

US00D935434S

(12) **United States Design Patent** (10) **Patent No.:** **US D935,434 S**
Cai (45) **Date of Patent:** **** Nov. 9, 2021**

(54) **EARPHONE**
(71) Applicant: **Ruibo Cai**, Guangdong (CN)
(72) Inventor: **Ruibo Cai**, Guangdong (CN)
(**) Term: **15 Years**
(21) Appl. No.: **29/772,542**
(22) Filed: **Mar. 2, 2021**
(51) **LOC (13) Cl.** **14-01**
(52) **U.S. Cl.**
USPC **D14/205**
(58) **Field of Classification Search**
USPC D14/205, 223; D24/174; D13/144, 133,
D13/168; 181/130, 135; 381/380, 381,
381/384; 128/864, 865, 866; 439/669,
439/460, 787; 455/90.3, 575.1, 569.1
CPC H04R 1/10; H04R 25/00; H04R 25/02;
H04R 1/1016; H04R 1/1066; H04R
5/033; H04R 5/0335; H04R 1/1033;
H04R 1/1041; H04R 1/1091
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,781,958 A * 11/1930 Schellenger H01R 24/58
439/669
D276,421 S * 11/1984 Shaw D12/174
D280,896 S * 10/1985 Campbell D14/155
4,647,135 A * 3/1987 Reinhardt H01R 24/58
439/460
D290,356 S * 6/1987 Fisher D14/191
D303,638 S * 9/1989 Andrews, Sr. D10/106.1
D306,853 S * 3/1990 Mayo D13/165
D313,790 S * 1/1991 Hirabayashi D13/133
D316,847 S * 5/1991 Rowen D13/168
D317,593 S * 6/1991 Rowen D13/168
D328,280 S * 7/1992 Lee D13/133
D330,522 S * 10/1992 Mokhtarian D10/104.1
D354,751 S * 1/1995 Hersh D14/218

D356,293 S * 3/1995 Riley D13/133
5,481,251 A * 1/1996 Buys H03J 1/0025
340/12.22
6,126,456 A * 10/2000 Campbell B23K 1/0008
439/74
D434,012 S * 11/2000 Krieser, Sr. D13/168
6,406,313 B1 * 6/2002 Victor H01R 27/00
439/175
D464,952 S * 10/2002 Beraut D14/225
D473,217 S * 4/2003 Rivera D14/223
7,139,590 B2 * 11/2006 Liu H04M 1/6058
455/557
D534,150 S * 12/2006 Griffin D14/155

(Continued)

FOREIGN PATENT DOCUMENTS

CN 305426999 * 11/2019
CN 306065337 * 9/2020

(Continued)

Primary Examiner — Paula Allen Greene
(74) *Attorney, Agent, or Firm* — ScienBiziP, P.C.

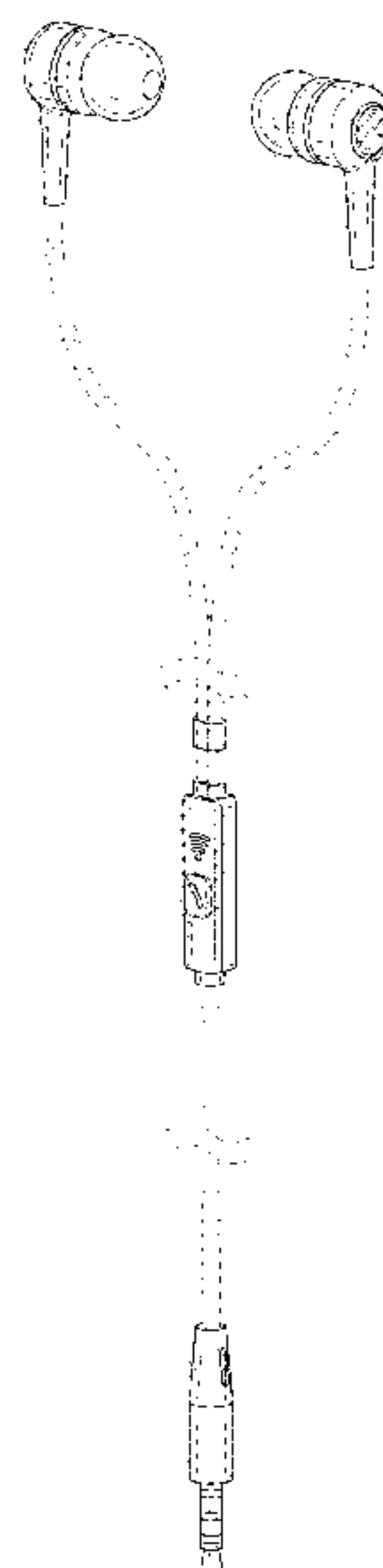
(57) **CLAIM**

The ornamental design for an earphone, as shown and described.

DESCRIPTION

FIG. 1 is a front, right, and top perspective view of an earphone, showing my design.
FIG. 2 is a front elevation view thereof.
FIG. 3 is a rear elevation view thereof.
FIG. 4 is a left side elevation view thereof.
FIG. 5 is a right side elevation view thereof.
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.
The broken lines shown in the drawings are included for the purpose of illustrating portions of the earphone that form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D572,703 S * 7/2008 Ledbetter D14/205
 D572,706 S * 7/2008 Schaefer D14/223
 D576,154 S * 9/2008 Ledbetter D14/223
 D578,507 S * 10/2008 Ando D14/205
 D584,695 S * 1/2009 Hilsbos D13/168
 D587,678 S * 3/2009 Yuyama D14/205
 D587,681 S * 3/2009 Yanai D14/205
 D602,919 S * 10/2009 Bodley D14/225
 D604,252 S * 11/2009 Yudate D13/154
 D606,980 S * 12/2009 Bradford D14/218
 D607,875 S * 1/2010 Pedersen, II H04R 1/1033
 D609,221 S * 2/2010 Kim D14/218
 D614,604 S * 4/2010 Hoehn D14/218
 D623,171 S * 9/2010 Chen D14/223
 D624,902 S * 10/2010 Kolton D14/205
 D625,294 S * 10/2010 Wada D14/218
 D645,022 S * 9/2011 Lee D14/205
 D647,081 S * 10/2011 Kwon D14/223
 D651,589 S * 1/2012 Fischer D14/218
 D658,157 S * 4/2012 McManigal D14/205
 D660,290 S * 5/2012 Weedon D14/223
 D681,001 S * 4/2013 Murchison D14/205
 8,456,864 B2 * 6/2013 Stiehl H01H 9/02
 361/832
 8,743,533 B2 * 6/2014 Stanley H01H 9/0228
 361/679.01
 D716,268 S * 10/2014 Yamamoto D14/218
 D718,273 S * 11/2014 Harata D14/205
 D718,745 S * 12/2014 Thompson D14/223
 D719,548 S * 12/2014 Thompson D14/223
 D719,935 S * 12/2014 Diamond D14/218
 D725,625 S * 3/2015 Hsieh D14/205
 D726,145 S * 4/2015 Hsieh D14/205
 D737,251 S * 8/2015 Thompson D14/223
 D738,863 S * 9/2015 Laffon de Mazieres D14/223
 D758,353 S * 6/2016 Akana D14/218
 D773,435 S * 12/2016 Ott D14/205
 D777,138 S * 1/2017 Fletcher D14/205
 D780,155 S * 2/2017 Levine D14/205
 D782,998 S * 4/2017 Shin D14/205
 D783,571 S * 4/2017 Mizrahi D14/205
 D784,962 S * 4/2017 Yang D14/223
 D785,594 S * 5/2017 Zaihui D14/205
 D793,995 S * 8/2017 Nakagawa D14/218
 D800,097 S * 10/2017 Chen D14/223
 D803,185 S * 11/2017 Loh Jun Kern D14/205
 D811,363 S * 2/2018 He D14/205
 D812,038 S * 3/2018 Nakajima D14/205

D816,059 S * 4/2018 Liu D14/205
 D820,810 S * 6/2018 Levine D14/205
 D821,999 S * 7/2018 Guo D14/205
 D840,954 S * 2/2019 Wu D13/168
 D845,926 S * 4/2019 Aoyagi D14/205
 D847,122 S * 4/2019 Messadek D14/217
 D881,838 S * 4/2020 Aoyagi D14/205
 D885,344 S * 5/2020 McGavock D13/133
 D895,569 S * 9/2020 Roberts D14/205
 D895,575 S * 9/2020 Aoyagi D14/217
 D899,399 S * 10/2020 Jung D14/205
 D901,445 S * 11/2020 Huang D14/218
 D904,347 S * 12/2020 Yamamoto D14/223
 D907,008 S * 1/2021 Yao D14/223
 D909,336 S * 2/2021 Adams D14/205
 D910,600 S * 2/2021 Zhang D14/223
 D921,610 S * 6/2021 Reimann D14/205
 D924,841 S * 7/2021 Yuan D14/205
 2002/0003889 A1 * 1/2002 Fischer H04R 1/1041
 381/370
 2007/0098201 A1 * 5/2007 Chen H04R 1/1016
 381/380
 2011/0142276 A1 * 6/2011 Uchida H04R 1/1075
 381/370
 2011/0176700 A1 * 7/2011 Hashimoto H04R 1/1016
 381/380
 2012/0170789 A1 * 7/2012 Lin H04R 1/1033
 381/384
 2013/0170692 A1 * 7/2013 Kaneko H04R 1/1033
 381/380
 2015/0055917 A1 * 2/2015 Liu H01R 13/5219
 385/94
 2016/0142808 A1 * 5/2016 Monahan H04R 5/033
 381/384
 2016/0261946 A1 * 9/2016 Chen H04R 1/1091
 2016/0316290 A1 * 10/2016 Shen H04R 1/1025
 2017/0295421 A1 * 10/2017 Hung H04R 1/1041
 2019/0306609 A1 * 10/2019 Lee H04R 1/1066

FOREIGN PATENT DOCUMENTS

CN 306078616 * 9/2020
 CN 306105576 * 10/2020
 CN 306182108 * 11/2020
 CN 306267707 * 2/2021
 CN 303605078 * 3/2021
 CN 306363411 * 3/2021
 CN 306620408 * 6/2021
 CN 306686737 * 7/2021
 GB 9007307301-0002 * 11/2019

* cited by examiner

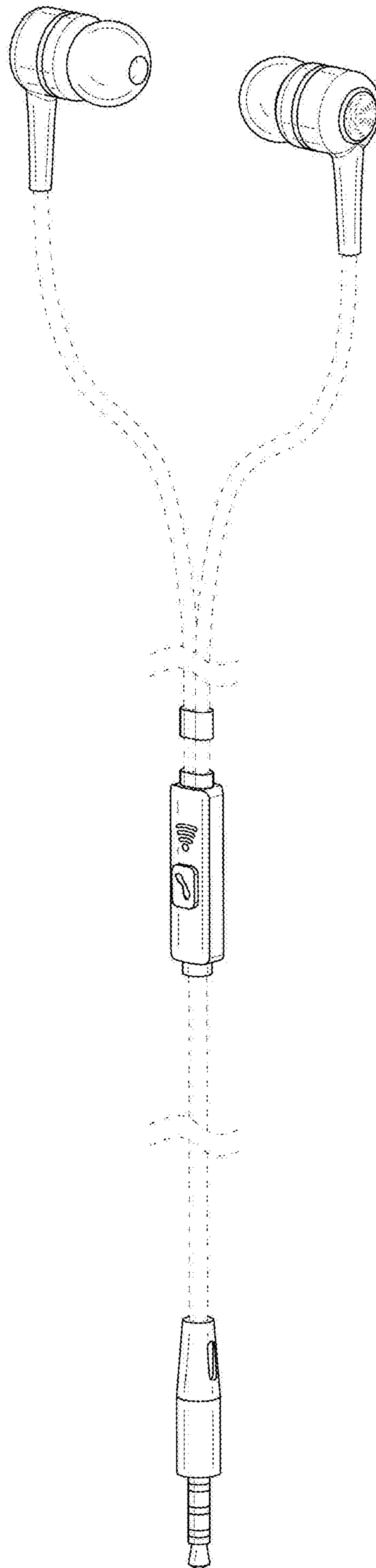


FIG.1

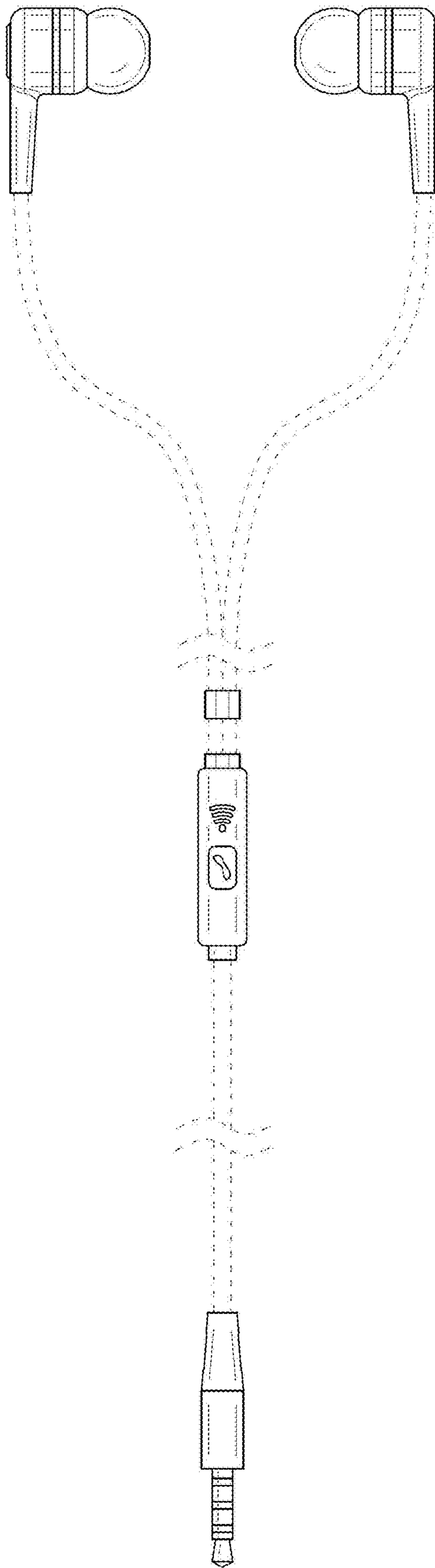


FIG. 2

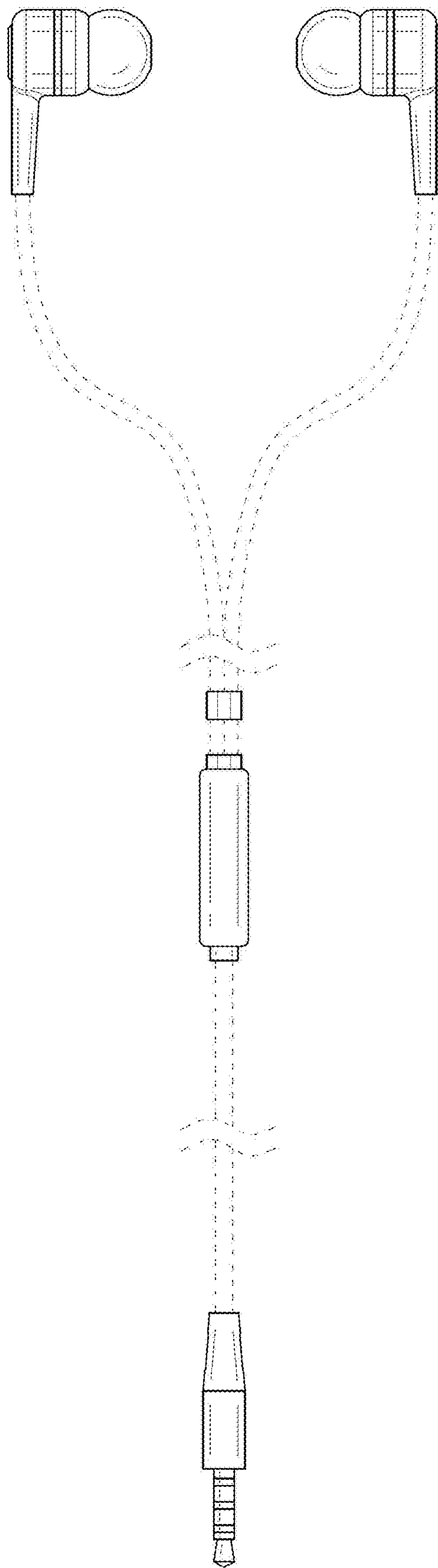


FIG.3

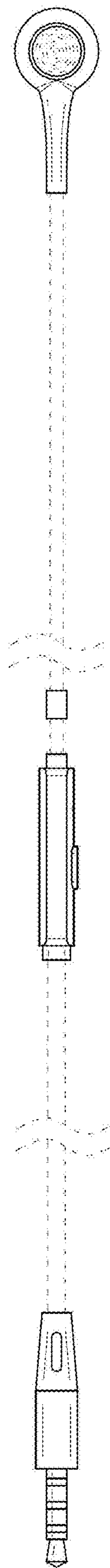


FIG.4

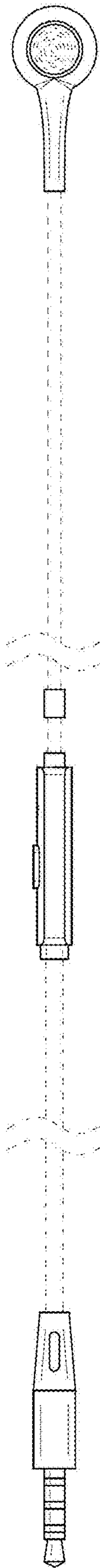


FIG.5

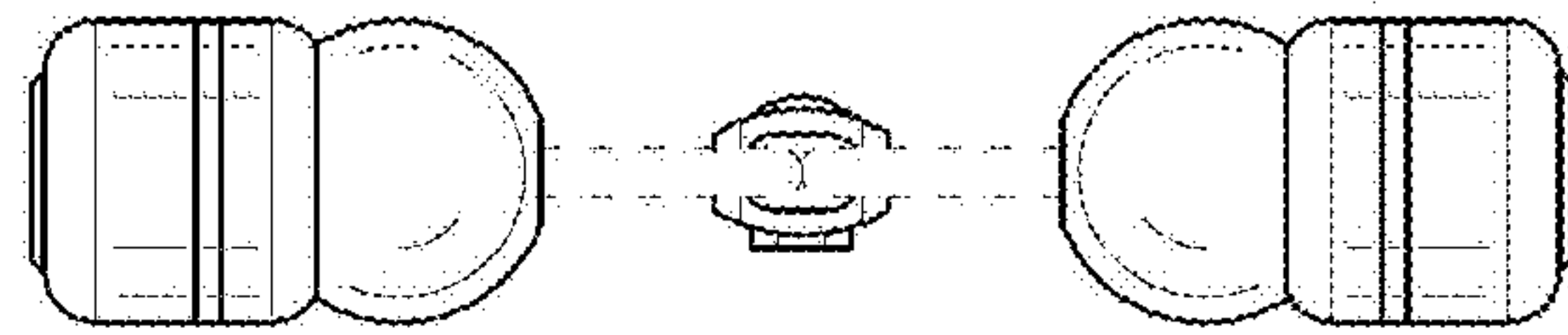


FIG.6

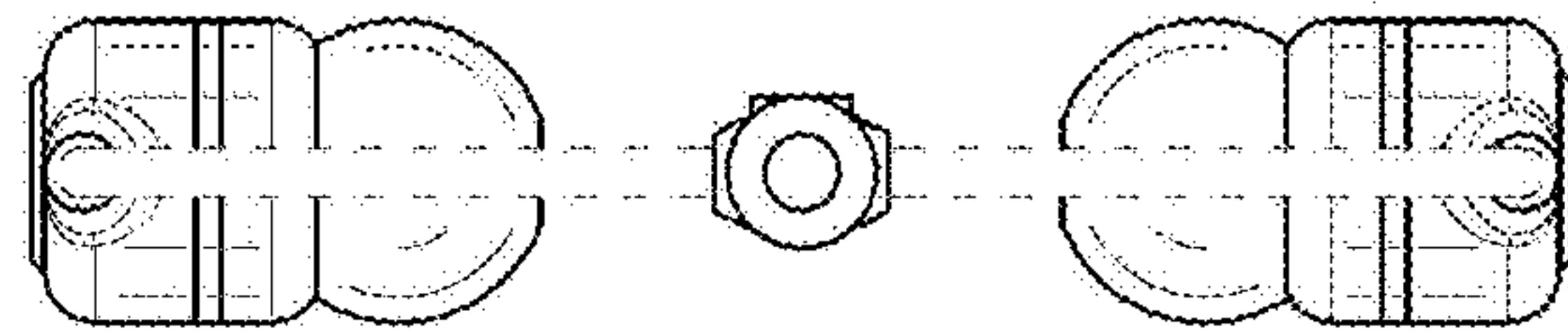


FIG. 7