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(12) **United States Design Patent** (10) **Patent No.:** **US D869,684 S**  
**Ma et al.** (45) **Date of Patent:** **\*\* Dec. 10, 2019**

(54) **ISOTHERMAL AMPLIFICATION  
MICROFLUIDIC CHIP NUCLEIC ACID  
ANALYZER**

D687,968 S \* 8/2013 Trigg ..... D24/232  
D753,311 S \* 4/2016 Long ..... D24/186  
D800,320 S \* 10/2017 Nishikawa ..... D24/186  
D825,776 S \* 8/2018 Quick ..... D24/232  
D827,859 S \* 9/2018 Mathers ..... D24/232  
D839,442 S \* 1/2019 Dohm ..... D24/216  
2012/0308990 A1 \* 12/2012 TerMaat ..... C12Q 1/6844  
435/3

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\* cited by examiner

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(57) **CLAIM**

We claim the ornamental design for an isothermal ampli-  
fication microfluidic chip nucleic acid analyzer, as shown and  
described.

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

(21) Appl. No.: **29/636,315**

(22) Filed: **Feb. 7, 2018**

(51) **LOC (12) Cl.** ..... **24-01**

(52) **U.S. Cl.**

USPC ..... **D24/232**

(58) **Field of Classification Search**

USPC ..... D24/107, 185, 186, 216, 231–234;  
D10/81

CPC ..... G01N 2035/00306; G01N 2035/00326;  
G01N 2035/00336; G01N 2035/00366;  
G01N 21/6428; G01N 21/645; G01N  
2201/068; C12Q 1/686; C12Q 1/6846;  
B01L 7/52

See application file for complete search history.

**DESCRIPTION**

The patent or application file contains at least one drawing  
executed in color. Copies of this patent or patent application  
publication with color drawings will be provided by the  
office upon request and payment of the necessary fee.

FIG. 1 is a front perspective view of an isothermal ampli-  
fication microfluidic chip nucleic acid analyzer showing our  
new design;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a side view thereof;

FIG. 5 is a side view of the opposite side of FIG. 4;

FIG. 6 is a top view thereof; and,

FIG. 7 is a bottom view thereof.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D556,914 S \* 12/2007 Okamoto ..... D24/233  
D653,764 S \* 2/2012 Macemon ..... D24/216

**1 Claim, 7 Drawing Sheets**  
**(7 of 7 Drawing Sheet(s) Filed in Color)**





FIG. 1



FIG. 2

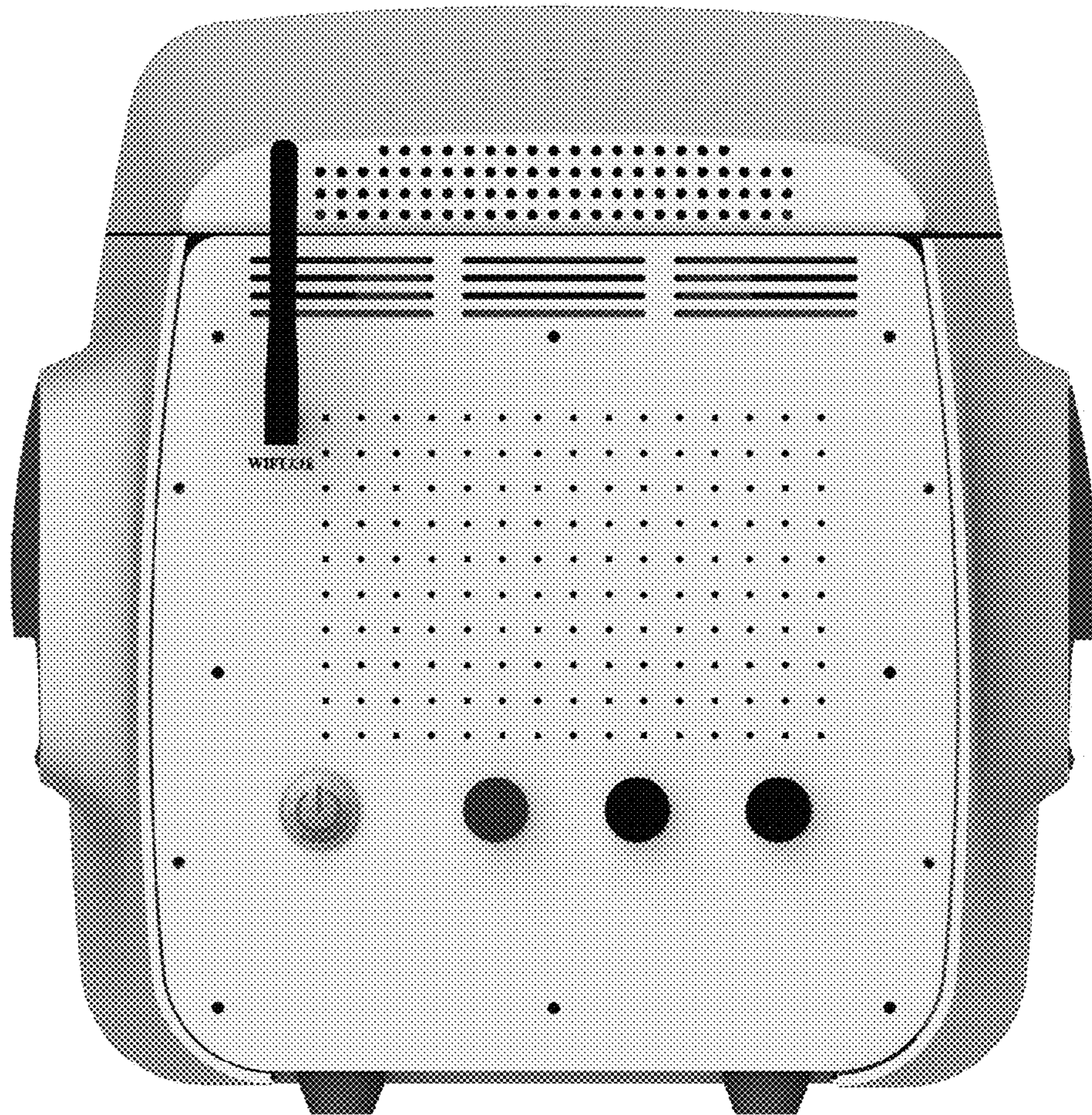


FIG. 3



FIG. 4



FIG. 5



FIG. 6

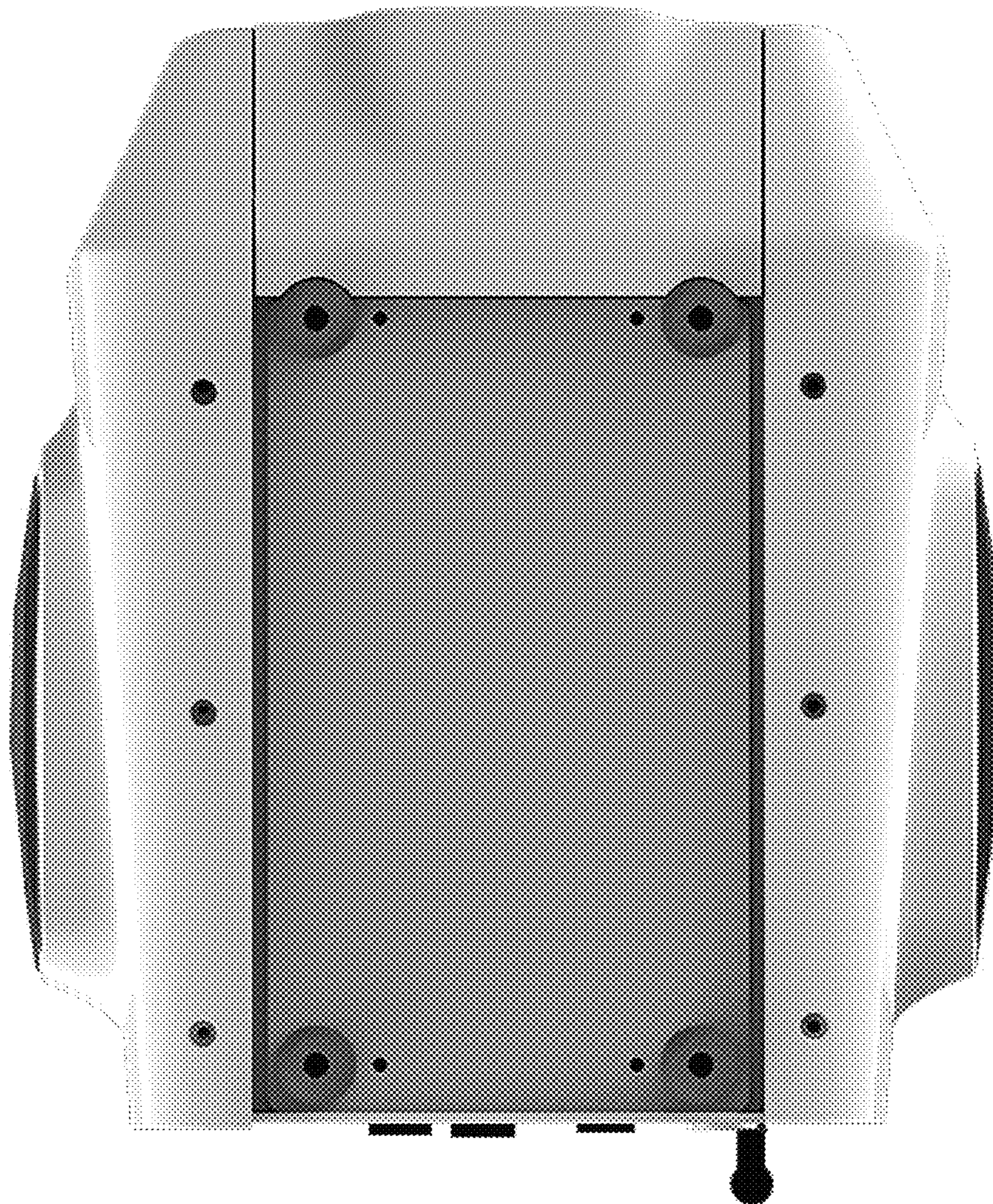


FIG. 7