



US00D933028S

(12) **United States Design Patent** (10) **Patent No.:** **US D933,028 S**
Takeshita et al. (45) **Date of Patent:** **** Oct. 12, 2021**

(54) **PUSH-BUTTON SWITCH**

(71) Applicant: **NKK SWITCHES CO., LTD.,**
Kanagawa (JP)

(72) Inventors: **Junya Takeshita**, Kawasaki (JP);
Yoshinori Yamasaki, Kawasaki (JP)

(73) Assignee: **NKK SWITCHES CO., LTD.,**
Kanagawa (JP)

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

(21) Appl. No.: **29/729,176**

(22) Filed: **Mar. 24, 2020**

(30) **Foreign Application Priority Data**

Oct. 18, 2019 (JP) 2019-023311

(51) **LOC (13) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/171**

(58) **Field of Classification Search**

USPC D13/162, 171, 174, 177
CPC .. H01H 3/00; H01H 3/02; H01H 3/08; H01H
3/10; H01H 3/12; H01H 9/02; H01H
9/16; H01H 9/18; H01H 9/181; H01H
9/182; H01H 13/04; H01H 13/14; H01H
13/50; H01H 19/14; G06F 3/0362; G05G
1/02; G05G 1/08; G05G 1/10; G05G 1/12
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D344,930 S * 3/1994 Schaeffer D13/171
D377,337 S * 1/1997 Schaeffer D13/171
6,417,469 B1 * 7/2002 Tamura H01H 13/023
200/314
D469,411 S * 1/2003 Decosse D13/171
D507,543 S * 7/2005 Ishii D13/174
D601,100 S * 9/2009 Wahrenberg D13/171

D689,827 S * 9/2013 Mayer D13/171
D799,434 S * 10/2017 Ott D13/173
D848,381 S * 5/2019 Cheng D13/168
D851,610 S * 6/2019 Schlegel D13/174
D880,433 S * 4/2020 Woo D13/171
D911,984 S * 3/2021 Andersson D13/171
2015/0340178 A1 * 11/2015 Shimoyama H01H 13/14
200/4
2016/0189889 A1 * 6/2016 Pizzato H01H 3/022
200/296
2018/0130617 A1 * 5/2018 Wu H01H 9/285
(Continued)

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — Studebaker & Brackett
PC

(57) **CLAIM**

The ornamental design for a push-button switch, as shown
and described.

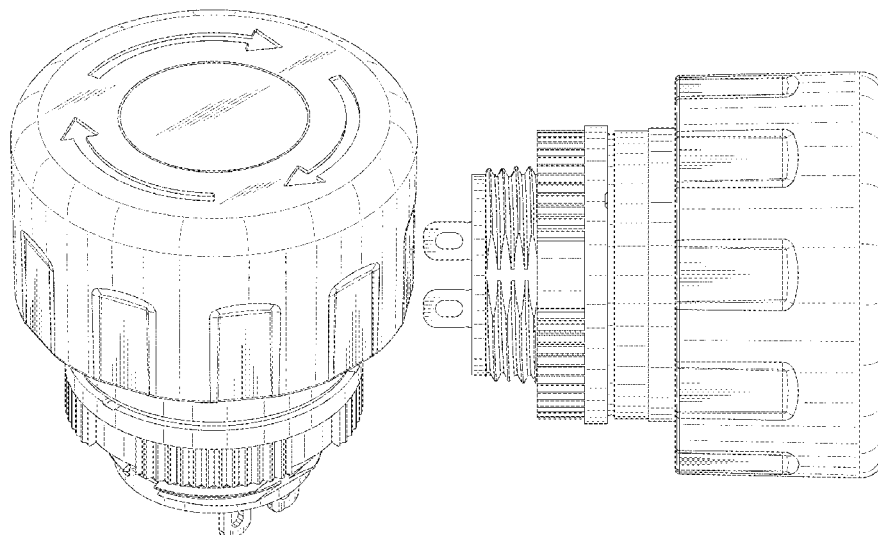
DESCRIPTION

FIG. 1 is a perspective view of our new design for a
push-button switch showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a right side view thereof;
FIG. 5 is a left side view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom view thereof.

This article is a so-called emergency stop switch for use in
machine tools, automatic machines or the like, and is used
as a switch to be pressed in an emergency to immediately
stop a machine in operation. Once it is depressed, the
depressed state will be maintained; therefore, in order to
cancel the depressed state, a pull-up operation needs to be
performed by rotating the button in the direction of an arrow
on the top surface.

The broken lines in FIG. 3 drawing view depict a portion of
the push button switch that form no part of the claimed
design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2018/0308649	A1 *	10/2018	Kubes	G05G 1/08
2019/0088422	A1 *	3/2019	Thizon	H01H 3/12
2019/0189371	A1 *	6/2019	Wu	H01H 13/14
2019/0198268	A1 *	6/2019	Doenoglu	H01H 3/54
2019/0237277	A1 *	8/2019	Mora	H01H 13/10
2021/0066002	A1 *	3/2021	Morita	H01H 13/04

* cited by examiner

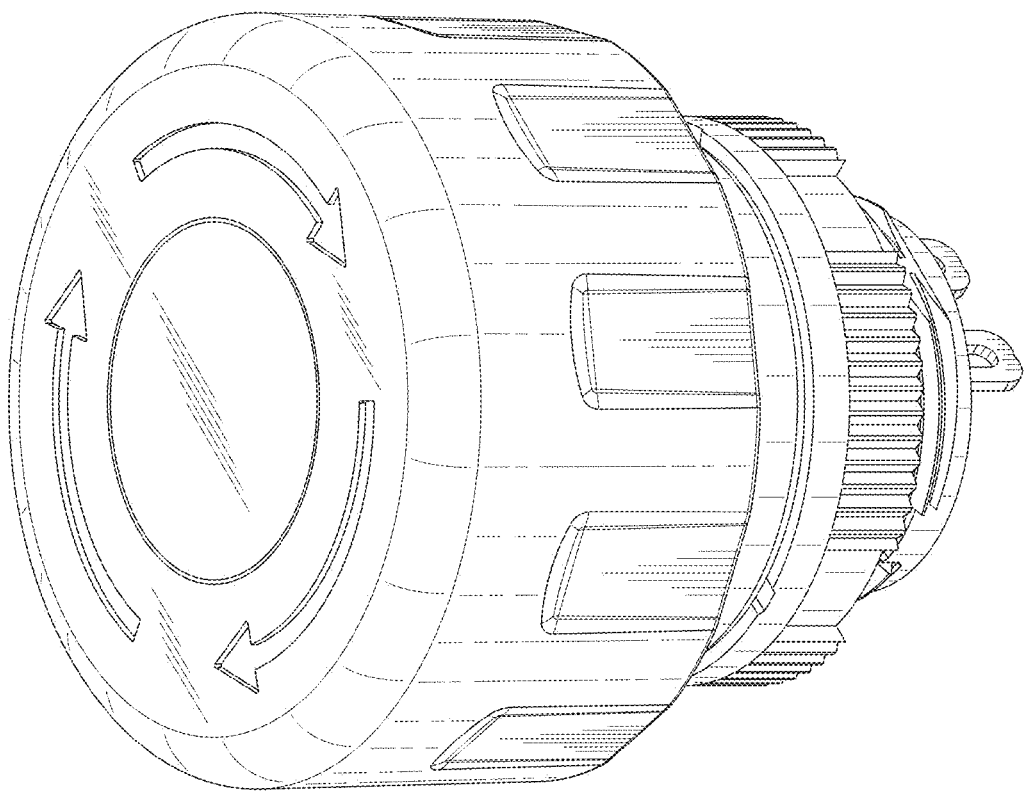


FIG.1

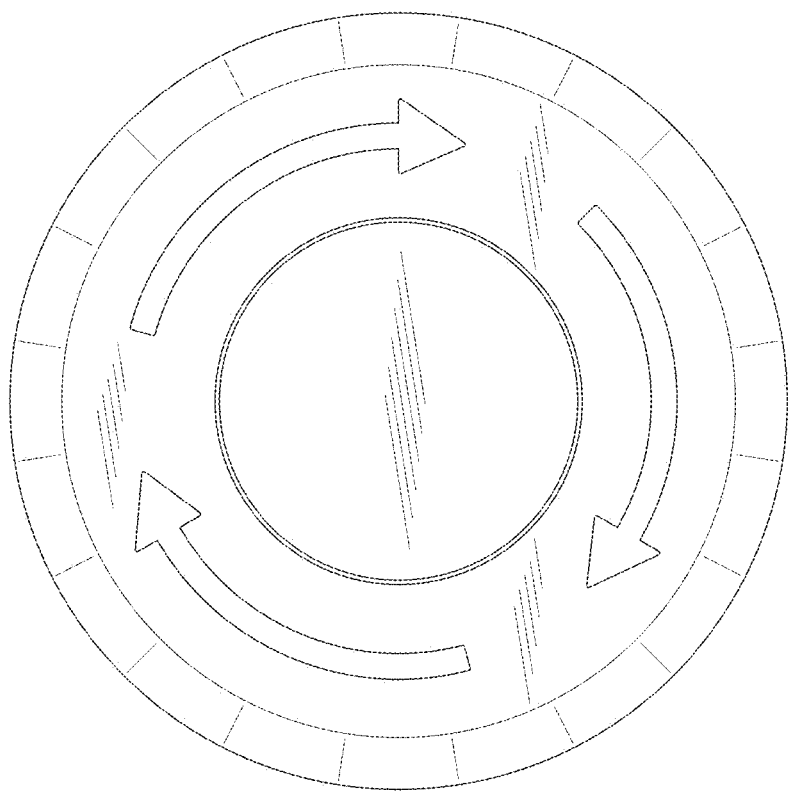


FIG.2

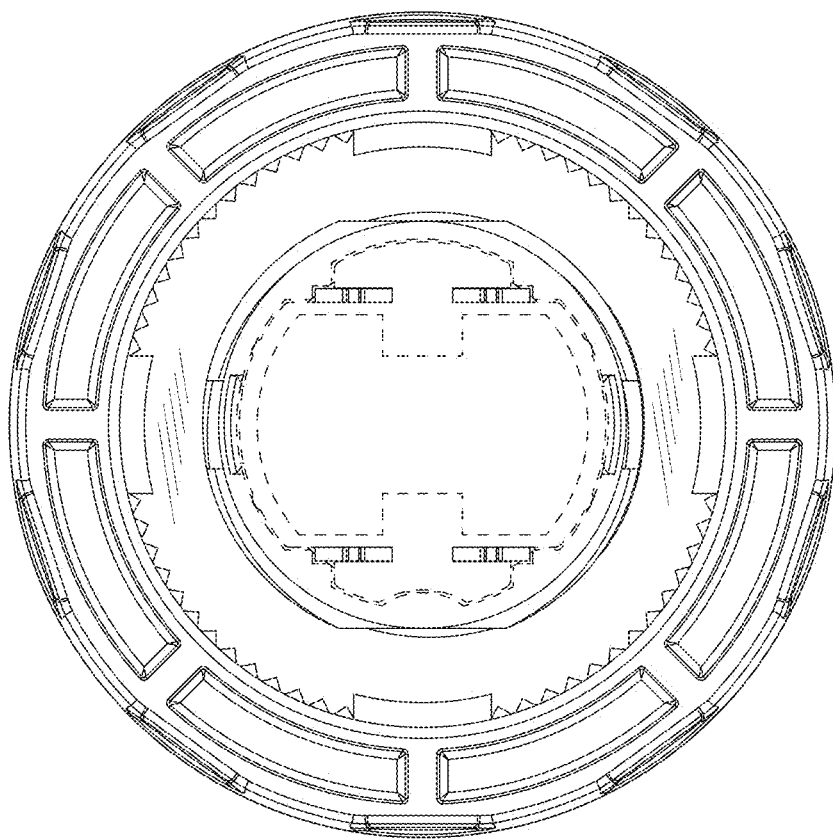


FIG.3

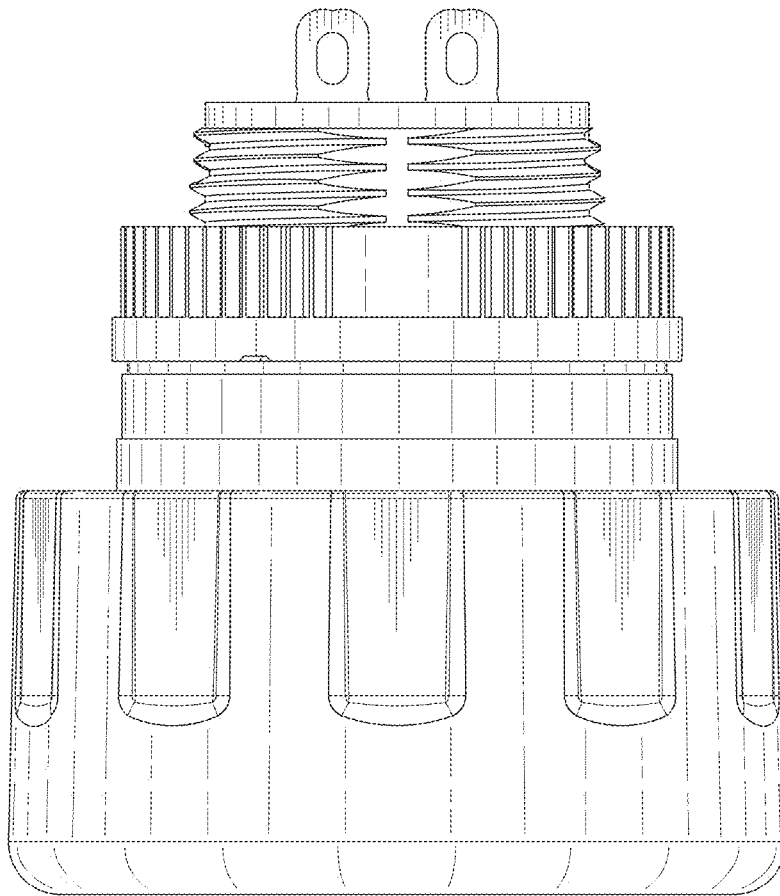


FIG.4

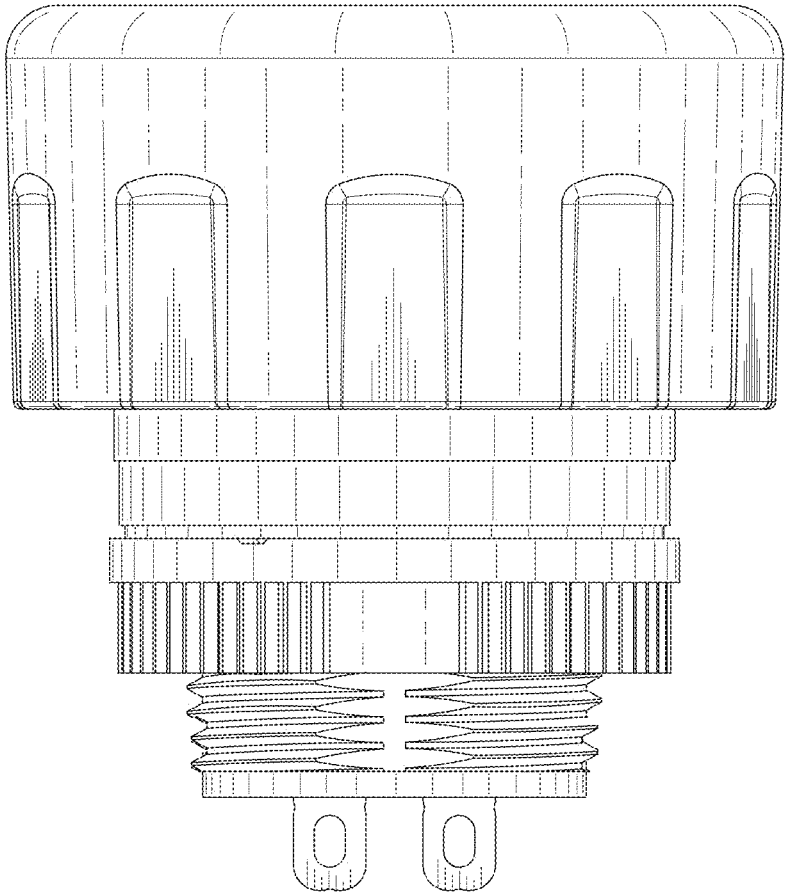


FIG.5

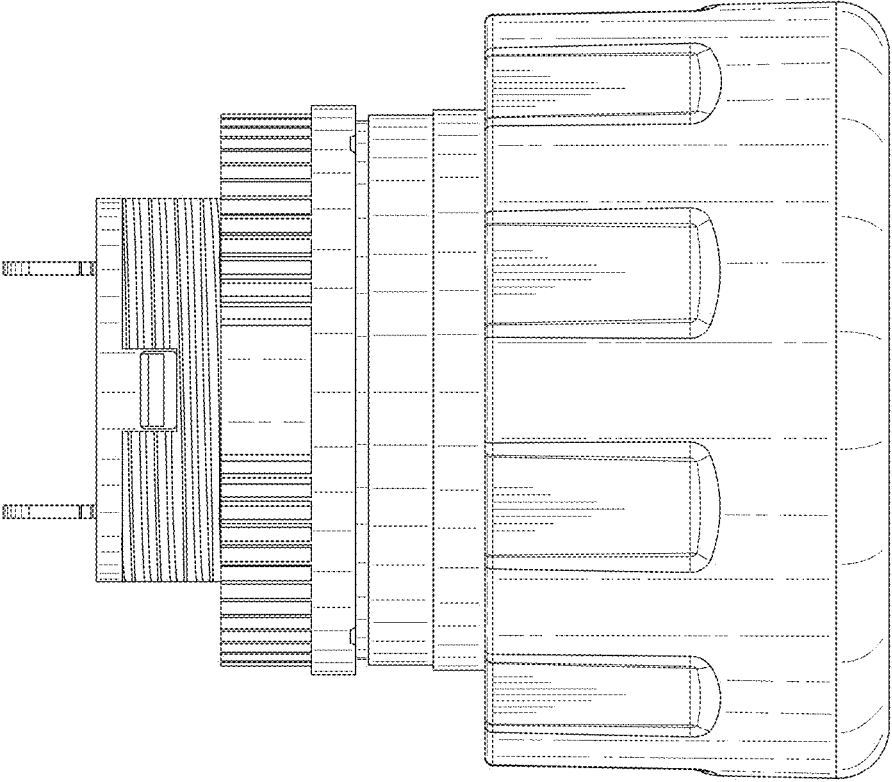


FIG.6

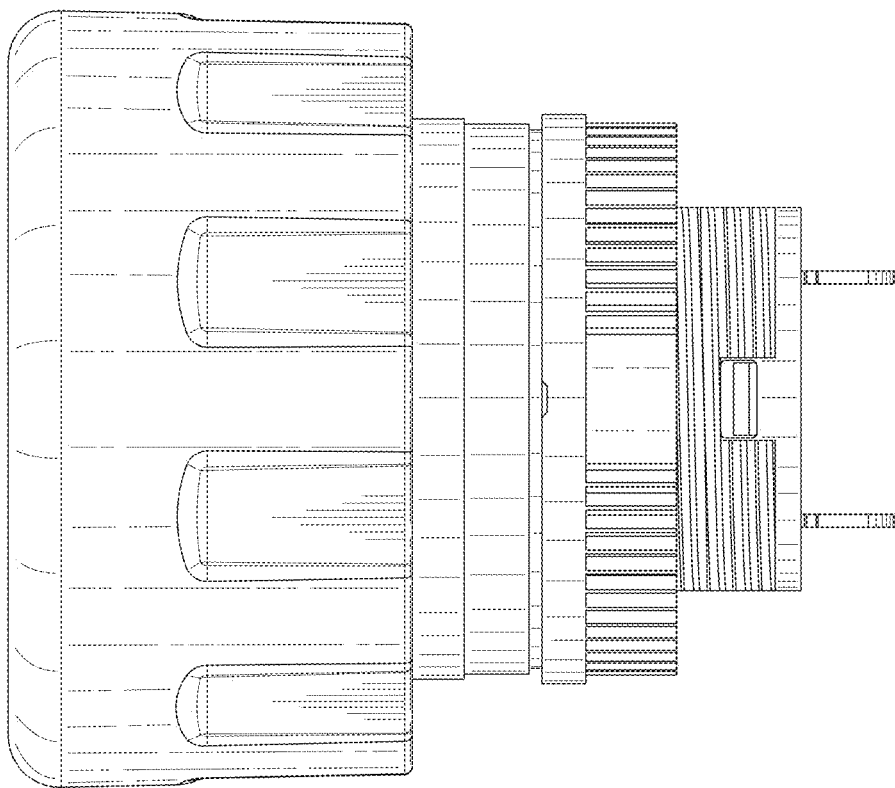


FIG.7