



US00D851633S

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

(10) **Patent No.:** **US D851,633 S**  
(45) **Date of Patent:** **\*\* Jun. 18, 2019**

- (54) **MICROPHONE WITH BUILT-IN SPEAKER**
- (71) Applicant: **TOA CORPORATION**, Kobe-shi, Hyogo-ken (JP)
- (72) Inventors: **Akinori Nakano**, Kobe (JP); **Daisuke Higashihara**, Kobe (JP)
- (73) Assignee: **TOA CORPORATION**, Kobe-Shi (JP)
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/625,606**
- (22) Filed: **Nov. 10, 2017**
- (30) **Foreign Application Priority Data**

- Jun. 12, 2017 (JP) ..... 2017-012540
- (51) **LOC (11) Cl.** ..... **14-01**
- (52) **U.S. Cl.**  
USPC ..... **D14/226; D14/214**
- (58) **Field of Classification Search**  
USPC ... D14/226, 225, 214, 204, 209.1, 210, 211;  
D23/210, 388; D26/51, 64; 362/800,  
362/807, 11, 109; 181/158; 381/338,  
381/387, 300; 206/37; 455/575.1  
CPC . H04R 19/04; H04R 5/02; H04R 1/20; H04R  
25/00; H04B 7/00; H05K 5/00  
See application file for complete search history.

(56) **References Cited**  
U.S. PATENT DOCUMENTS

- 2,210,415 A \* 8/1940 Kellogg ..... G01S 1/72  
181/146
- 2,910,539 A \* 10/1959 Hartsfield ..... H04R 19/04  
181/158
- 3,082,298 A \* 3/1963 Gorike ..... H04R 1/38  
381/174
- 3,159,719 A \* 12/1964 Weiss ..... H04R 17/00  
181/158

- 3,194,339 A \* 7/1965 Pawlowski ..... H04R 1/403  
181/146
  - 3,207,257 A \* 9/1965 Wilson ..... H04R 1/02  
181/147
  - D249,683 S \* 9/1978 Rams ..... D14/211
  - 4,649,791 A \* 3/1987 Sawada ..... G10D 13/08  
84/402
  - D296,435 S \* 6/1988 Kubota ..... D14/228
- (Continued)

**FOREIGN PATENT DOCUMENTS**

- JP 1533373 9/2015
- JP 1562995 11/2016
- JP 1566495 1/2017

*Primary Examiner* — Paula Allen Greene  
(74) *Attorney, Agent, or Firm* — Caesar Rivise, PC

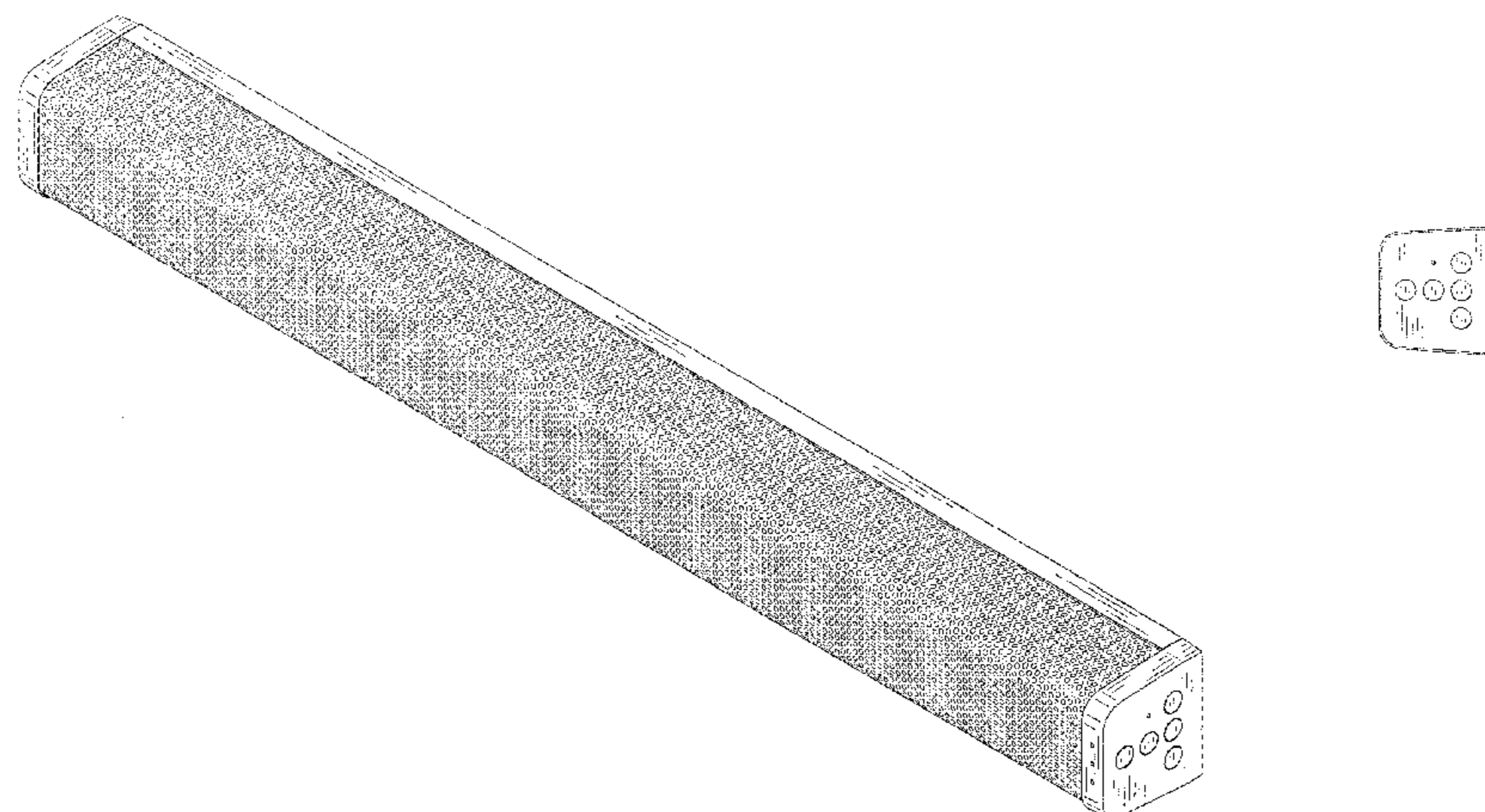
(57) **CLAIM**

The ornamental design for a microphone with built-in speaker, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, top and right side perspective view of a microphone with built-in speaker showing our new design; FIG. 2 is a front elevation view thereof; FIG. 3 is a top plan view thereof, the bottom plan view being a mirror image of FIG. 3; FIG. 4 is a right side elevation view thereof; FIG. 5 is a left side elevation view thereof; FIG. 6 is a front elevation view thereof, wherein the central LED is in an illuminated state; FIG. 7 is a front elevation view thereof, wherein all of the LEDs are in an illuminated state; and, FIG. 8 is a front elevation view thereof, wherein the right-side LED is in an illuminated state. The broken radiating lines in FIGS. 6, 7, and 8 indicate illuminations only and form no part of the claimed design.

**1 Claim, 4 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

5,862,240 A \* 1/1999 Ohkubo ..... H04R 1/406  
 381/122  
 D431,817 S \* 10/2000 Yuyama ..... D14/227  
 D470,126 S \* 2/2003 Ljungberg ..... D14/214  
 D472,542 S \* 4/2003 Oikawa ..... D14/172  
 D478,891 S \* 8/2003 Hisatsune ..... D14/211  
 D491,165 S \* 6/2004 Hakoda ..... D14/214  
 6,859,543 B2 \* 2/2005 Fingleton ..... H04R 1/323  
 181/153  
 D532,411 S \* 11/2006 Shimizu ..... D14/228  
 D538,260 S \* 3/2007 Wada ..... D14/188  
 D540,305 S \* 4/2007 Han ..... D14/211  
 D540,310 S \* 4/2007 Yuyama ..... D14/214  
 D547,748 S \* 7/2007 Tsuge ..... D14/211  
 D552,493 S \* 10/2007 Johnston ..... D10/40  
 D583,876 S \* 12/2008 Ashida ..... D21/324  
 D589,939 S \* 4/2009 Hsu ..... H04R 1/025  
 D14/211  
 D636,758 S \* 4/2011 Tzeng ..... D14/214  
 D644,625 S \* 9/2011 Iseki ..... D14/206  
 D659,677 S \* 5/2012 Kim ..... D14/214  
 D660,284 S \* 5/2012 Carbone ..... D14/214  
 D669,883 S \* 10/2012 Cheng ..... D14/214

D681,009 S \* 4/2013 Meng ..... D14/214  
 D681,606 S \* 5/2013 Nishii ..... D14/214  
 D681,607 S \* 5/2013 Nishii ..... D14/214  
 D685,349 S \* 7/2013 Ohno ..... D14/221  
 D688,231 S \* 8/2013 Nishii ..... D14/214  
 D703,194 S \* 4/2014 Jacobs ..... D14/225  
 D718,274 S \* 11/2014 Shadovitz ..... D14/209.1  
 D719,140 S \* 12/2014 Sanhui ..... D14/225  
 D742,855 S \* 11/2015 Carbone ..... D14/214  
 D743,373 S \* 11/2015 Kim ..... D14/210  
 D759,624 S 6/2016 Byrd et al.  
 D764,440 S 8/2016 Xin  
 D766,873 S \* 9/2016 Washio ..... D14/214  
 D768,603 S \* 10/2016 Kim ..... D14/214  
 D773,436 S \* 12/2016 Kim ..... D14/214  
 D774,491 S \* 12/2016 Kim ..... D14/214  
 D791,736 S \* 7/2017 Schoolmeester ..... D14/214  
 D797,707 S \* 9/2017 Abehassera ..... D14/226  
 D817,308 S \* 5/2018 Sugiura ..... D14/214  
 D833,414 S \* 11/2018 Brennan ..... D14/204  
 D835,605 S \* 12/2018 Schoolmeester ..... D14/214  
 2012/0063618 A1 \* 3/2012 Tanaka ..... H04R 3/12  
 381/303  
 2012/0263335 A1 \* 10/2012 Breen ..... H04R 1/403  
 381/387

\* cited by examiner

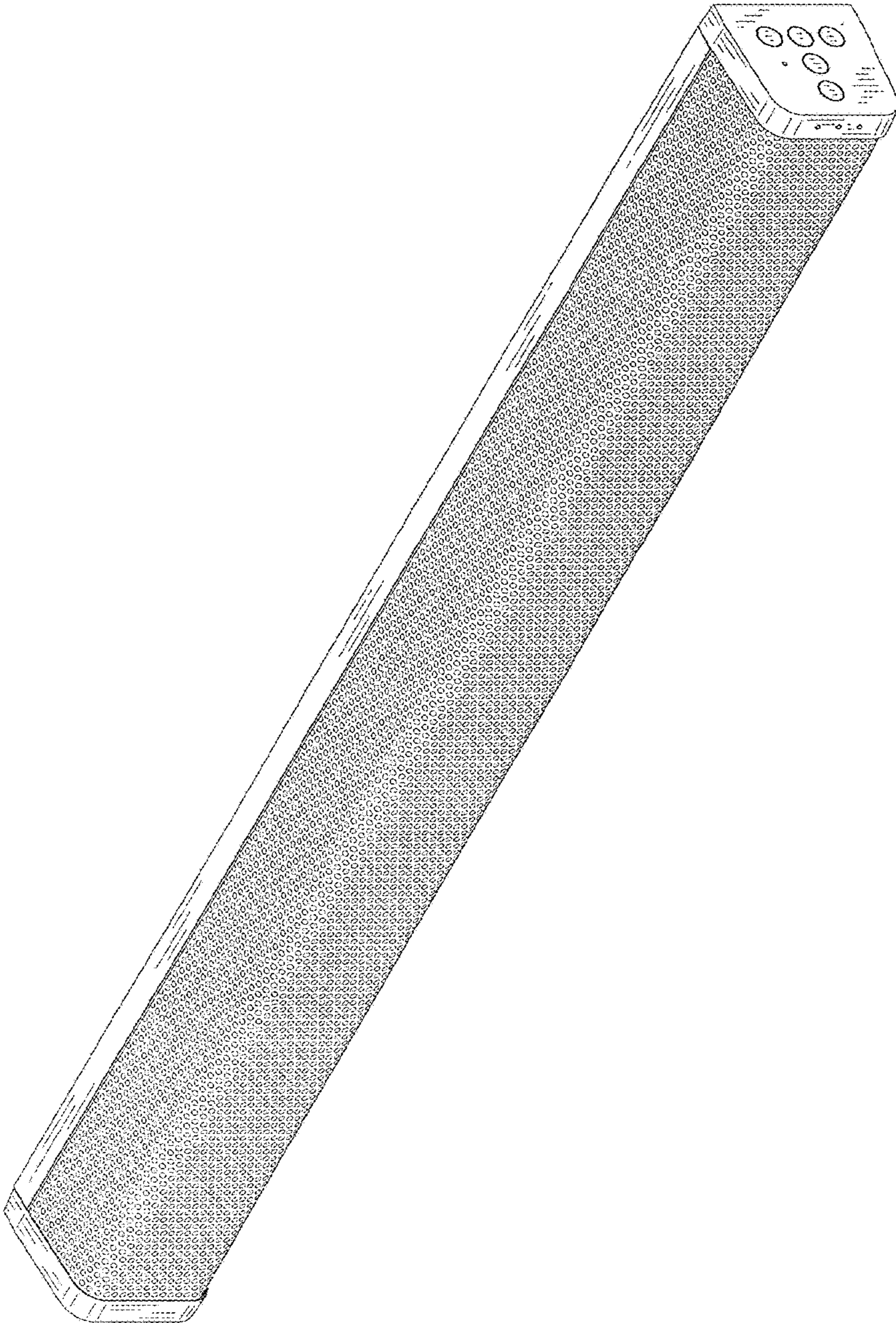


Fig.1

Fig.2

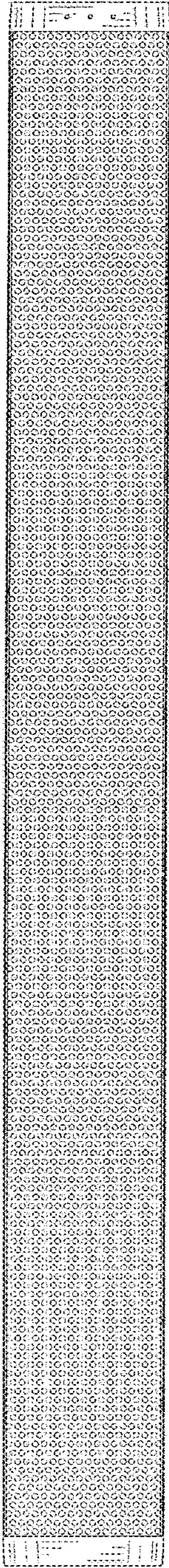
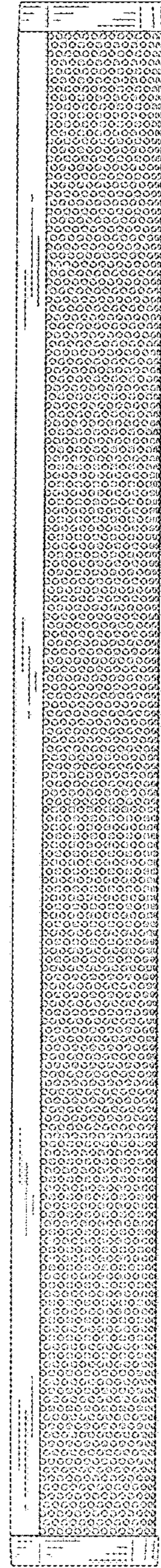


Fig.3



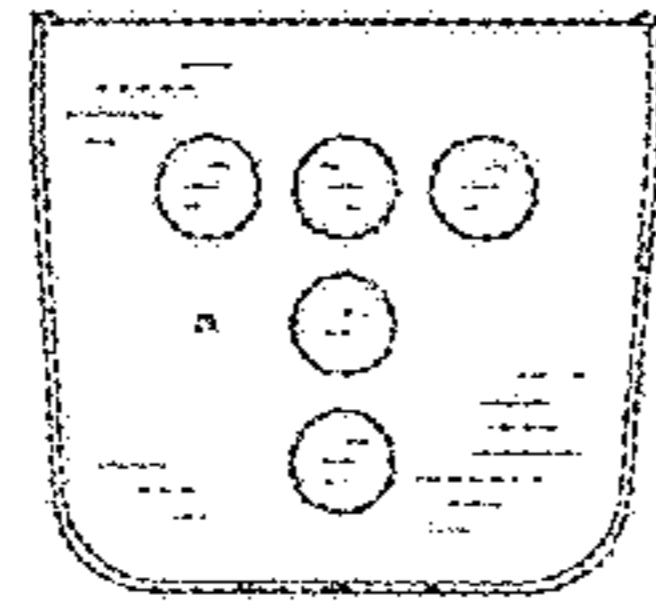


Fig.4

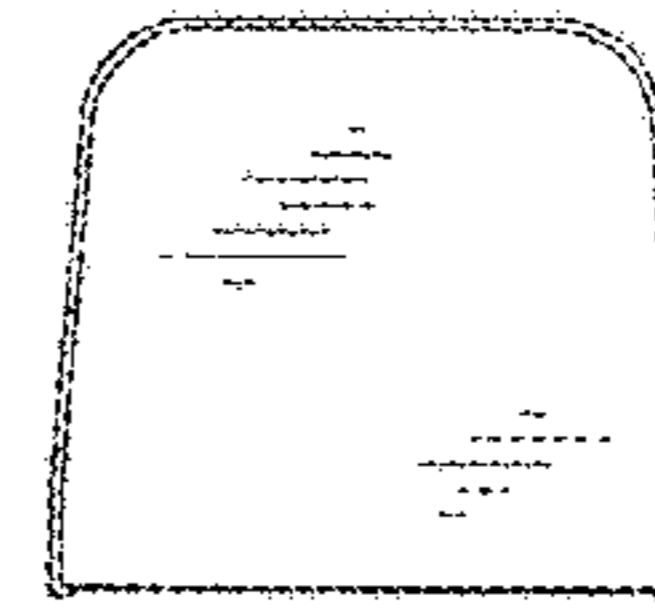


Fig.5

Fig.6

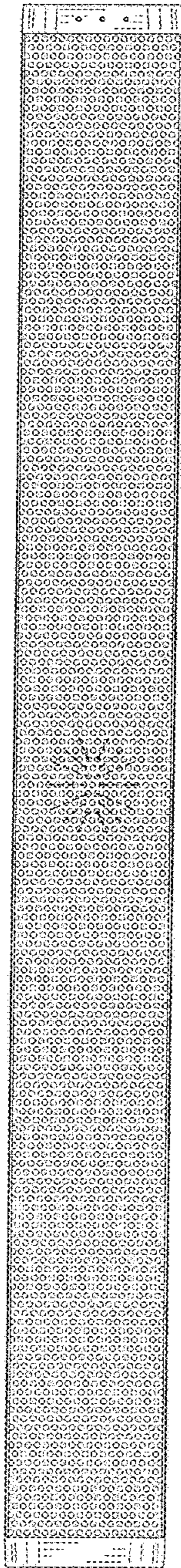


Fig.7

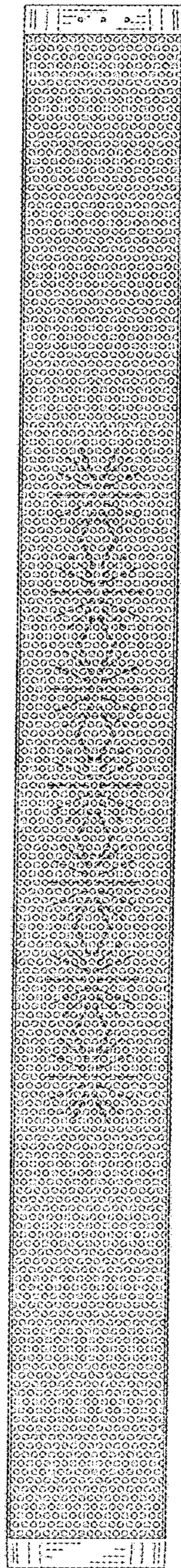


Fig.8

