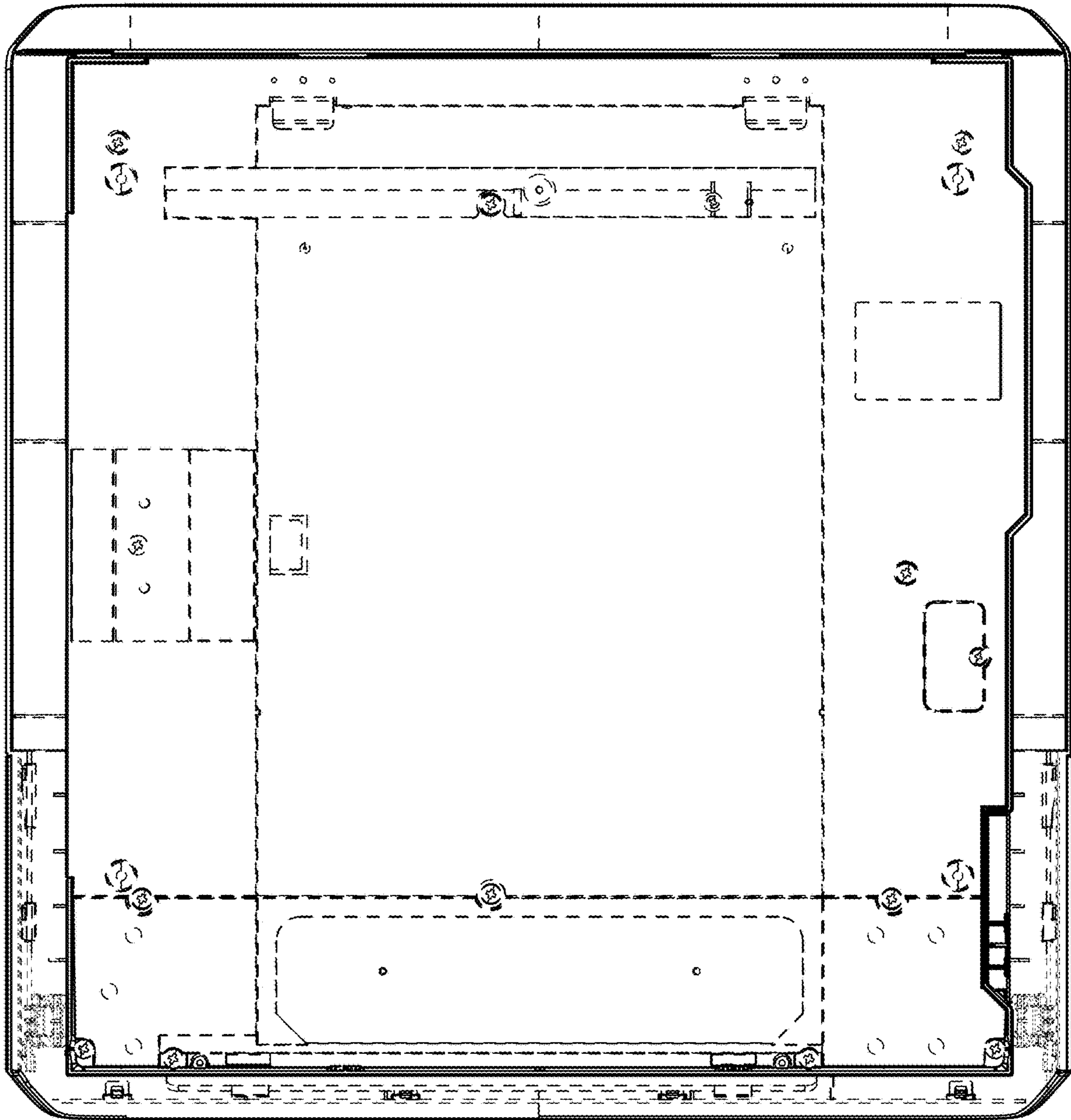


FIG. 1.2) Back

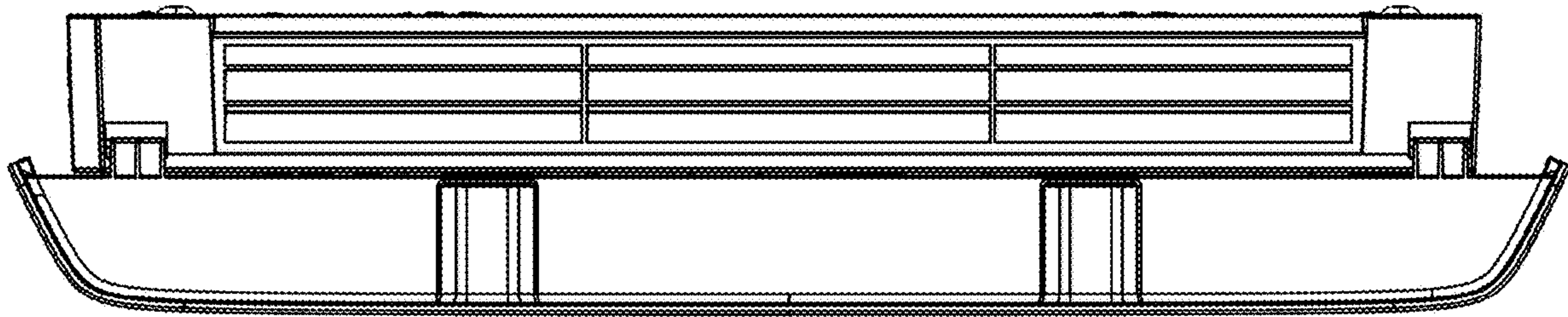


FIG. 1.3) Top

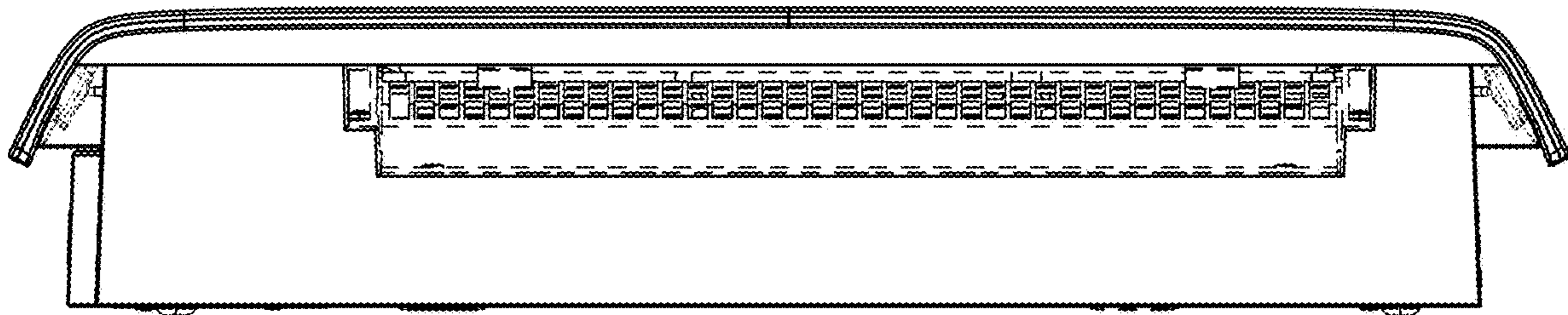


FIG. 1.4) Bottom

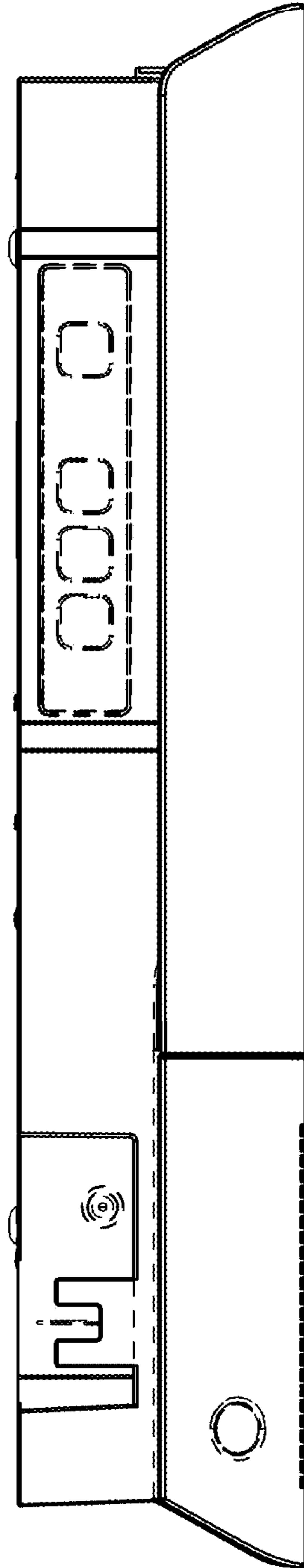


FIG. 1.5) Left

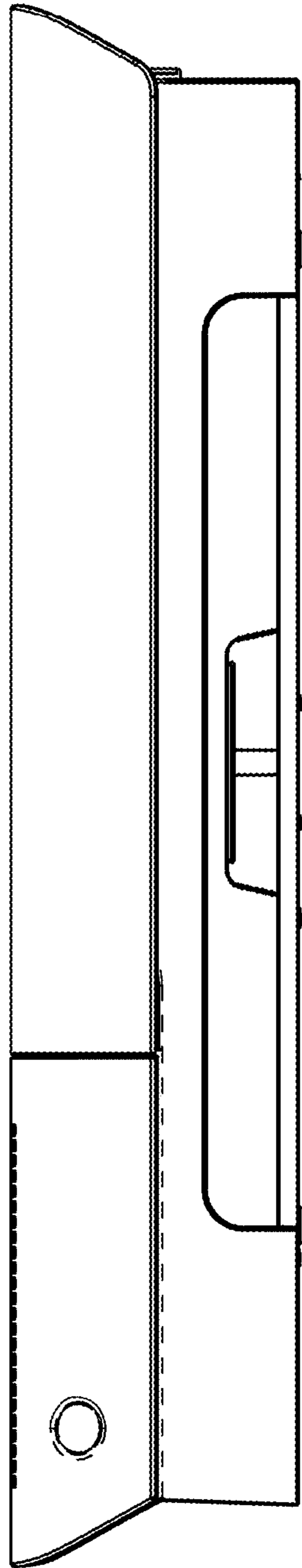


FIG. 1.6) Right

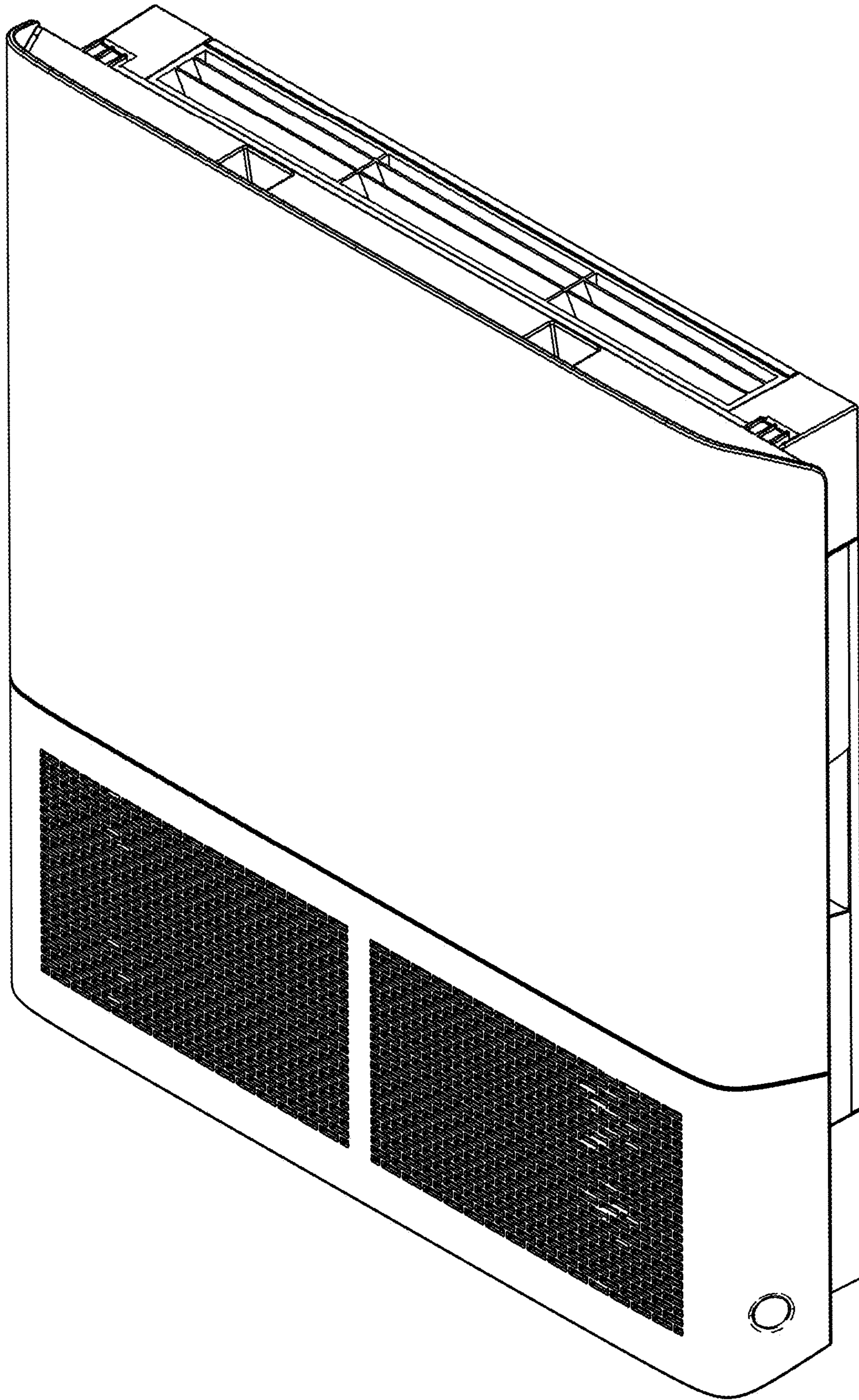


FIG. 1.7) Perspective

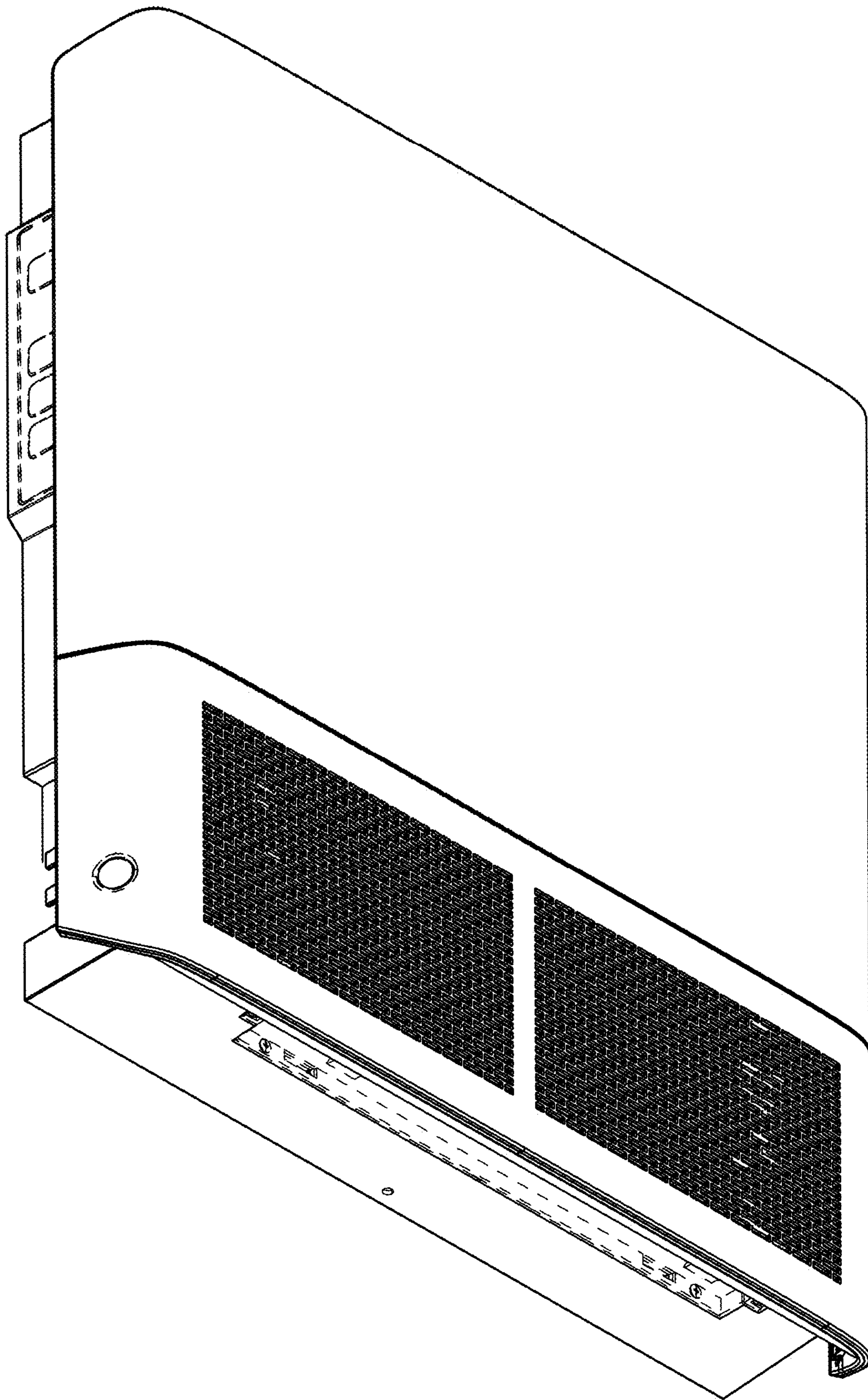


FIG. 1.8) Perspective