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

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(54) **CONNECTOR**

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(**) Term: **14 Years**

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Related U.S. Application Data

(63) Continuation of application No. 29/456,487, filed on May 31, 2013, now Pat. No. Des. 707,681, which is a continuation of application No. 29/431,556, filed on Sep. 7, 2012, now Pat. No. Des. 684,976.

(51) **LOC (10) Cl.** **14-02**

(52) **U.S. Cl.**
USPC **D14/433**

(58) **Field of Classification Search**
USPC D14/356–358, 383–385, 420, 426, 427,
D14/432–439, 447, 453, 454, 217, 253,
D14/299; D13/107, 108, 133, 146, 147,
D13/152, 154, 156, 158, 162, 162.1, 168,
D13/173, 177, 153; 439/131, 172–174, 373,
439/378, 607.41, 607.55, 607.34, 40;
361/679.08, 679.56, 679.21, 679.4;
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CPC H01R 24/64; H01R 24/62; H01R 12/714;
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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D304,028 S 10/1989 Matsuzaki
5,179,501 A 1/1993 Ocken et al.

(Continued)

FOREIGN PATENT DOCUMENTS

AU 346798 S 2/2013
CN 201130377608.3 5/2012

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 29/375,909, Andre et al., “Connector,” filed Sep. 29, 2010.

(Continued)

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(57) **CLAIM**

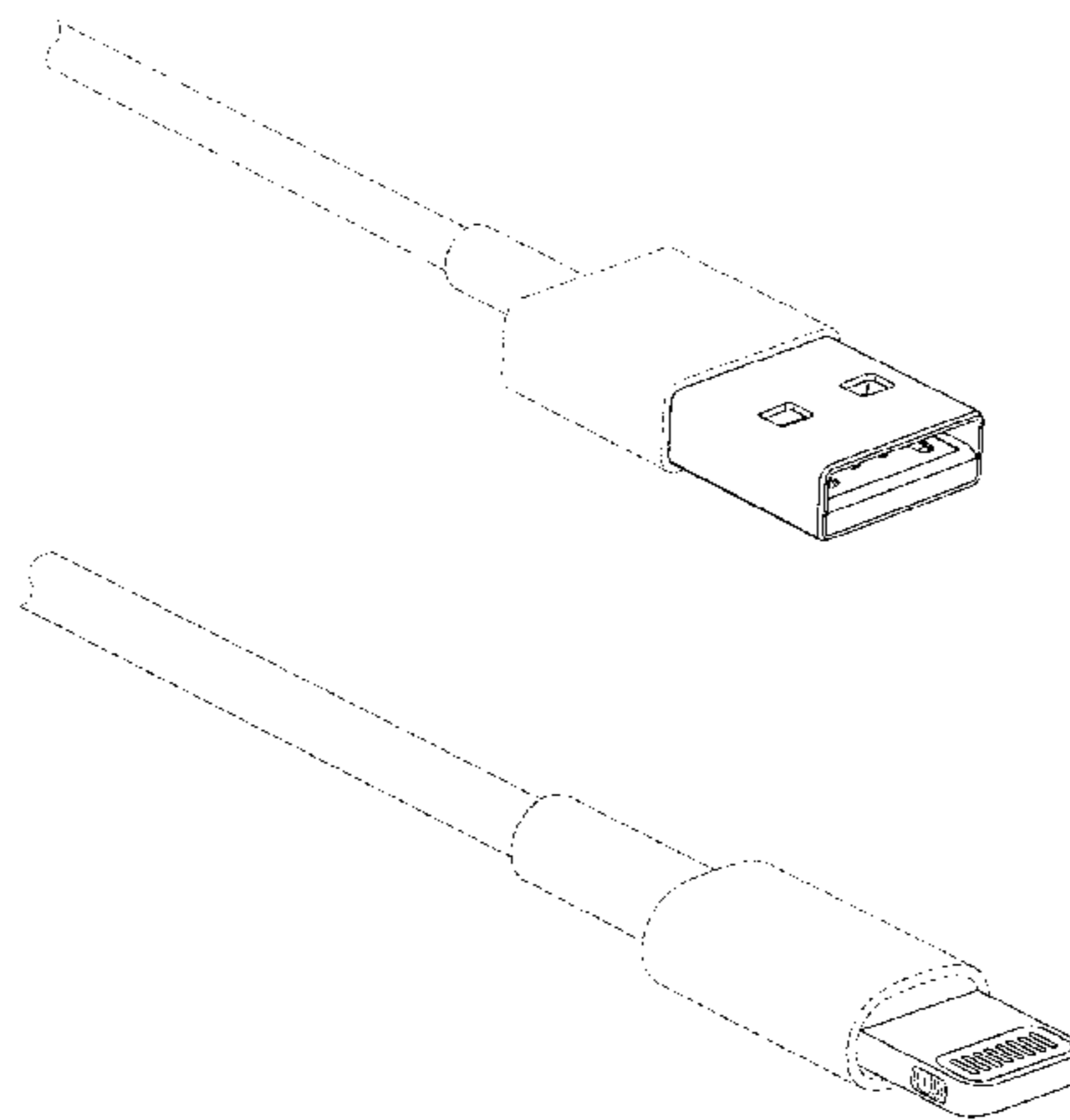
The ornamental design for a connector, as shown and described.

DESCRIPTION

FIG. 1 is a top view of a connector showing our new design; FIG. 2 is a top front perspective view of a portion thereof; FIG. 3 is a bottom rear perspective view thereof; FIG. 4 is a top view thereof; FIG. 5 is a bottom view thereof; FIG. 6 is a side view thereof, the other side view being a mirror image thereof; FIG. 7 is a front view thereof; FIG. 8 is a rear view thereof; FIG. 9 is a top front perspective view of another end of the connector of FIG. 1; FIG. 10 is a bottom rear perspective view thereof; FIG. 11 is a top view thereof, the bottom view being a mirror image thereof; FIG. 12 is a side view thereof, the other side view being a mirror image thereof; FIG. 13 is a front view thereof; and, FIG. 14 is a rear view thereof.

The broken lines in the Figures show portions of the connector that form no part of the claimed design. The shade lines in the Figures show contour and not surface ornamentation.

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D336,746 S 6/1993 Tse
 D369,157 S 4/1996 Ohmori et al.
 5,568,006 A 10/1996 Luff et al.
 D399,047 S 10/1998 Yoshida et al.
 6,137,710 A 10/2000 Iwasaki et al.
 D446,499 S 8/2001 Andre et al.
 D452,245 S 12/2001 Wallace et al.
 D452,246 S 12/2001 Wallace et al.
 D454,110 S 3/2002 Andre et al.
 6,483,038 B2 11/2002 Lee et al.
 6,522,534 B1 2/2003 Wu
 D487,747 S 3/2004 Yu et al.
 D490,796 S 6/2004 Allen
 D515,545 S 2/2006 Griffin
 D522,463 S 6/2006 Novotney et al.
 D525,977 S 8/2006 Yao
 7,094,089 B2 8/2006 Andre et al.
 D531,127 S 10/2006 Zhong et al.
 D534,184 S 12/2006 Leija et al.
 D534,545 S 1/2007 Leija et al.
 D537,036 S 2/2007 Chen
 D537,780 S 3/2007 Suckle
 D543,156 S 5/2007 Suckle
 D548,700 S 8/2007 Ledbetter et al.
 D552,099 S 10/2007 Nishizawa et al.
 D552,604 S * 10/2007 Andre et al. D14/242
 D558,145 S 12/2007 Stavoe et al.
 D563,899 S 3/2008 Goetz et al.
 7,341,472 B2 3/2008 Chao et al.
 D565,571 S 4/2008 Trifilio
 7,354,312 B2 4/2008 Chuang
 D569,848 S 5/2008 Suzuki
 D574,365 S 8/2008 Andre et al.
 D577,008 S 9/2008 Andre et al.
 D577,990 S 10/2008 Andre et al.
 D578,991 S 10/2008 Donovan et al.
 D585,835 S 2/2009 Jaqua et al.
 D586,293 S 2/2009 Fujino
 D587,209 S 2/2009 Tsai et al.
 D588,545 S 3/2009 Andre et al.
 D594,418 S 6/2009 Fujino et al.
 D599,740 S 9/2009 Guccione et al.
 D599,800 S 9/2009 Klein et al.
 D600,652 S 9/2009 Hong et al.
 D604,725 S 11/2009 Chen
 D605,650 S 12/2009 Ribeiro
 D607,886 S 1/2010 Bolotin et al.
 D612,809 S 3/2010 Zhao et al.
 D617,776 S 6/2010 Hightower
 D618,226 S 6/2010 Tong et al.
 D618,240 S 6/2010 Larmour et al.
 D619,127 S 7/2010 Tong et al.
 D619,963 S * 7/2010 Hou D13/133
 D621,785 S 8/2010 Nickol
 D624,548 S 9/2010 Yamamoto
 D626,513 S 11/2010 Lin
 D628,151 S 11/2010 Wegener et al.
 D628,537 S 12/2010 Nagata et al.
 D631,883 S 2/2011 Maier
 D631,885 S 2/2011 Maier
 D634,326 S 3/2011 Gehrke
 D635,142 S 3/2011 Borislow
 D636,337 S 4/2011 Smith et al.
 D637,193 S 5/2011 Andre et al.
 D641,023 S 7/2011 Chen et al.
 D643,040 S 8/2011 Sedio et al.
 D644,611 S 9/2011 Sasaki et al.
 D648,726 S 11/2011 Behar et al.
 D655,296 S 3/2012 Andre et al.
 D656,147 S 3/2012 Schlossstein
 D658,665 S 5/2012 Akana et al.
 D659,150 S 5/2012 Andre
 D665,734 S 8/2012 Fitch et al.
 D665,754 S 8/2012 Cobbett et al.
 D675,990 S 2/2013 Sculler

D680,076 S 4/2013 McManigal
 D680,539 S 4/2013 Kim
 D682,835 S 5/2013 Daniel
 D683,703 S 6/2013 Akana et al.
 D684,538 S 6/2013 Akana et al.
 D684,539 S 6/2013 Akana et al.
 D684,976 S 6/2013 Akana et al.
 8,454,388 B2 6/2013 Song
 8,461,465 B2 * 6/2013 Golko et al. 174/359
 D692,390 S * 10/2013 Smith et al. D13/153
 8,561,879 B2 10/2013 Jol et al.
 D693,828 S 11/2013 Akana et al.
 D694,243 S 11/2013 Akana et al.
 8,602,822 B2 * 12/2013 Siahhaan et al. 439/607.41
 8,637,165 B2 1/2014 Siahhaan et al.
 D699,188 S 2/2014 Akana et al.
 8,686,600 B2 * 4/2014 Terlizzi et al. 307/125
 D709,032 S * 7/2014 Akana et al. D13/147
 8,777,666 B2 * 7/2014 Golko et al. 439/607.34
 8,784,136 B2 * 7/2014 Siahhaan et al. 439/607.55
 D713,350 S * 9/2014 Akana et al. D13/147
 8,926,337 B2 * 1/2015 Siahhaan et al. 439/40
 2002/0170972 A1 11/2002 Kim
 2003/0225954 A1 12/2003 Wu
 2005/0109841 A1 5/2005 Ryan et al.
 2005/0124219 A1 6/2005 Chen et al.
 2005/0202727 A1 9/2005 Andre et al.
 2007/0123106 A1 5/2007 Zhang
 2007/0229025 A1 10/2007 Tsai et al.
 2007/0293079 A1 12/2007 Chao et al.
 2010/0151734 A1 6/2010 Wu et al.
 2011/0199729 A1 8/2011 Hsieh
 2012/0252256 A1 10/2012 Zhu et al.
 2013/0084760 A1 4/2013 Siahhaan et al.
 2013/0175326 A1 7/2013 Jol et al.
 2013/0238823 A1 9/2013 Terlizzi et al.
 2013/0244472 A1 9/2013 Weber et al.
 2013/0244489 A1 9/2013 Terlizzi et al.
 2013/0244491 A1 9/2013 Sarwar et al.
 2013/0244492 A1 9/2013 Golko et al.
 2013/0279055 A1 10/2013 Mullins et al.
 2013/0286522 A1 10/2013 Mullins et al.
 2013/0304942 A1 11/2013 Golembeski et al.
 2013/0305066 A1 11/2013 Mullins et al.
 2014/0057479 A1 2/2014 Weber et al.

FOREIGN PATENT DOCUMENTS

EM 000623848-0001 2/2007
 EM 001222905-0018 10/2010
 EM 001945981-0002 11/2011
 JP D1341475 10/2008
 WO WO 2006/074348 A1 7/2006
 WO WO 2011/150403 A1 12/2011
 WO WO 2011/160138 A2 12/2011
 WO WO 2011/163256 A1 12/2011
 WO WO 2011/163260 A1 12/2011
 WO WO 2012/103383 A2 8/2012
 WO WO 2013/0817041 6/2013

OTHER PUBLICATIONS

Apple iPad Camera Connection Kit, <http://store.apple.com/us/product/MC531ZM/A/apple-ipad-camera-connection-kit?fnode=3a&fs=m.ipadCompatibility%3Dipad2>, accessed on Aug. 28, 2013, 3 pages.
 Apple 30-pin Digital AV Adapter, <http://store.apple.com/us/product/MD098ZM/A/apple-digital-av-adapter?fnode=3a&fs=m.ipadCompatibility%3Dipad2>, accessed on Aug. 28, 2013, 3 pages.
 Apple 30-pin to VGA Adapter, <http://store.apple.com/us/product/MC552ZM/B/apple-vga-adapter?fnode=3a&fs=m.ipadCompatibility%3Dipad2>, accessed on Aug. 28, 2013, 4 pages.
 Apple 30-pin to USB Cable, http://store.apple.com/us_smb_78313/product/MA591G/C/apple-30-pin-to-usb-cable, accessed on Aug. 28, 2013, 3 pages.

* cited by examiner

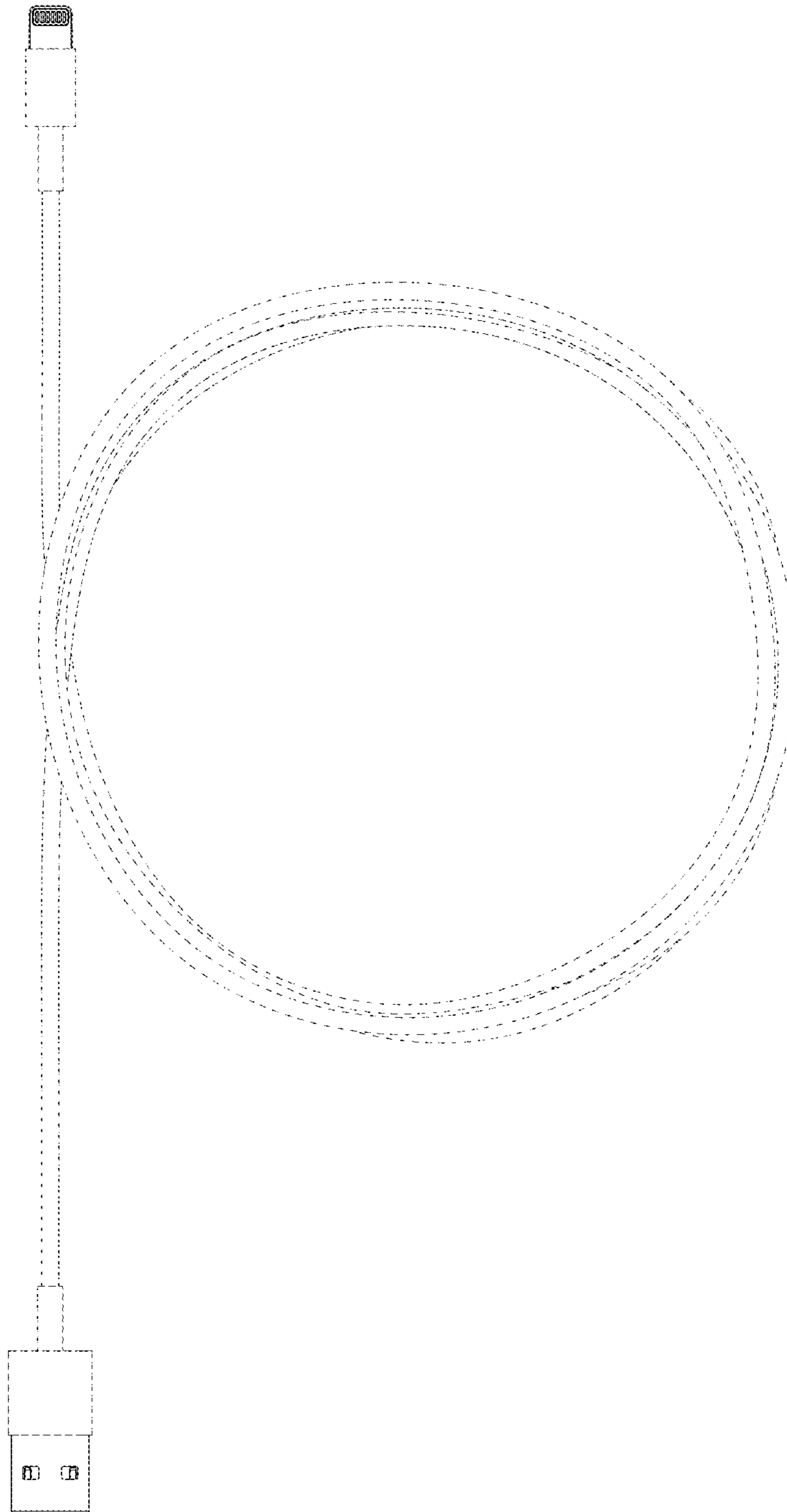


FIG. 1

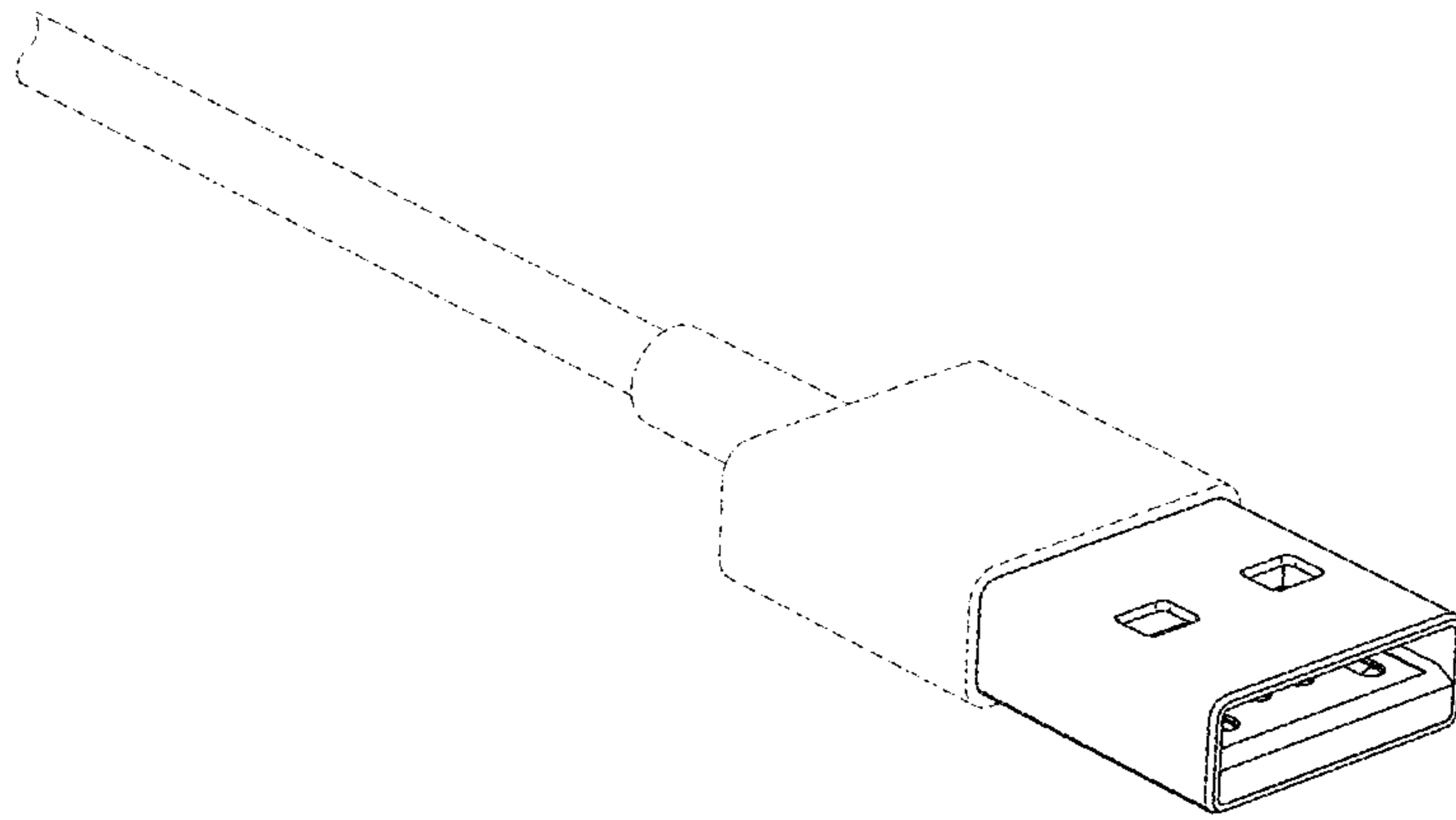


FIG. 2

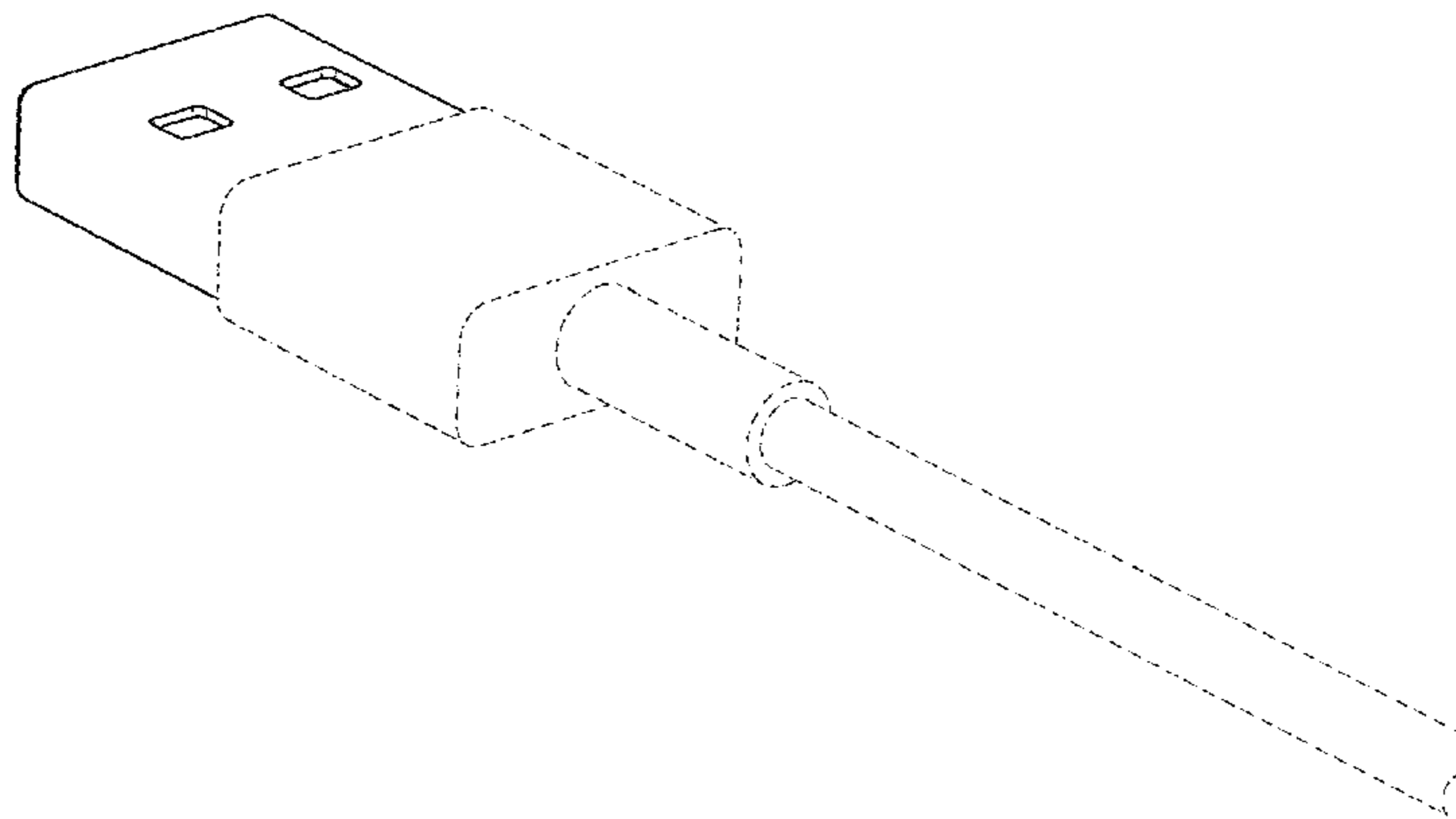


FIG. 3

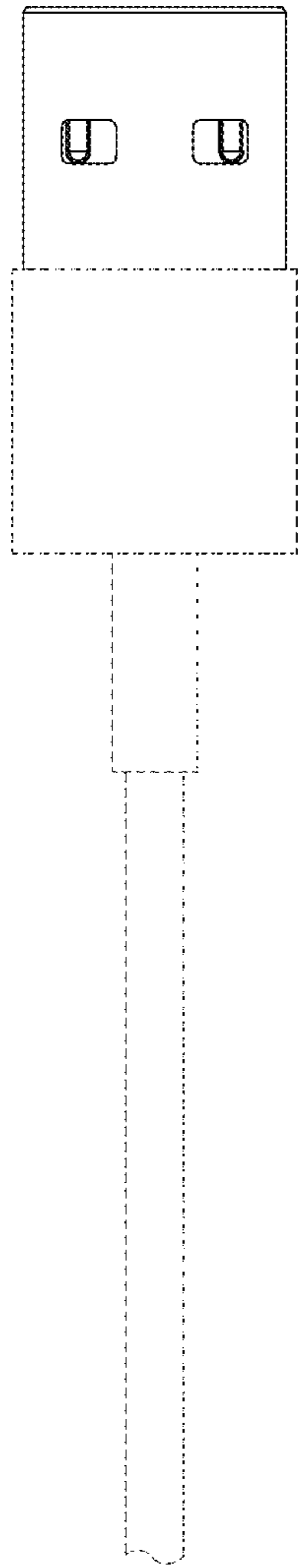


FIG. 4

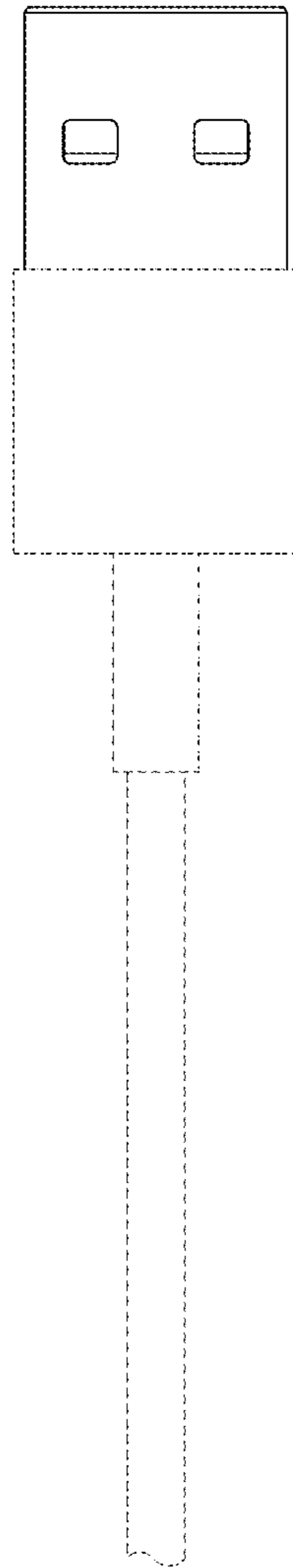


FIG. 5

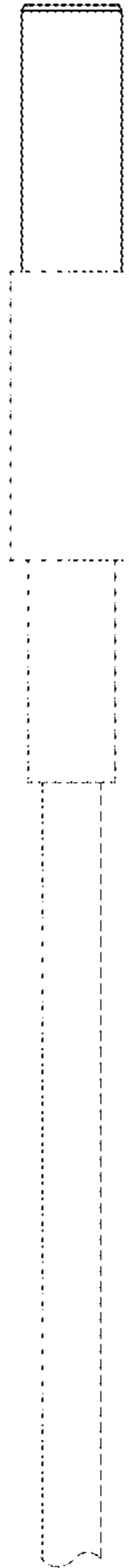


FIG. 6

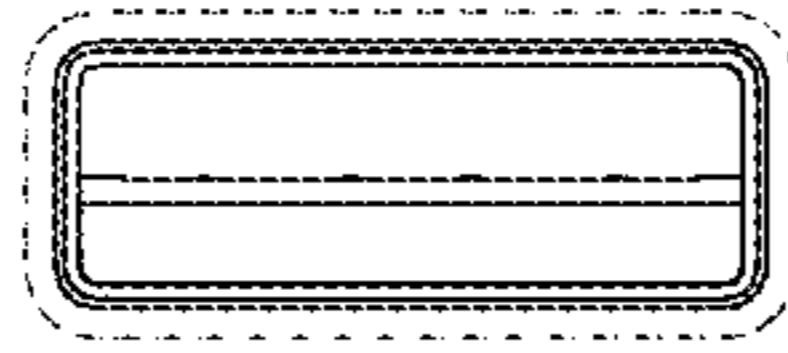


FIG. 7



FIG. 8

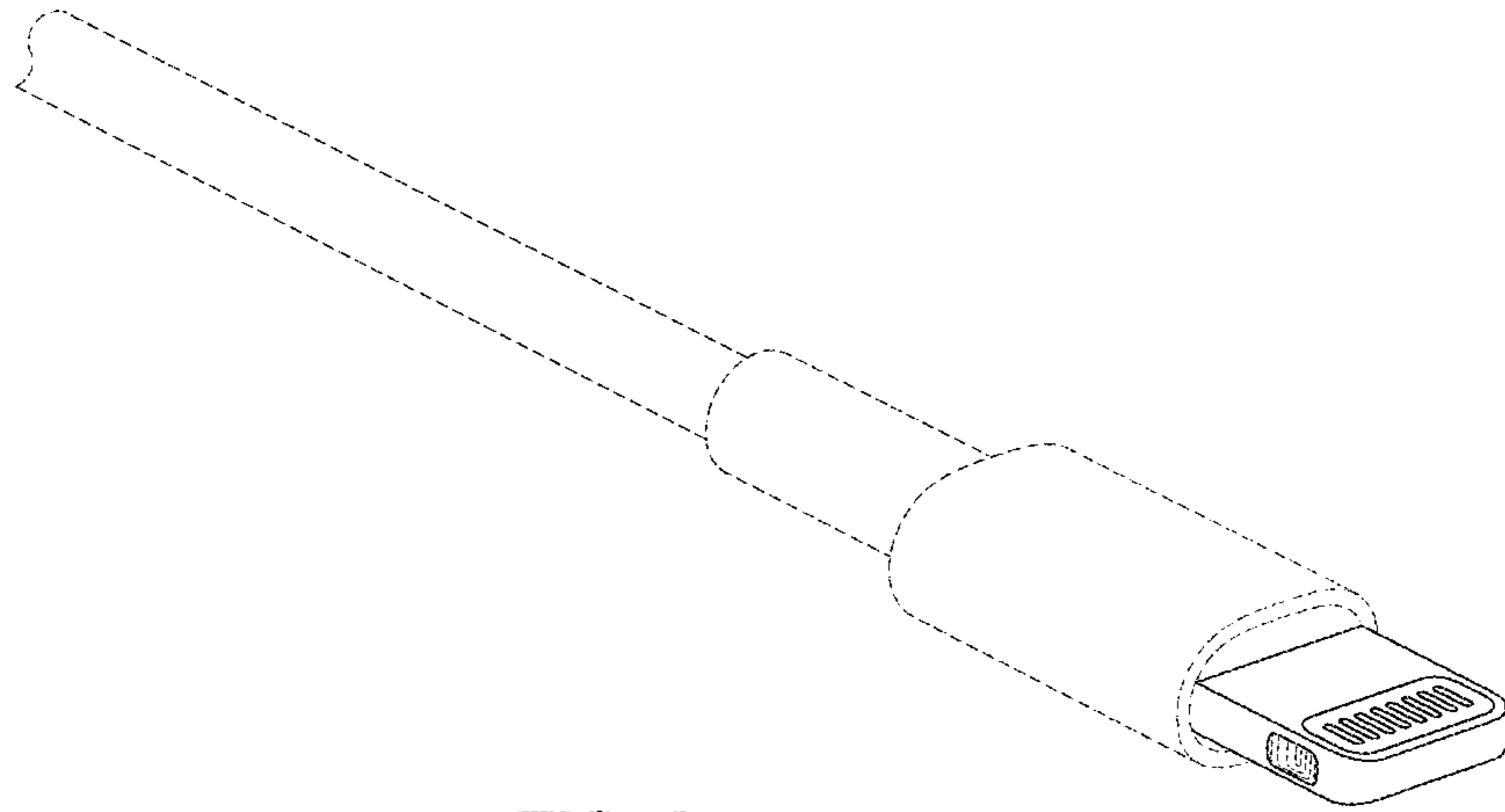


FIG. 9

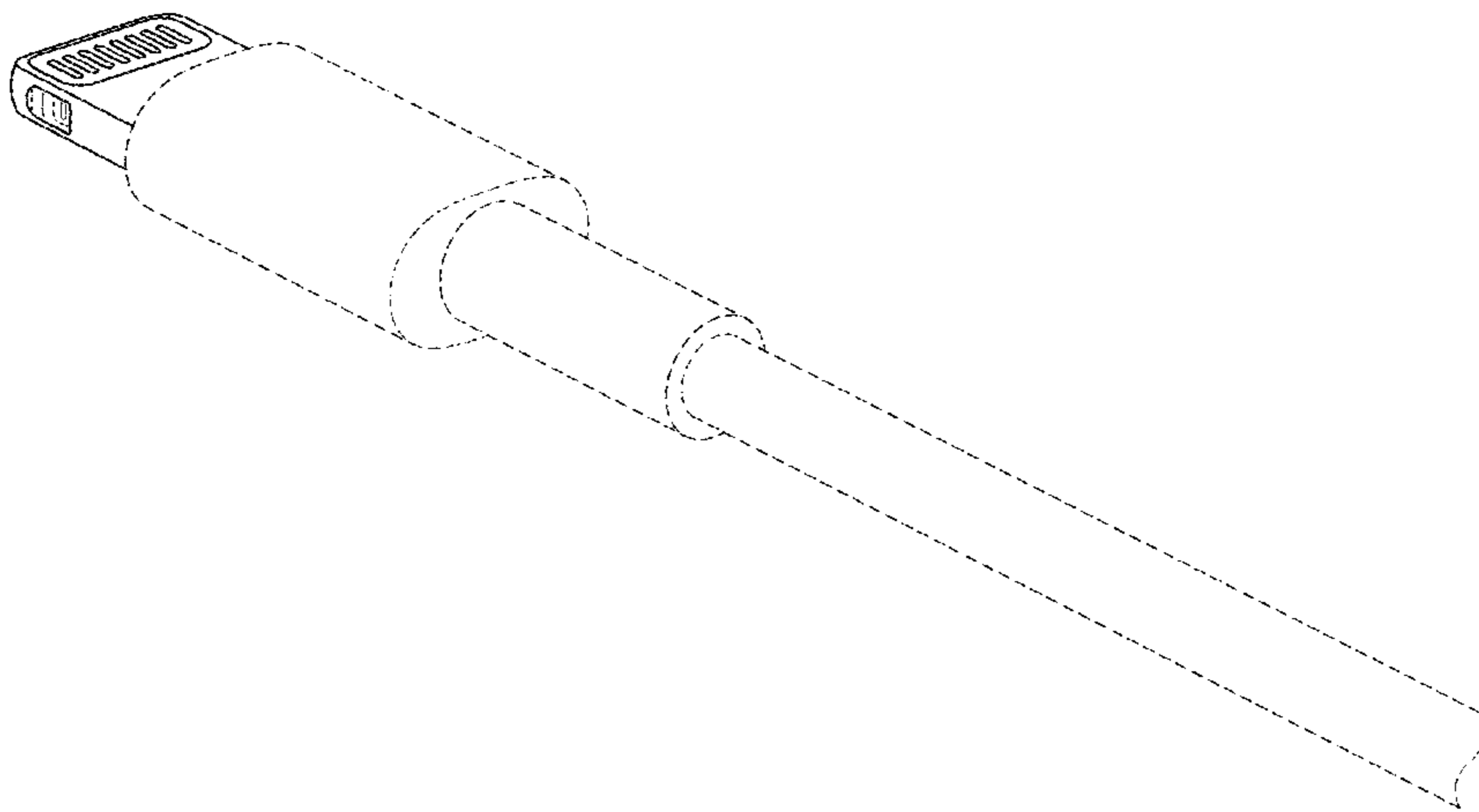


FIG. 10

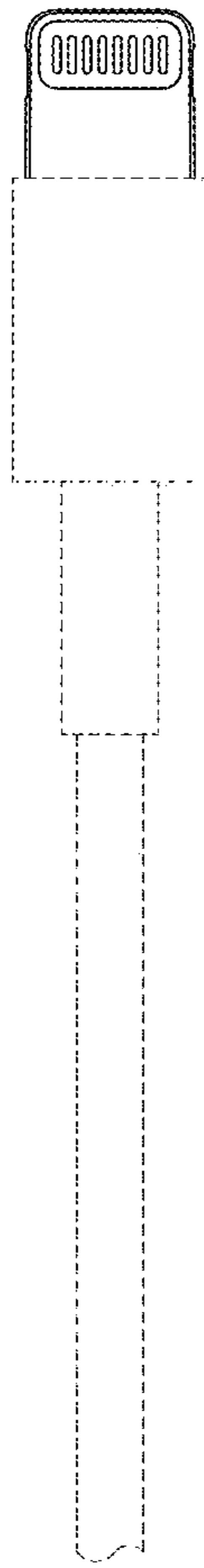


FIG. 11

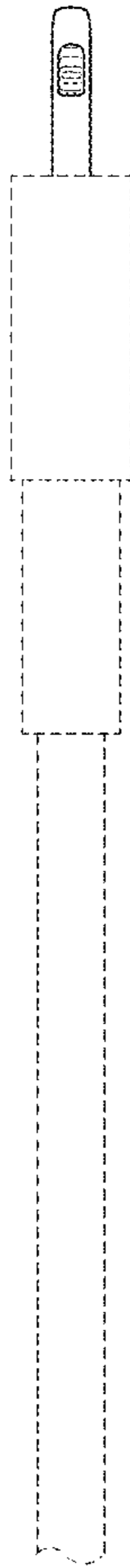


FIG. 12

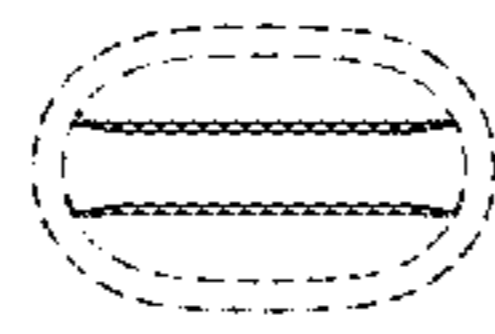


FIG. 13

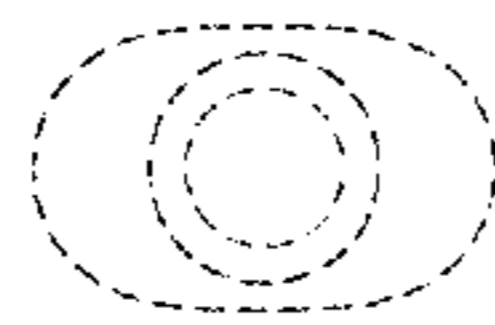


FIG. 14