



US00D987078S

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

(10) **Patent No.:** **US D987,078 S**

(45) **Date of Patent:** **** May 23, 2023**

(54) **INTRAORAL SCANNER**

(71) Applicant: **J. MORITA MFG. CORP.**, Kyoto (JP)

(72) Inventors: **Fritz Frenkler**, Munich (DE); **Junji Kawabe**, Kyoto (JP); **Tsuyoshi Tanaka**, Kyoto (JP); **Masanori Otsuka**, Kyoto (JP)

(73) Assignee: **J. MORITA MFG. CORP.**

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

(21) Appl. No.: **35/514,383**

(22) Filed: **May 10, 2022**

(80) **Hague Agreement Data**

Int. Filing Date: **May 10, 2022**

Int. Reg. No.: **DM/220862**

Int. Reg. Date: **May 10, 2022**

Int. Reg. Pub. Date: **May 27, 2022**

(30) **Foreign Application Priority Data**

Dec. 14, 2021 (JP) 2021-027506 D

(51) **LOC (14) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/152; D24/137; D16/208**

(58) **Field of Classification Search**
USPC D24/133, 137, 138, 141, 144, 147, 150,
D24/152, 158; D16/206, 208, 218
CPC A61B 1/00009; A61B 1/00011; A61B
1/00016; A61B 1/00005; A61B 1/00096;
A61B 1/0623; A61B 1/0638; A61B
1/0684; A61B 1/247; A61B 5/0088;
G03B 15/14; A61C 19/004
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D398,995 S * 9/1998 Muller D24/133
D405,883 S * 2/1999 Emerson D24/133

D510,662 S * 10/2005 Kling D4/101
D518,601 S * 4/2006 Kling D28/65
D558,345 S * 12/2007 Witt D24/152
D597,207 S * 7/2009 Kobayashi D24/152
D599,018 S * 8/2009 Plank D24/152

(Continued)

FOREIGN PATENT DOCUMENTS

KR 300893948.0000 * 2/2017

OTHER PUBLICATIONS

J. Morita Mfg. Corp., "Package insert for a digital image taking device, URL: https://www.pmda.go.jp/PmdaSearch/kikiDetail/ResultDataSetPDF/790033_30300BZX00243000_A_01_01", Pharmaceuticals and Medical Devices Agency, Nov. 4, 2021.

Primary Examiner — T Chase Nelson

Assistant Examiner — Kelly L Gross

(74) *Attorney, Agent, or Firm* — Dilworth IP, LLC

(57) **CLAIM**

The ornamental design for an intraoral scanner, as shown and described.

DESCRIPTION

1. Intraoral scanner

1.1 : Front

1.2 : Back

1.3 : Top

1.4 : Bottom

1.5 : Right

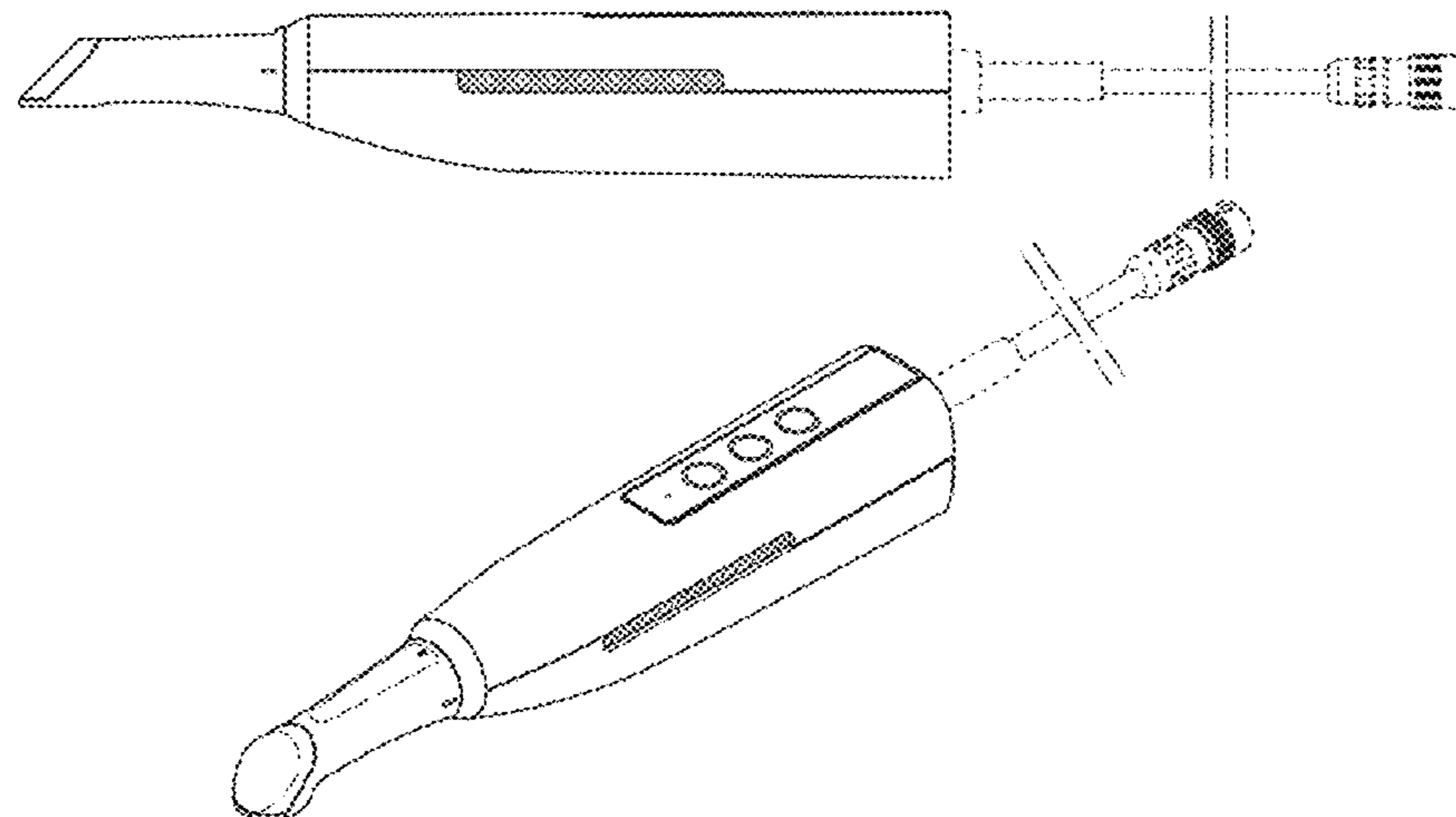
1.6 : Left

1.7 : Perspective view 1

1.8 : Perspective view 2

The article is a device for scanning a three-dimensional shape of an interior of an oral cavity mainly in dental treatment; the tip of the article is detachable; the article has air inlet openings and an air outlet opening in order to cool the article; the parts shown in dotted lines do not form part

(Continued)



of the claimed design; the dot-dashed lines are only to represent indeterminate length and form no part of the claimed design.

1 Claim, 8 Drawing Sheets

(56)

References Cited

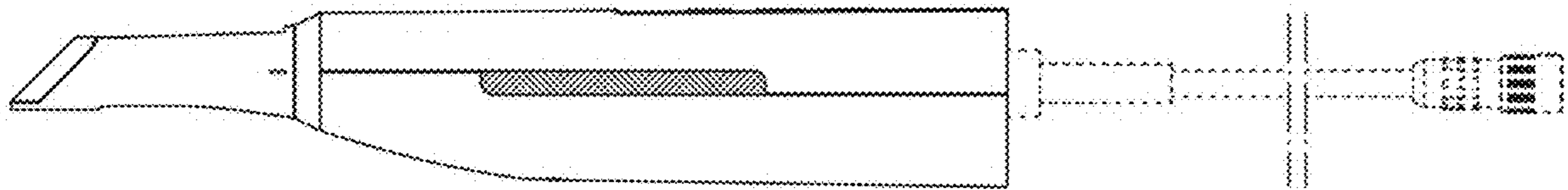
U.S. PATENT DOCUMENTS

D607,646 S * 1/2010 Ino D4/101
 D613,865 S * 4/2010 De Charentenay D24/152
 D616,992 S * 6/2010 Kitayama D24/186
 D619,717 S * 7/2010 Toshima D24/152
 D622,852 S * 8/2010 Berberich D28/50
 D627,471 S * 11/2010 Mueller D24/176
 D630,747 S * 1/2011 Shinohara D24/152
 D644,439 S * 9/2011 Shigeno D4/101
 D648,026 S * 11/2011 Okawa D24/152
 D653,340 S * 1/2012 Goerge D24/152
 D653,761 S * 2/2012 Lytle D24/209
 D658,760 S * 5/2012 Cox D24/144
 D672,047 S * 12/2012 Hsu D24/200
 D674,091 S * 1/2013 Carlson D24/152
 D688,464 S * 8/2013 Hara D4/138
 D701,606 S * 3/2014 Ohmukai D24/187
 D703,331 S * 4/2014 Kitayama D24/187
 D711,951 S * 8/2014 Mazuir D16/218
 D722,164 S * 2/2015 Graham, II D24/152
 D741,935 S * 10/2015 Sundheim D16/208
 D742,518 S * 11/2015 Barak D24/176
 D759,382 S * 6/2016 Watkins D4/101
 D760,901 S * 7/2016 Barak D24/158
 D766,580 S * 9/2016 Kollar D4/101
 D767,896 S * 10/2016 Shigeno D4/101
 D770,184 S * 11/2016 Gabriele D4/104
 D780,182 S * 2/2017 Klein D24/152
 D785,176 S * 4/2017 Tseng D16/208
 D797,933 S * 9/2017 Fleenor D24/144
 D800,897 S * 10/2017 Aneas D24/113
 D801,696 S * 11/2017 McGarry D4/101
 D809,123 S * 1/2018 Ishikawa D24/108
 D823,468 S * 7/2018 Frenkler D24/152
 D827,842 S * 9/2018 Bainton D24/200
 D837,993 S * 1/2019 Bailey D24/214
 D844,137 S * 3/2019 Sun D24/138

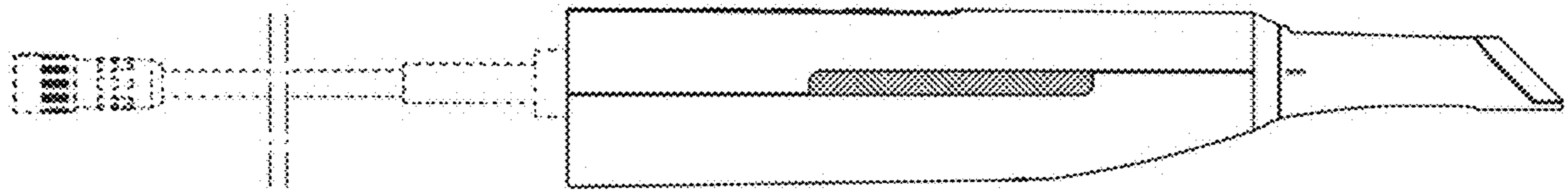
D857,196 S * 8/2019 Powell D24/133
 D857,994 S * 8/2019 Abou-Elsoud D28/58
 D878,588 S * 3/2020 Chang D24/152
 D884,175 S * 5/2020 Aubailly D24/152
 D890,340 S * 7/2020 Wohnhaas D24/158
 D890,341 S * 7/2020 Wohnhaas D24/158
 D891,784 S * 8/2020 Okai D4/101
 D892,341 S * 8/2020 Cheng D24/187
 D892,506 S * 8/2020 Okai D4/101
 D903,896 S * 12/2020 Tianhao D24/223
 D904,614 S * 12/2020 Inoue A61C 19/003
 D907,231 S * 1/2021 Zhou D24/215
 D908,160 S * 1/2021 Sun D16/208
 D911,713 S * 3/2021 Okai D4/101
 D911,714 S * 3/2021 Okai D4/101
 D916,288 S * 4/2021 Hansen D24/152
 D918,209 S * 5/2021 Kenworthy D14/453
 D941,513 S * 1/2022 He D26/37
 D943,790 S * 2/2022 Sheetz A61C 19/003
 D944,989 S * 3/2022 Ishizuka D24/152
 D945,618 S * 3/2022 Ramon Martinez D28/8
 D946,146 S * 3/2022 Gee D24/133
 D948,039 S * 4/2022 Dastmalchi D24/133
 D949,335 S * 4/2022 Liu D24/137
 D952,851 S * 5/2022 Chang D16/208
 D953,531 S * 5/2022 Ramon Martinez D24/147
 D956,987 S * 7/2022 Lewis D24/144
 D963,860 S * 9/2022 Han D24/152
 D964,747 S * 9/2022 Liu D24/152
 D965,149 S * 9/2022 Kaspo D24/147
 D965,785 S * 10/2022 Han D24/152
 D971,409 S * 11/2022 He D24/152
 D975,275 S * 1/2023 Ueda D24/138
 D976,406 S * 1/2023 Johnson A61C 17/022
 D977,095 S * 1/2023 Shainwald A61B 18/22
 D977,099 S * 1/2023 Julian A61C 19/04
 2020/0069168 A1 * 3/2020 Tanaka A61C 17/022
 2022/0087519 A1 * 3/2022 Foged A61B 1/07
 2022/0160211 A1 * 5/2022 Beerstecher A61B 1/00105
 2022/0273399 A1 * 9/2022 Lin A61B 18/22
 2022/0313094 A1 * 10/2022 Lee G01B 11/24
 2022/0401201 A1 * 12/2022 Jessop A61C 19/04

* cited by examiner

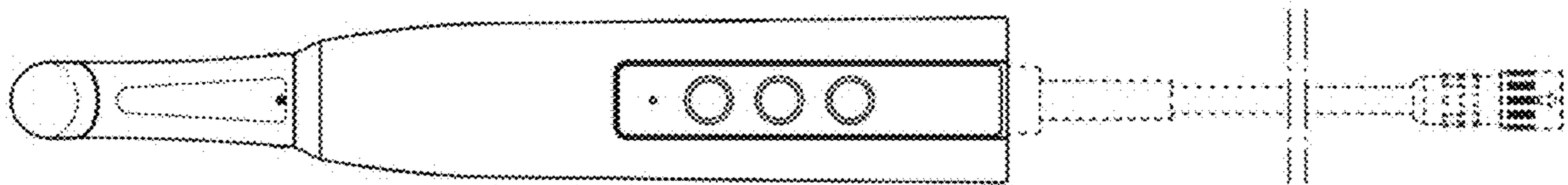
1.1



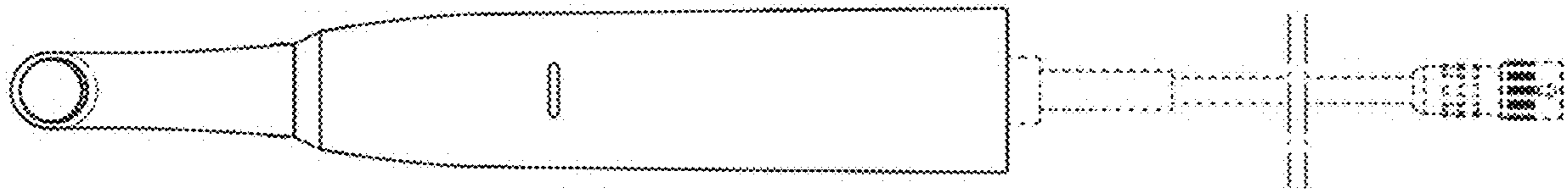
1.2



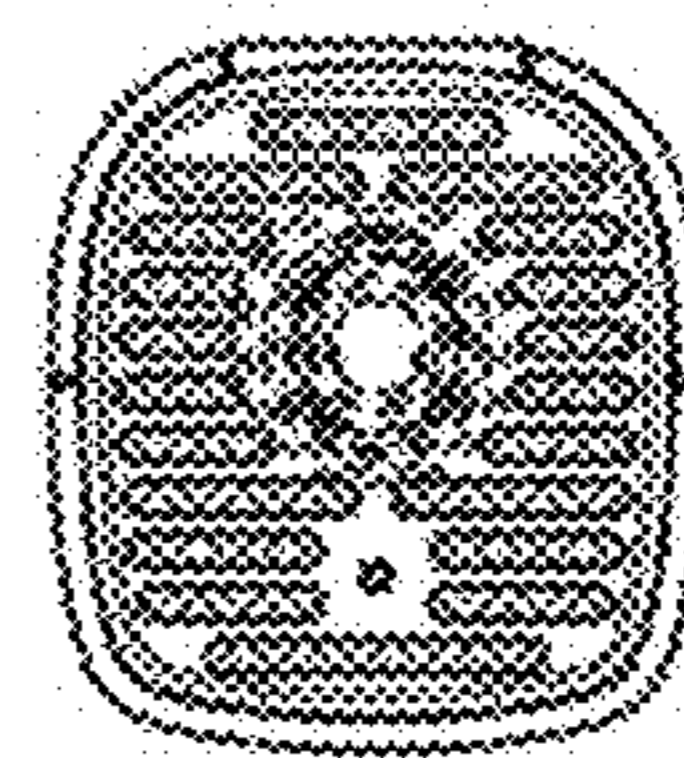
1.3



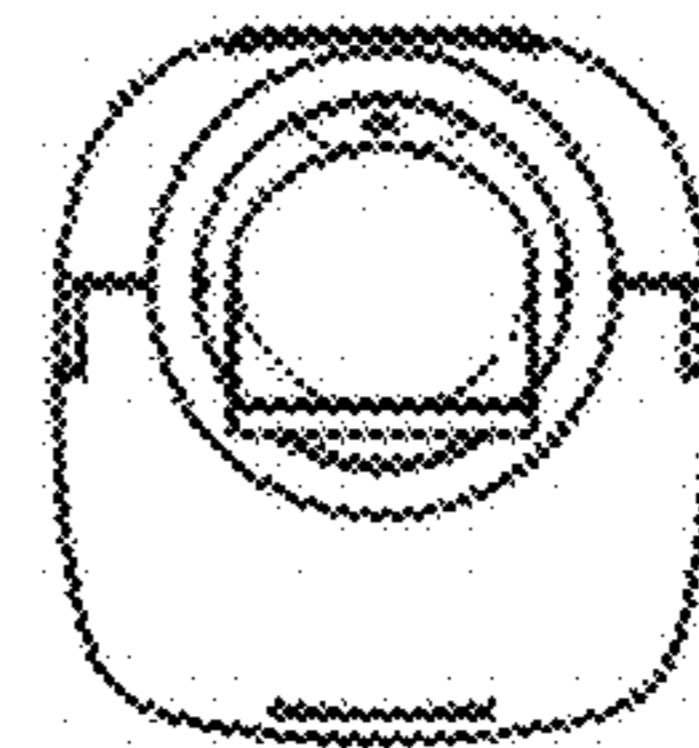
1.4



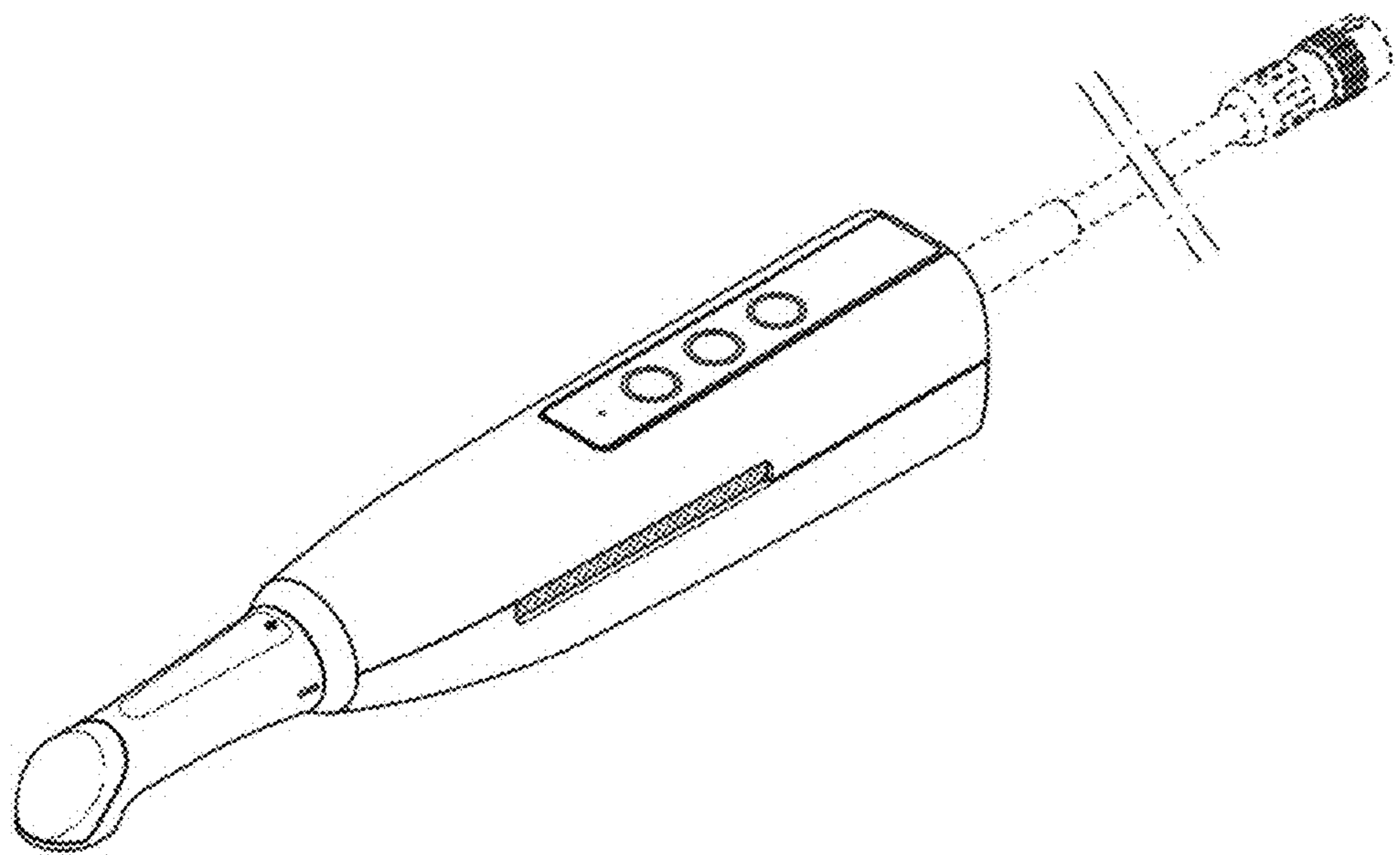
1.5



1.6



1.7



1.8

