

(12) **United States Design Patent**
Song

(10) **Patent No.:** **US D1,089,542 S**
(45) **Date of Patent:** **** Aug. 19, 2025**

(54) **SOLENOID VALVE**
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D615,618 S * 5/2010 Someya D23/233
D633,180 S * 2/2011 Duong D23/233
D896,346 S * 9/2020 Yamabe D23/233

* cited by examiner

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(**) Term: **15 Years**
(57) **CLAIM**

The ornamental design for a solenoid valve, as shown and described.

(21) Appl. No.: **29/904,949**
(22) Filed: **Oct. 13, 2023**
(51) **LOC (15) Cl.** **23-01**
(52) **U.S. Cl.**
USPC **D23/233**
(58) **Field of Classification Search**
USPC D23/233, 249, 235, 248
CPC F16K 31/0675; F16K 31/06; F16K 27/029;
F16K 31/082; F16K 31/0606; F16K
27/048; F16K 11/24
See application file for complete search history.

DESCRIPTION

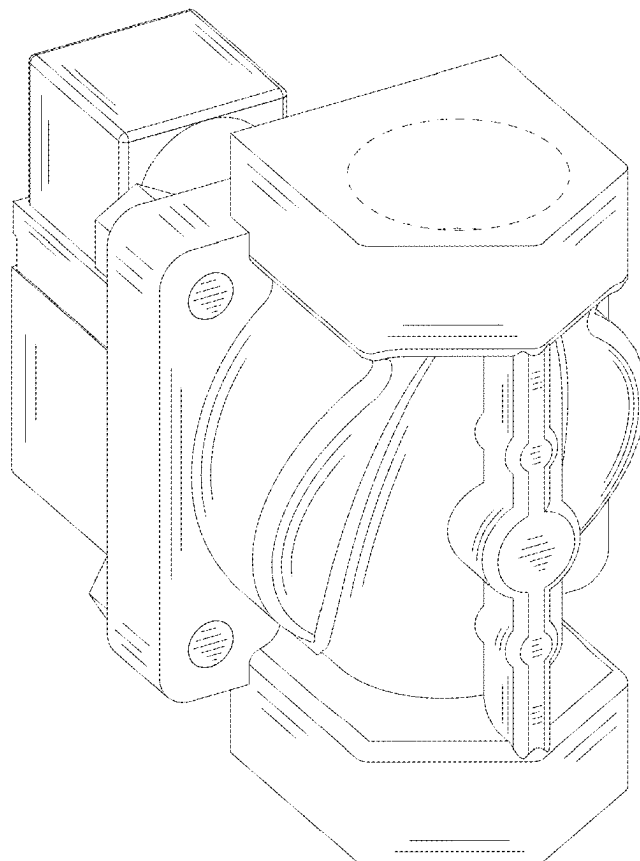
FIG. 1 is a perspective view of a solenoid valve, showing my new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.
The broken line showing of the solenoid valve is for the purpose of illustrating portions of the article and forms no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D273,699 S * 5/1984 Loup D23/248
D524,910 S * 7/2006 Matsumoto D23/233

1 Claim, 7 Drawing Sheets



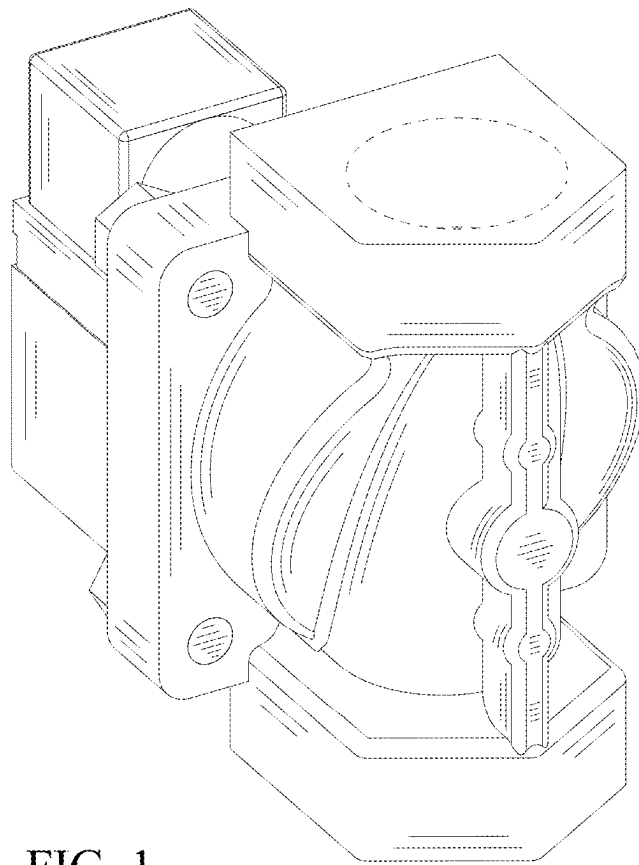


FIG. 1

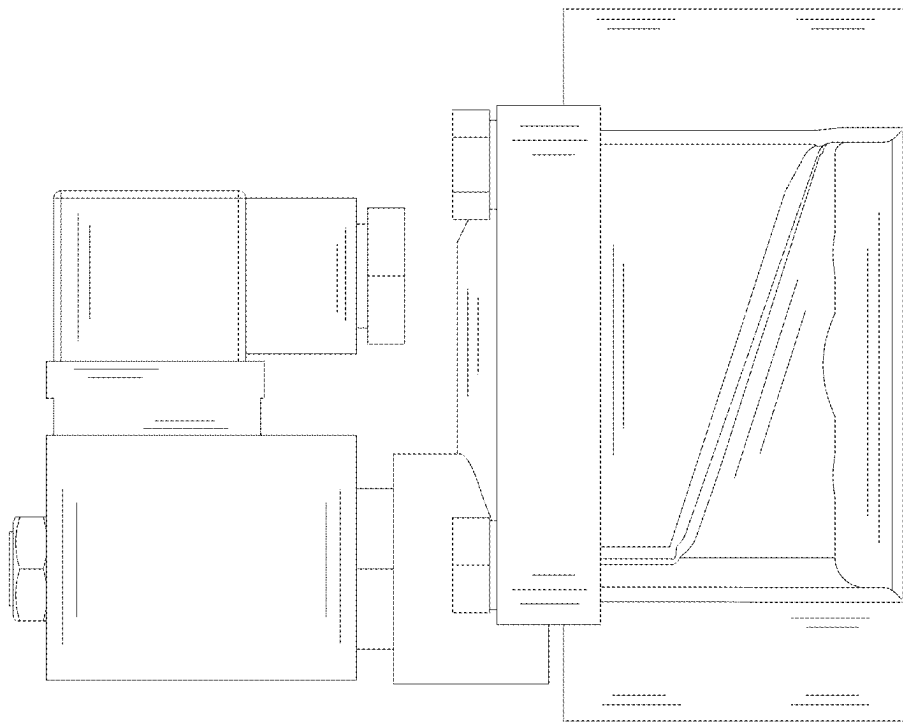


FIG. 2

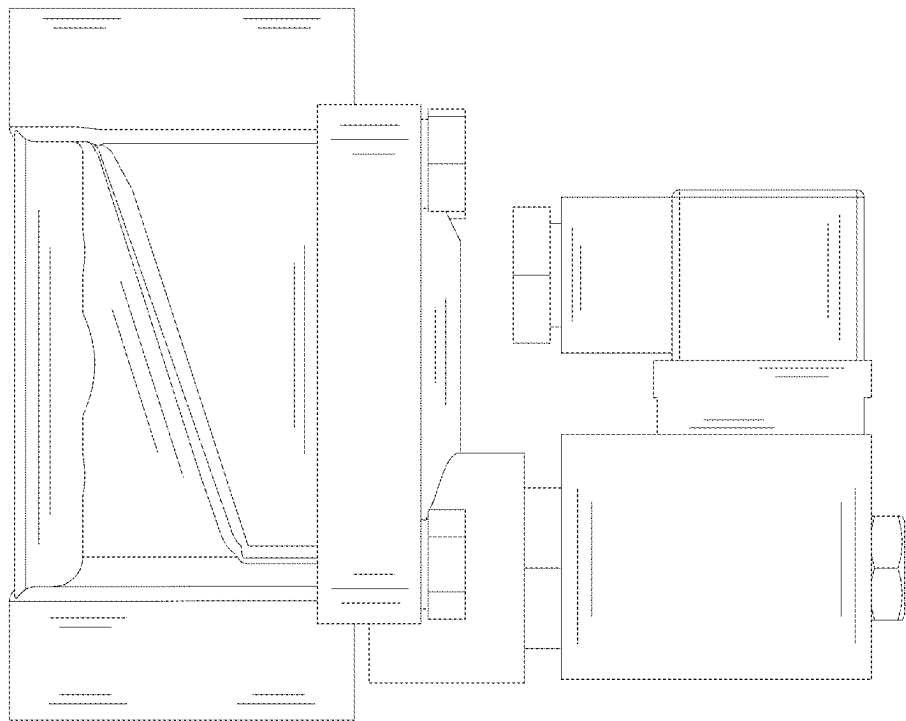


FIG. 3

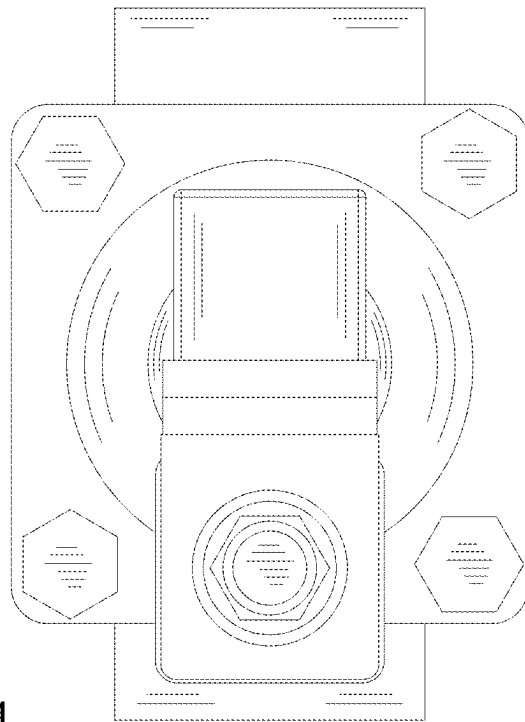


FIG. 4

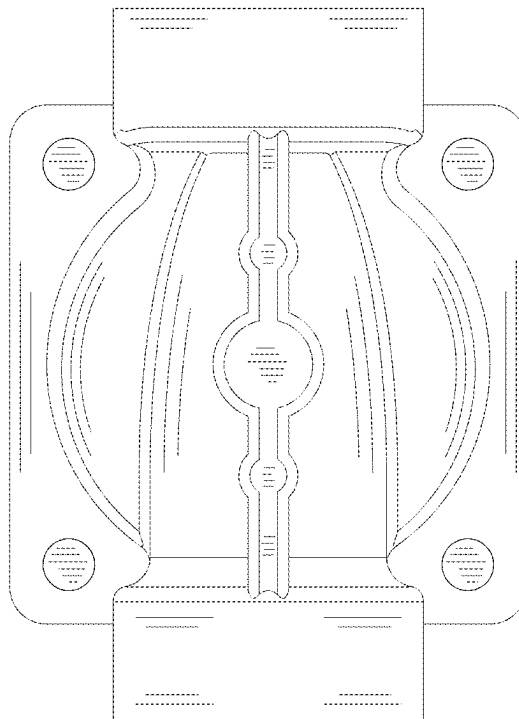


FIG. 5

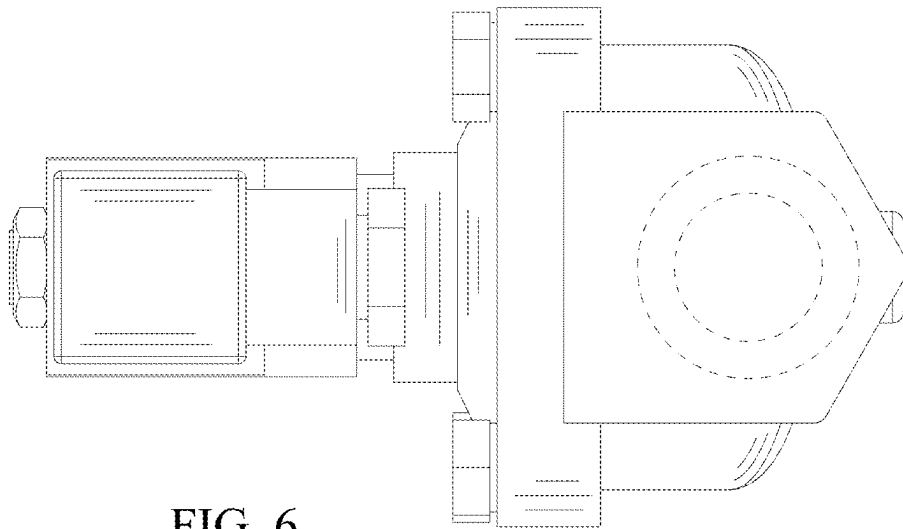


FIG. 6

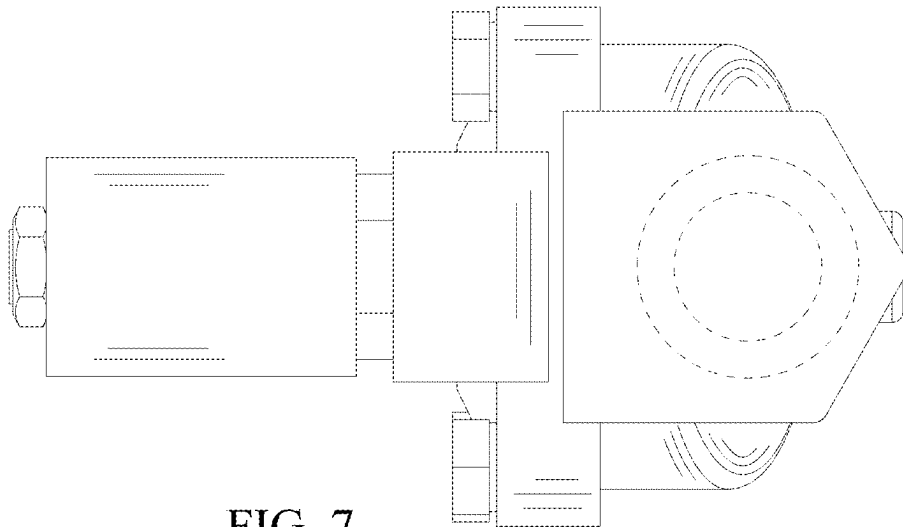


FIG. 7