



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

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(54) **POSITION DETECTING SWITCH**  
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(73) Assignee: **SMC CORPORATION**, Tokyo (JP)  
(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/665,437**

2002/0014128 A1\* 2/2002 Kroll ..... F15B 15/2807  
73/866.5  
2002/0100336 A1\* 8/2002 Sakurai ..... F15B 15/2807  
73/866.5  
2004/0031385 A1\* 2/2004 Neuhaeuser ..... F15B 15/2892  
92/5 R  
2005/0194239 A1\* 9/2005 Terasaki ..... F15B 15/2892  
200/61.39  
2013/0263733 A1\* 10/2013 Machijima ..... F15B 15/28  
92/5 R  
2015/0316396 A1\* 11/2015 Mandokoro ..... F15B 15/2892  
73/431  
2019/0170494 A1\* 6/2019 Tiemann ..... G01B 7/003

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(30) **Foreign Application Priority Data**

**FOREIGN PATENT DOCUMENTS**

CN 302908451 S 8/2014  
CN 304431106 S 12/2017

Apr. 4, 2018 (CN) ..... 2018 3 0132462  
(51) **LOC (12) Cl.** ..... **13-03**  
(52) **U.S. Cl.**  
USPC ..... **D13/158**  
(58) **Field of Classification Search**  
USPC ..... D13/110, 118, 123, 133, 154, 158-161,  
D13/173, 178, 184, 199  
CPC . G01B 7/00; G01B 7/003; G01B 7/14; G01D  
11/24; F15B 15/00; F15B 15/28; F15B  
15/2892; H01C 10/30; H01H 3/16; H01H  
1/42; H01H 9/16; H05K 7/00; H05K  
7/02; H05K 7/04  
See application file for complete search history.

\* cited by examiner

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(56) **References Cited**

(57) **CLAIM**

The ornamental design for a position detecting switch, as shown and described.

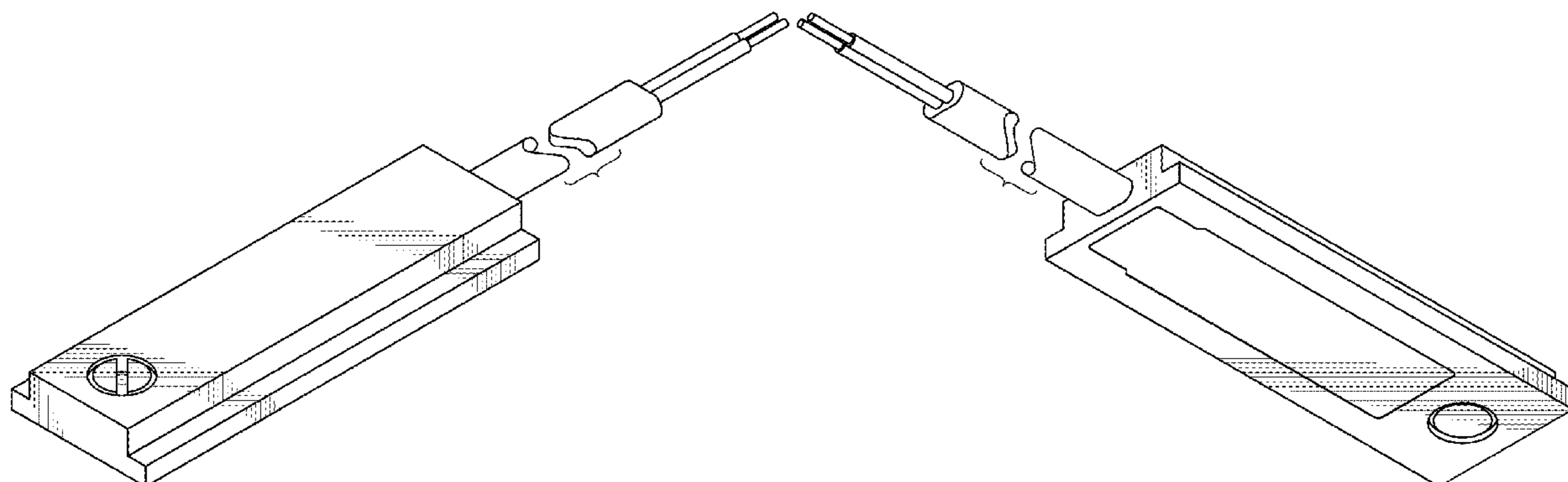
**U.S. PATENT DOCUMENTS**

**DESCRIPTION**

4,221,975 A \* 9/1980 Ledniczki ..... H03K 17/962  
307/116  
5,118,910 A \* 6/1992 Duhon ..... H01H 3/142  
200/275  
5,413,505 A \* 5/1995 Hayes ..... H01H 85/24  
439/620.3  
D656,169 S \* 3/2012 Fukano ..... D15/143  
D689,445 S \* 9/2013 Chu ..... D13/158  
D738,827 S \* 9/2015 Lo ..... D13/154

FIG. 1 is a front, top and left side perspective view of a position detecting switch showing our new design;  
FIG. 2 is a rear, bottom and right side perspective view thereof;  
FIG. 3 is a front view thereof;  
FIG. 4 is a rear view thereof;  
FIG. 5 is a top plan view thereof;  
FIG. 6 is a bottom plan view thereof;  
FIG. 7 is a left side view thereof; and,  
FIG. 8 is a right side view thereof.  
The drawings include a separation and a bracket and the appearance of any portion of the article between the break lines forms no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



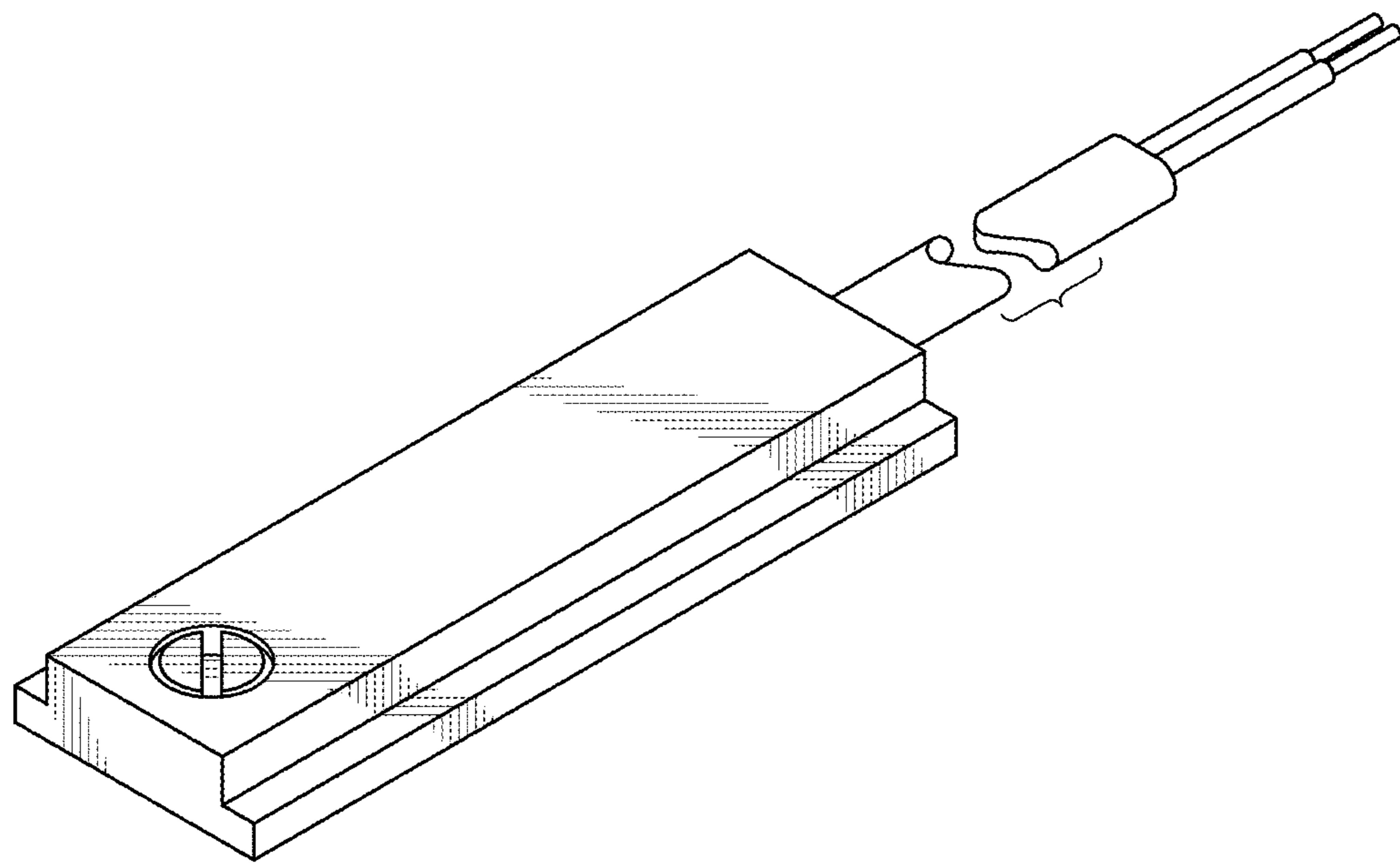


FIG.1

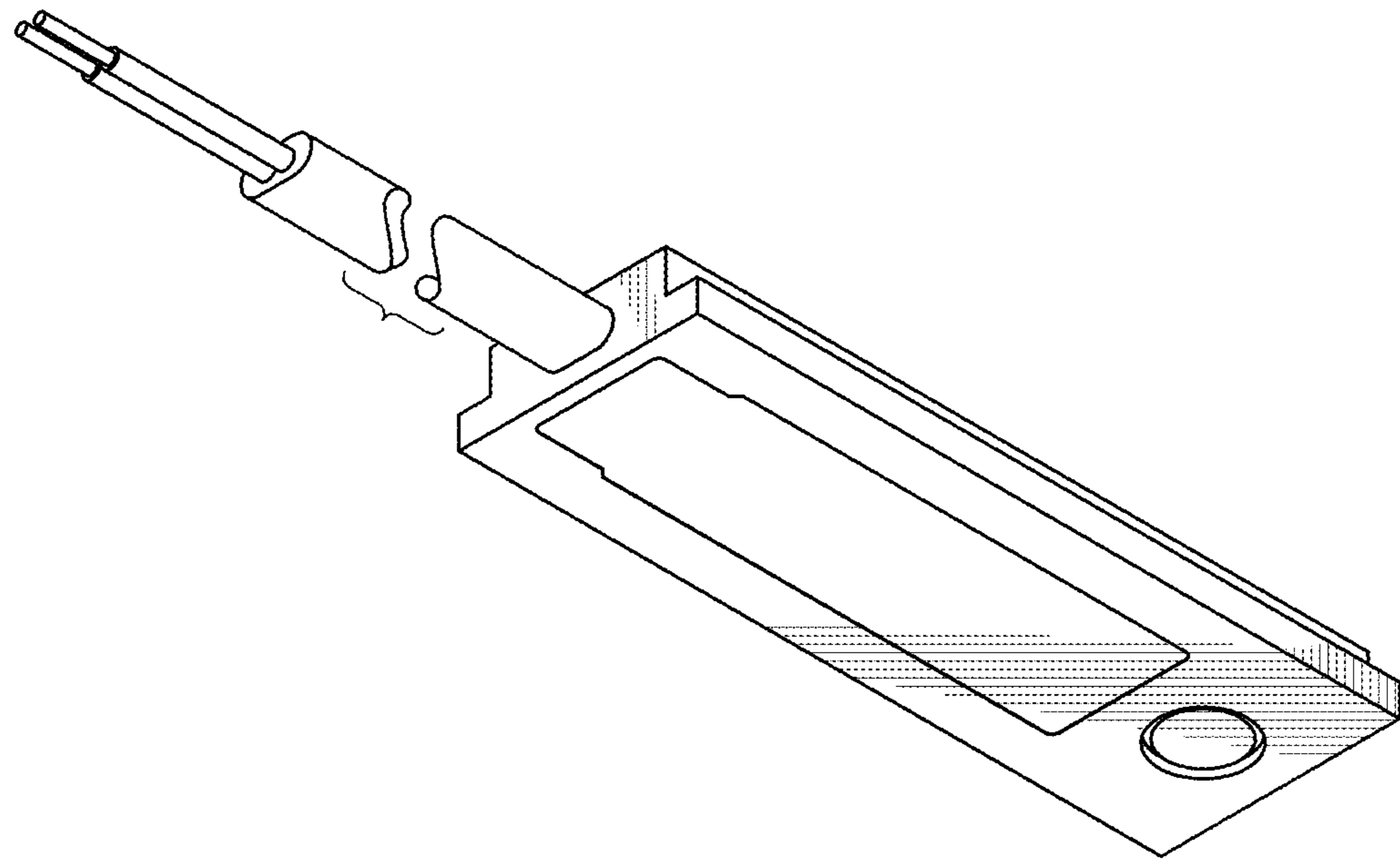


FIG.2

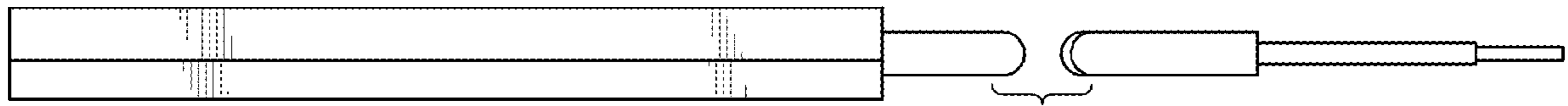


FIG.3



FIG.4

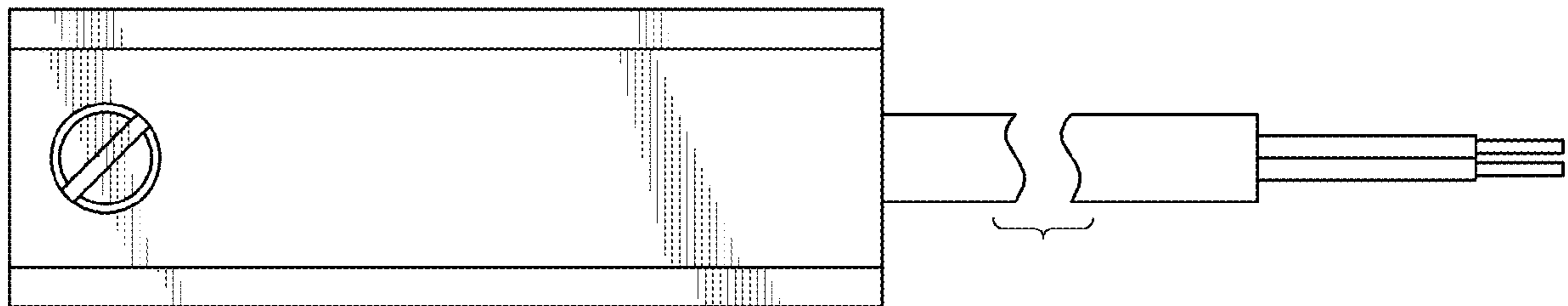


FIG.5

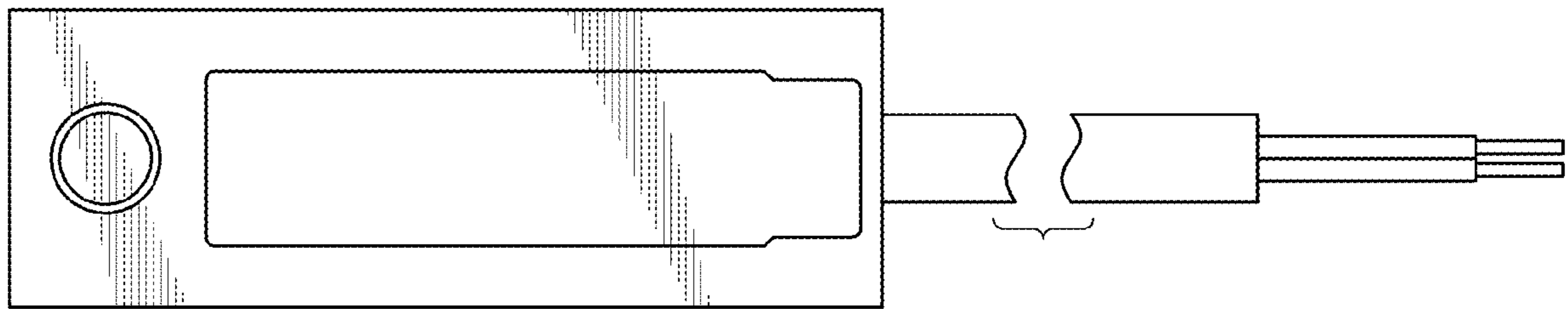


FIG.6

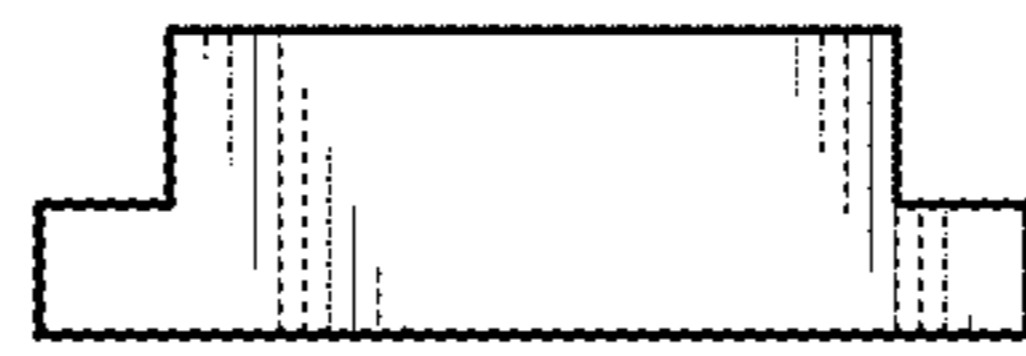


FIG. 7



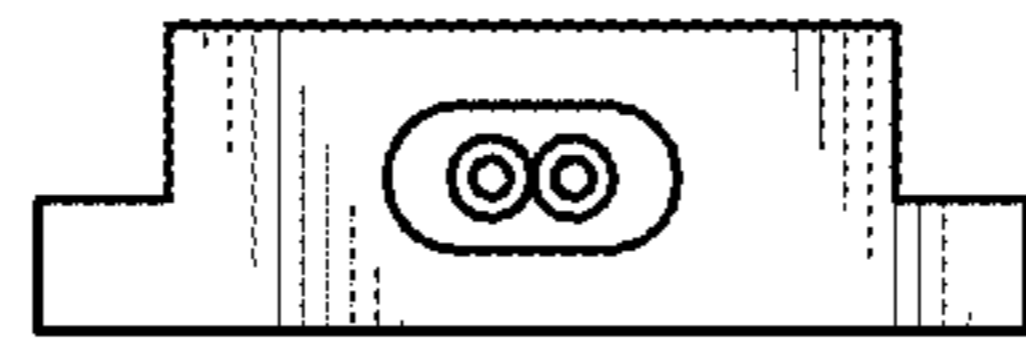


FIG.8