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(12) **United States Design Patent** (10) **Patent No.:** **US D840,401 S**  
**Lim et al.** (45) **Date of Patent:** **\*\* Feb. 12, 2019**

(54) **RADIO FREQUENCY IDENTIFICATION (RFID) READER**

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

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(51) **LOC (11) Cl.** ..... **14-02**

(52) **U.S. Cl.**  
USPC ..... **D14/428**

(58) **Field of Classification Search**  
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CPC ..... G06F 1/626; G06F 1/1626; G06F 1/1656; G06F 1/1632; G06F 1/1684; G06F 1/1635; G06F 8/63; G06F 17/30091; G06F 9/4401; G06K 7/10881; G06K 7/1098; G06K 7/10722; G06K 7/1404; G06K 7/0004; G06K 7/10633; G06K 7/10851; G06K 7/1091; G06K 7/1092;

G06K 7/1093; G06K 7/10; G06K 7/109; G06K 7/1417; G06K 9/228; G06K 17/0022; G06K 17/00; G06K 2207/1011; G06K 2207/1013; G06K 2207/1016; G06K 2207/1018; G06K 2017/0051; G06K 2017/0067; G06K

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D256,469 S \* 8/1980 Stemme ..... D16/206  
5,200,599 A \* 4/1993 Krichever ..... G06K 7/10643  
235/462.38

(Continued)

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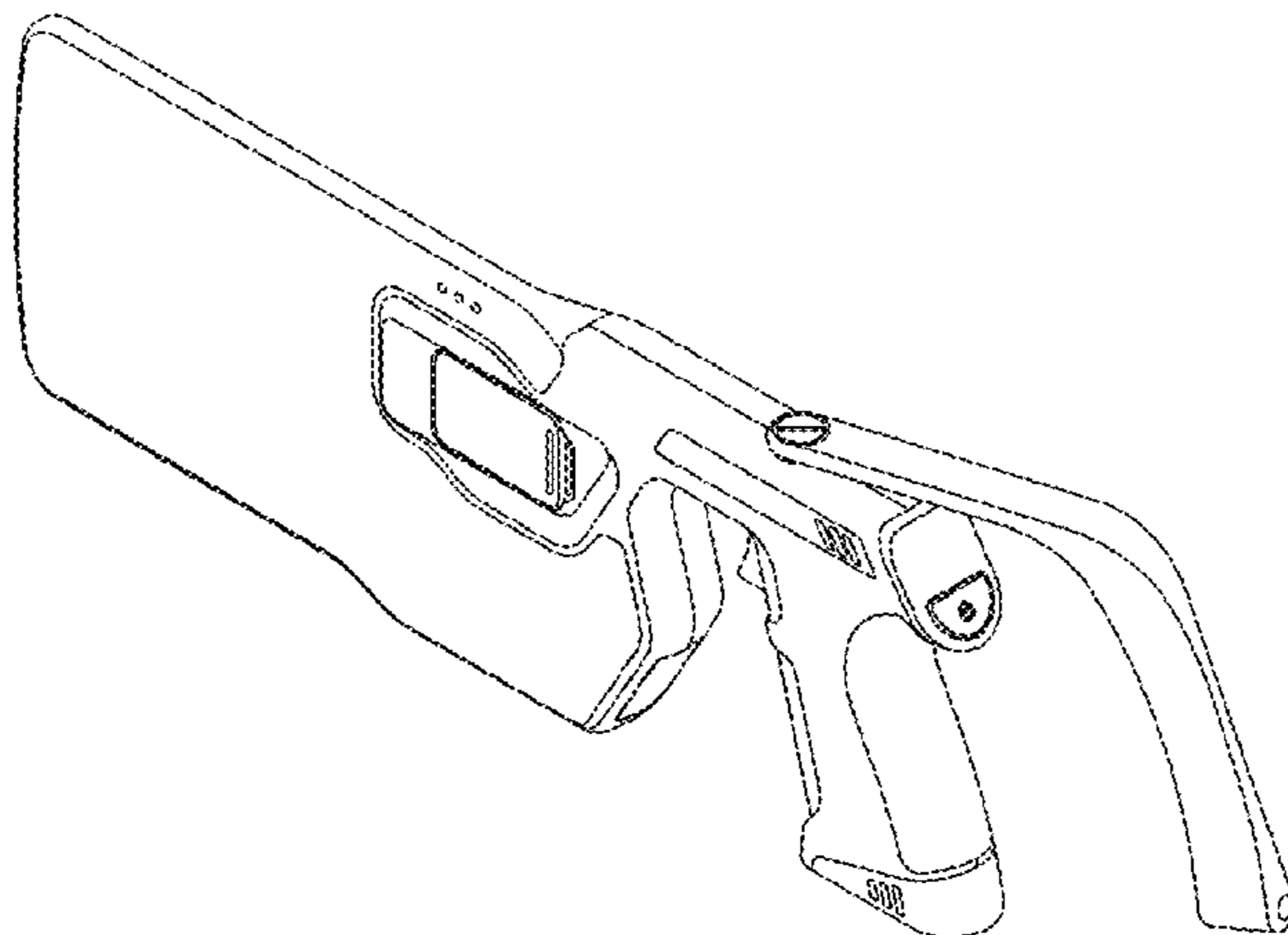
(57) **CLAIM**

The ornamental design for a radio frequency identification (RFID) reader, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a radio frequency identification (RFID) reader showing our new design; FIG. 2 is a front elevation view thereof; FIG. 3 is a rear elevation view thereof; FIG. 4 is a left side view thereof; FIG. 5 is a right side view thereof; FIG. 6 is a top plan view thereof; FIG. 7 is a bottom plan view thereof; FIG. 8 is another perspective view of the radio frequency identification (RFID) reader showing a state in which the rotatably mounted barcode reader component has been rotated; and, FIG. 9 is another perspective view of the radio frequency identification (RFID) reader, showing a state in which a grip portion of the reader has been rotated.

**1 Claim, 6 Drawing Sheets**



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## (58) Field of Classification Search

CPC ..... 2007/10524; G06K 19/0722; G06K 19/07758; G06K 19/0723; G06K 7/1095; G06K 7/089; G06K 7/10821; G06K 7/10386; G06K 7/10356; G06K 7/10316; G06K 7/10346; G06K 7/10366; G06K 7/10237; G07G 1/0081; G07G 1/009; G06Q 20/20; G06Q 20/201; G06Q 20/202; G06Q 20/203; G06Q 20/30; G06Q 20/32; G06Q 20/322; G06Q 20/4014; G06Q 10/087; G06Q 10/0875; G06Q 30/0635; G06Q 30/0639; H04N 1/00127; H04N 1/00135; H04N 1/00326; H04N 1/00334; H04N 1/00307; H04N 1/107; H04N 2201/0084; H04N 2101/00; H04M 1/0249; H04M 1/0262; H04M 1/0266; H04M 1/18; H04M 1/23; H04M 1/236; H04B 1/3827; H04B 1/3833; H04B 1/3877; H04B 1/3883; H04B 1/3888; H04B 2001/3894; H01M 2/1066; H01Q 1/2225; G01C 15/00

See application file for complete search history.

(56)

## References Cited

### U.S. PATENT DOCUMENTS

6,232,870 B1 \* 5/2001 Garber ..... G06K 7/0008  
235/385  
6,277,067 B1 \* 8/2001 Blair ..... A61B 1/00041  
348/77  
D470,847 S \* 2/2003 Carlson ..... D14/428  
D504,407 S \* 4/2005 Cohen ..... D13/144  
D723,564 S \* 3/2015 Lim ..... D14/428  
9,239,590 B2 \* 1/2016 Vargas ..... G06F 1/1632  
2001/0008390 A1 \* 7/2001 Berquist ..... G06K 7/10079  
340/10.31  
2004/0056760 A1 \* 3/2004 Fukuoka ..... G06K 7/10881  
340/10.3  
2008/0163504 A1 \* 7/2008 Smith ..... G01C 17/30  
33/268  
2009/0090864 A1 \* 4/2009 Glatzmaier ..... G01J 5/04  
250/330  
2015/0255873 A1 \* 9/2015 Chan ..... H01Q 9/285  
343/806  
2016/0078257 A1 \* 3/2016 Liou ..... G06K 7/10792  
340/10.3  
2017/0004336 A1 \* 1/2017 Lim ..... G06K 7/10009

\* cited by examiner

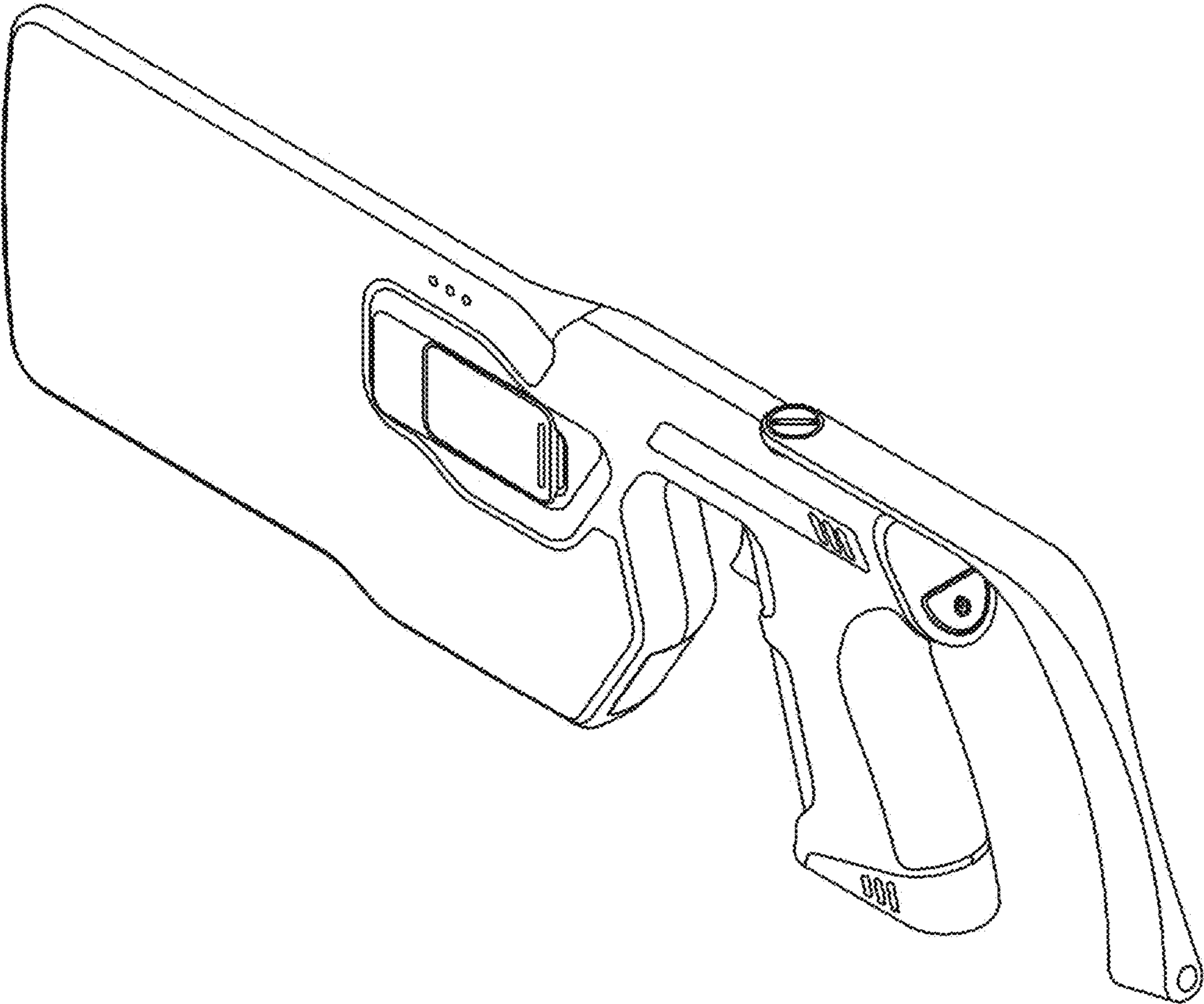


FIG. 1

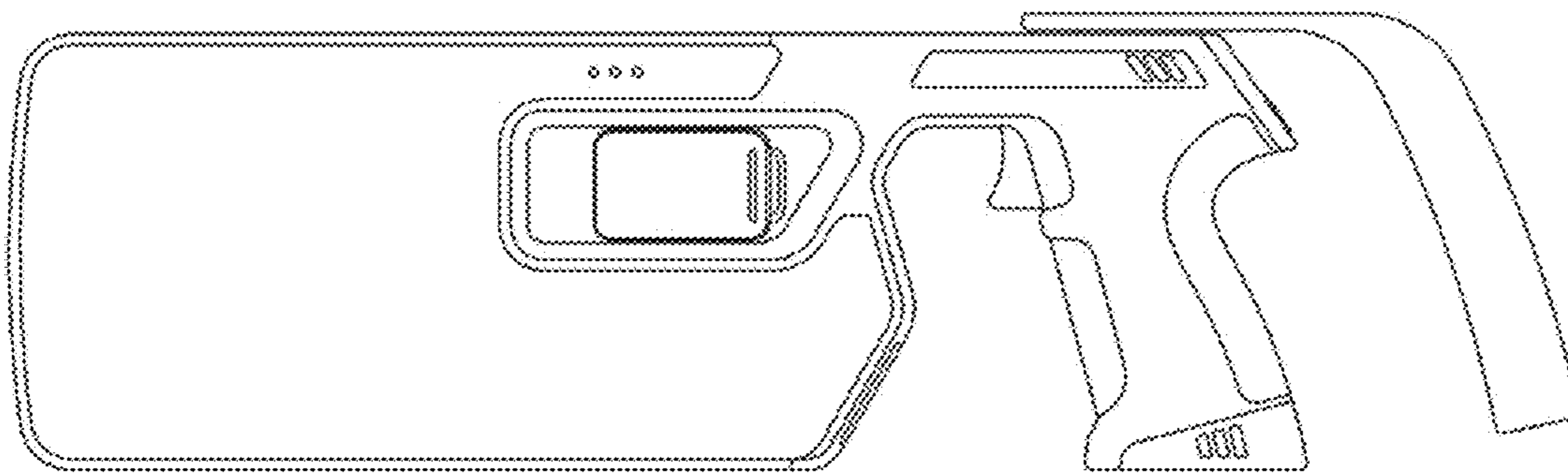


FIG. 2

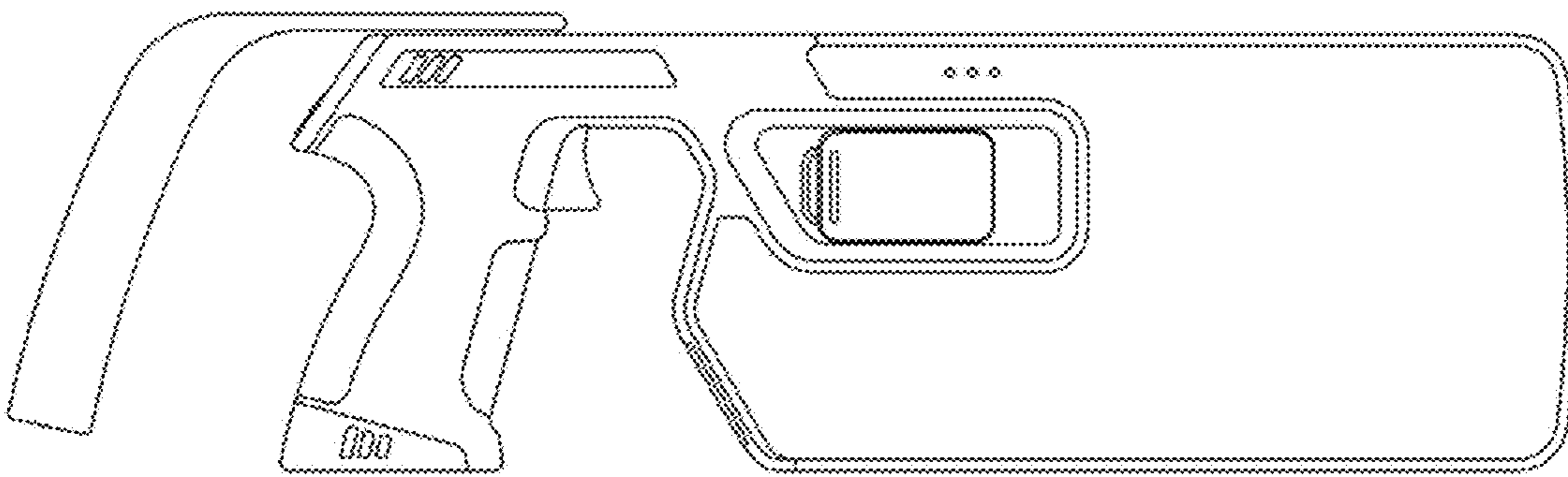


FIG. 3



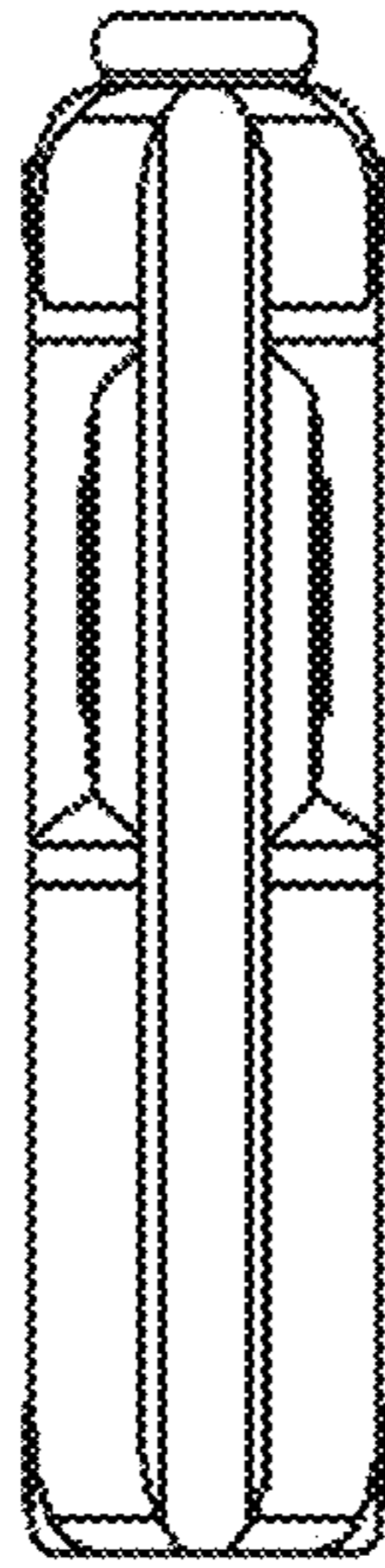


FIG. 4



FIG. 5

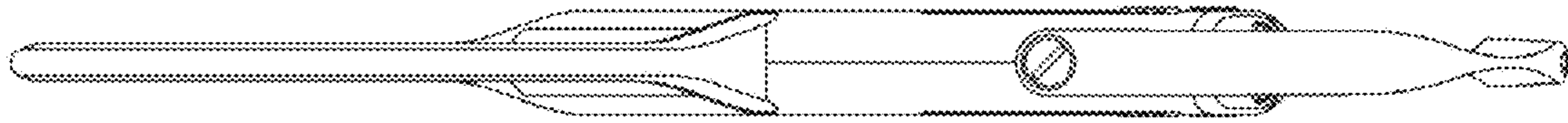


FIG. 6

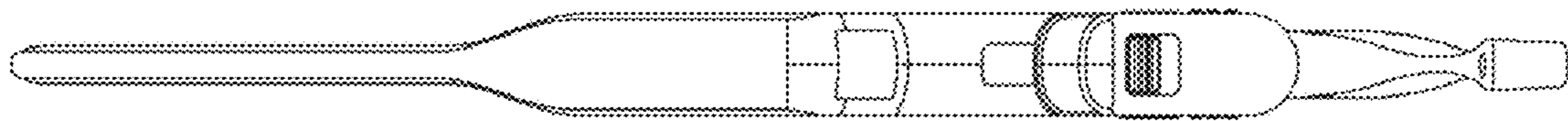


FIG. 7

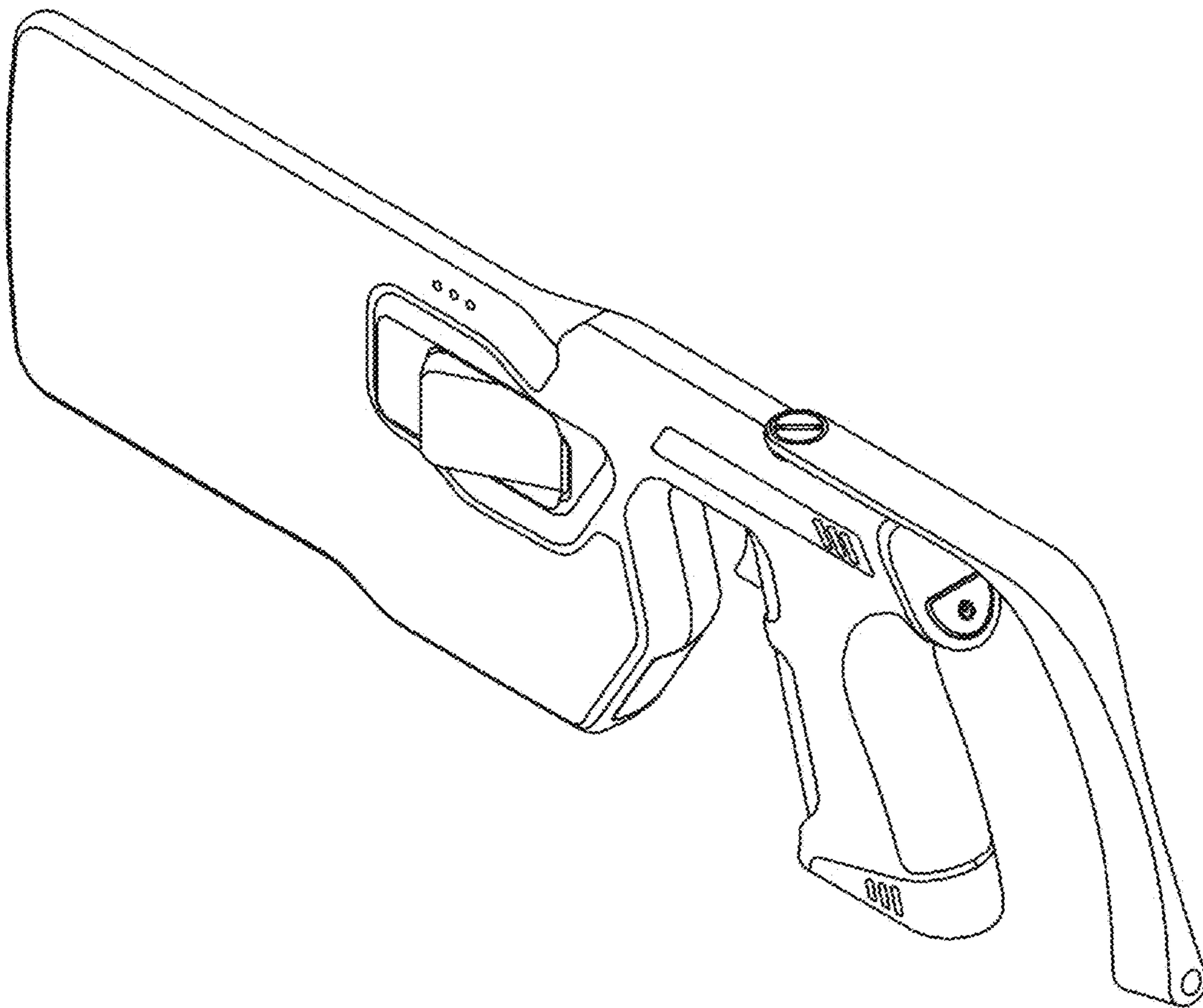


FIG. 8

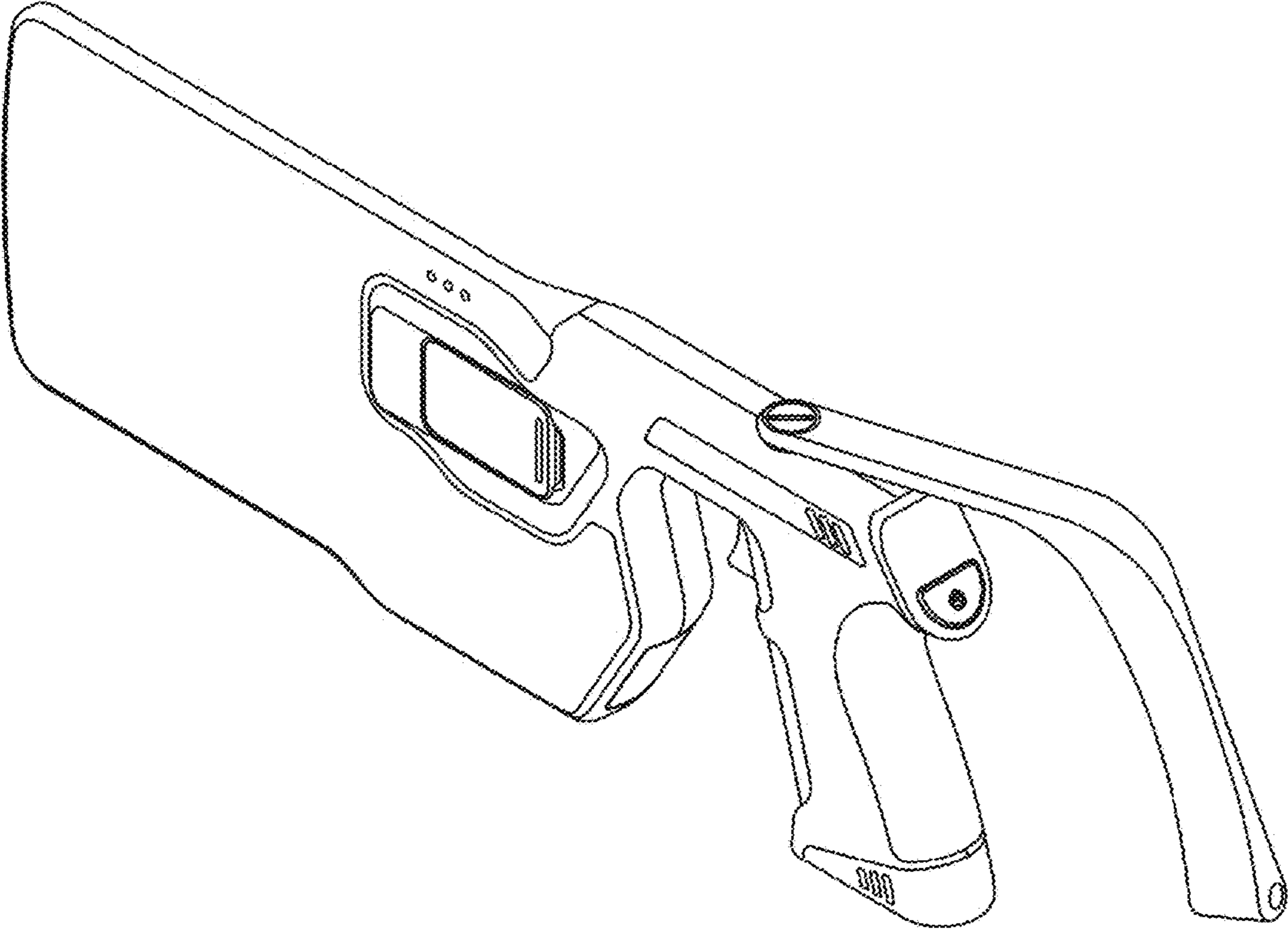


FIG. 9