



US00D522618S

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

(10) **Patent No.:** **US D522,618 S**
(45) **Date of Patent:** **** Jun. 6, 2006**

(54) **BALL VALVE**

(75) Inventor: **Hiroyuki Matsushita**, Nobeoka (JP)

(73) Assignee: **Asahi Organic Chemicals Industry Co., Ltd.**, Nobeoka (JP)

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

(21) Appl. No.: **29/179,613**

(22) Filed: **Apr. 14, 2003**

(30) **Foreign Application Priority Data**

Oct. 15, 2002 (JP) 2002-28134

(51) **LOC (8) Cl.** **23-01**

(52) **U.S. Cl.** **D23/245; D23/233**

(58) **Field of Classification Search** D23/233–237,
D23/244–250; 251/309–310, 314, 315, 315.14,
251/335.5, 286–288; 137/625, 22, 170–174,
137/219, 385

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D172,662 S * 7/1954 Clade D23/248
4,608,199 A * 8/1986 Caplan et al. 530/414
D291,229 S * 8/1987 Kunz D23/245
D291,230 S * 8/1987 Kunz D23/245
D297,254 S 8/1988 Odate et al.
D366,693 S 1/1996 Gregor
D372,073 S 7/1996 Ozaki et al.
D374,066 S * 9/1996 Gregor D23/233
5,553,831 A * 9/1996 Ozaki et al. 251/292
D432,633 S * 10/2000 Higgins et al. D23/250
D432,634 S * 10/2000 Higgins et al. D23/250

D433,105 S * 10/2000 Mirth et al. D23/250
D455,474 S 4/2002 Knobel et al.
D471,963 S * 3/2003 Chiu D23/245
6,591,859 B1 * 7/2003 Shih 137/375

FOREIGN PATENT DOCUMENTS

JP 570808 2/1982
JP 1112773 6/2001

OTHER PUBLICATIONS

Asahi AV Valve Catalogue, Asahi Yukizai Kogyo Co., Ltd., Tokyo, Japan, Sep. 1974, p. 17.

* cited by examiner

Primary Examiner—Nelson C. Holtje

(74) *Attorney, Agent, or Firm*—Burns, Doane, Swecker & Mathis, L.L.P.

(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a front perspective view of a ball valve showing my new design;

FIG. 2 is a front elevational view thereof, the rear elevational view being a mirror image of the front elevational view;

FIG. 3 is a right side elevational view thereof, the left side elevational view being a mirror image of the right side elevational view;

FIG. 4 is a top plan view thereof;

FIG. 5 is a bottom plan view thereof; and,

FIG. 6 is a cross-sectional view taken along the line 6—6 in FIG. 4.

1 Claim, 3 Drawing Sheets

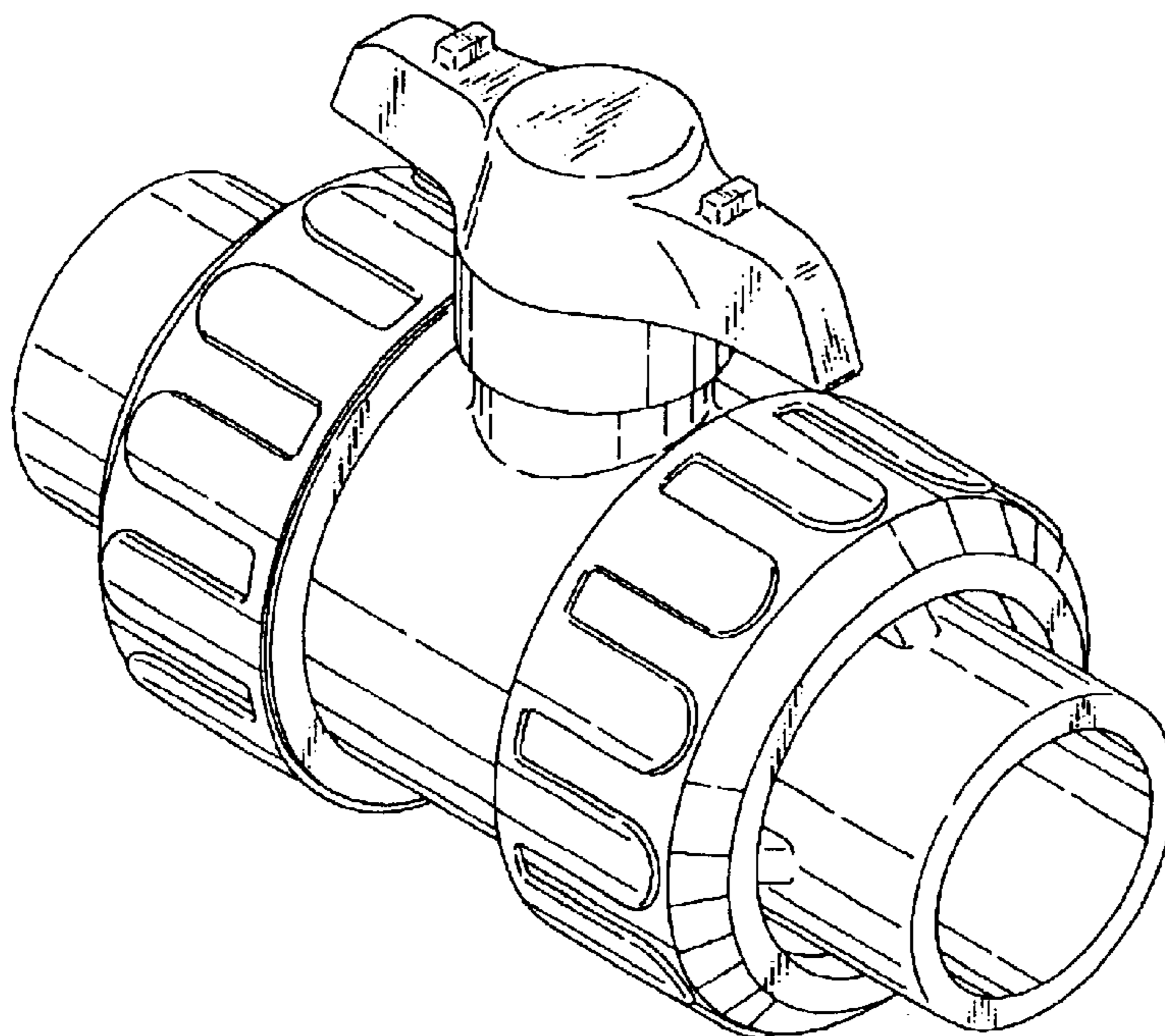


Fig.1

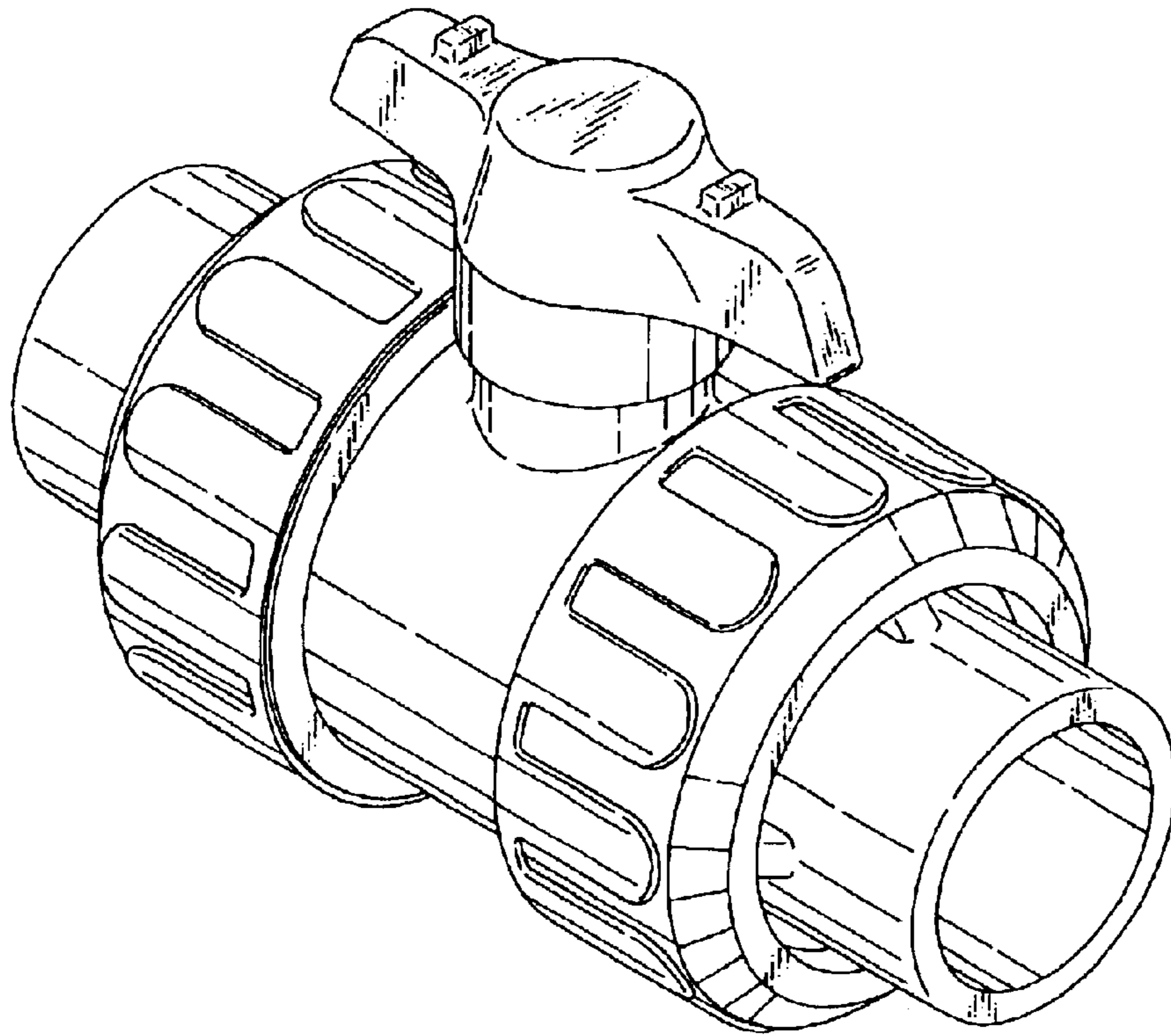


Fig.2

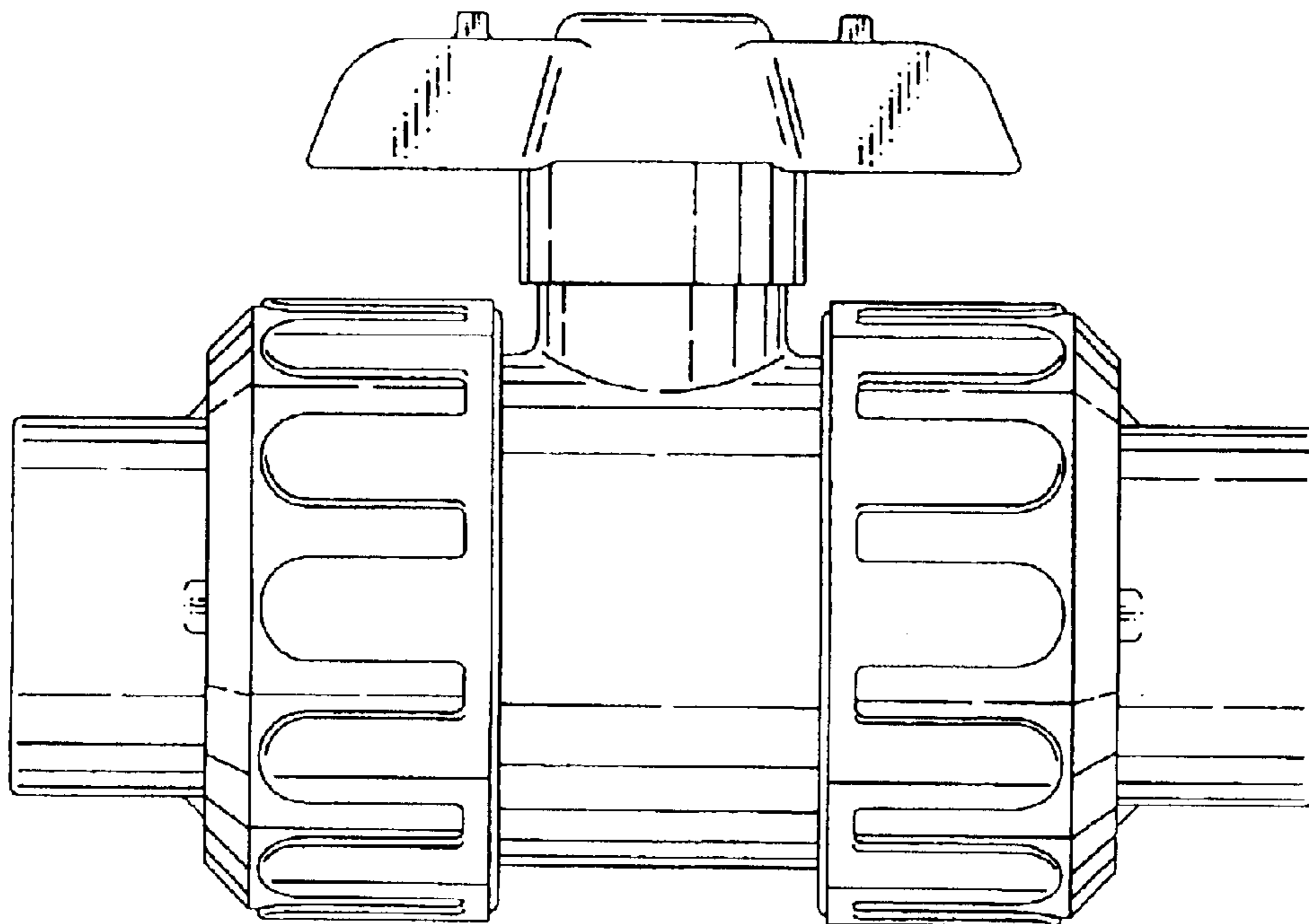


Fig.3

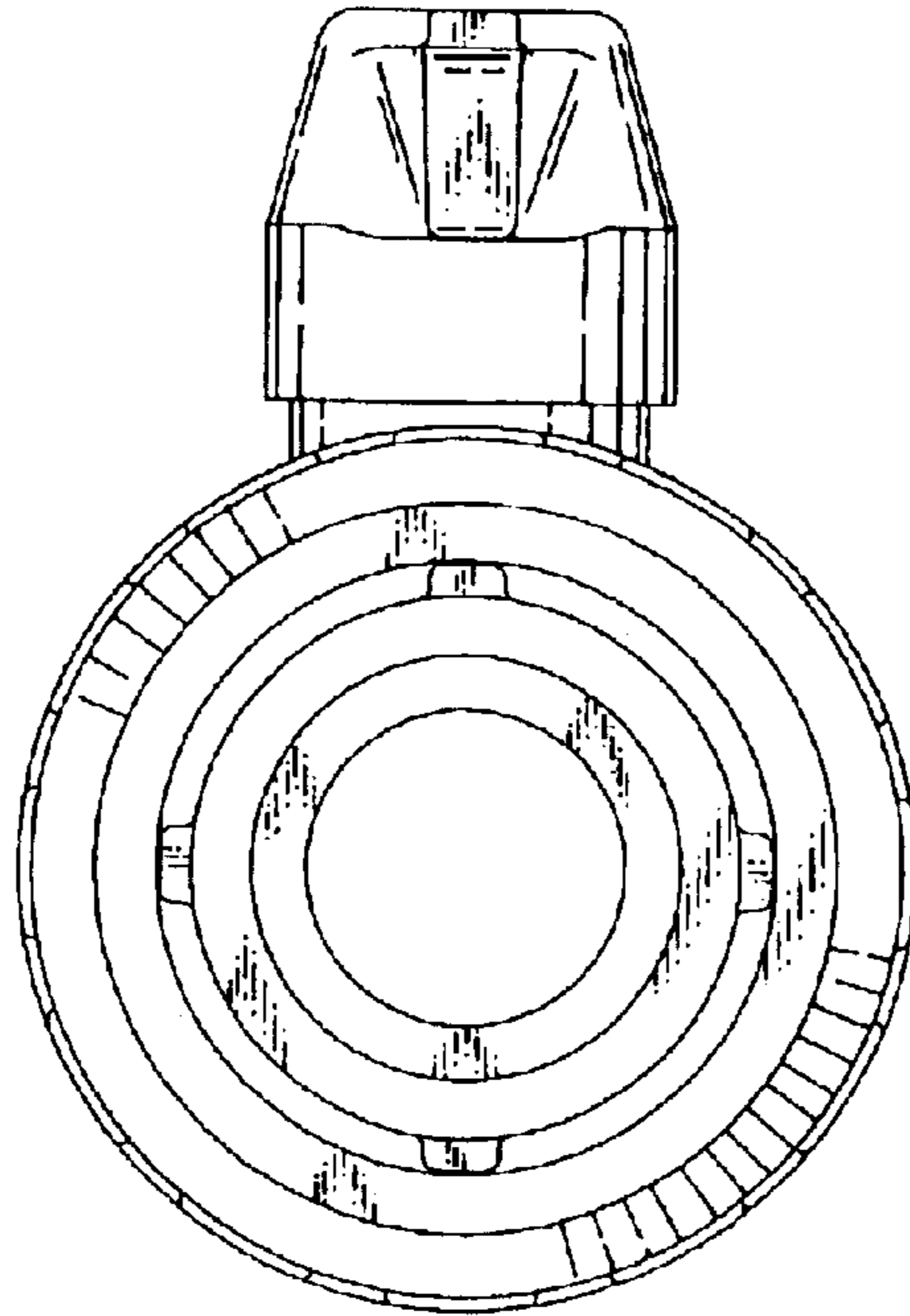


Fig.4

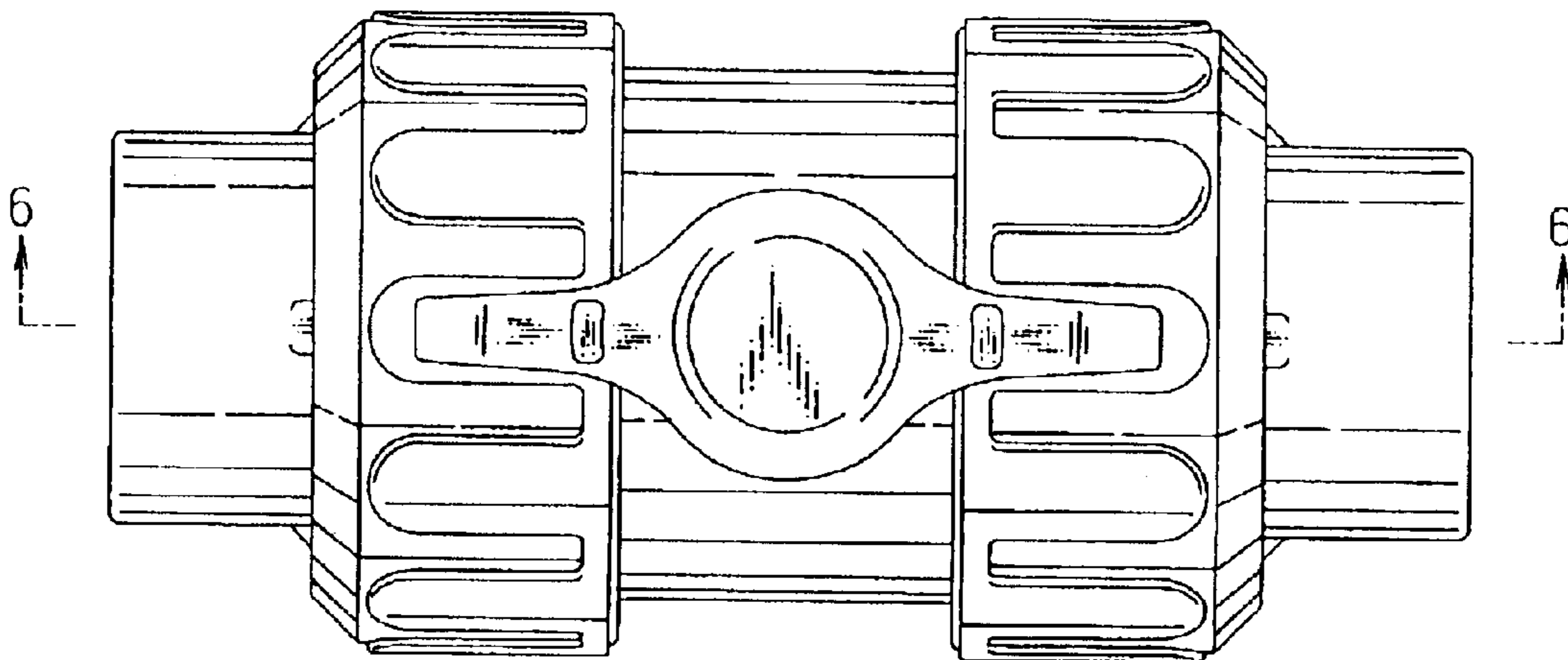


Fig.5

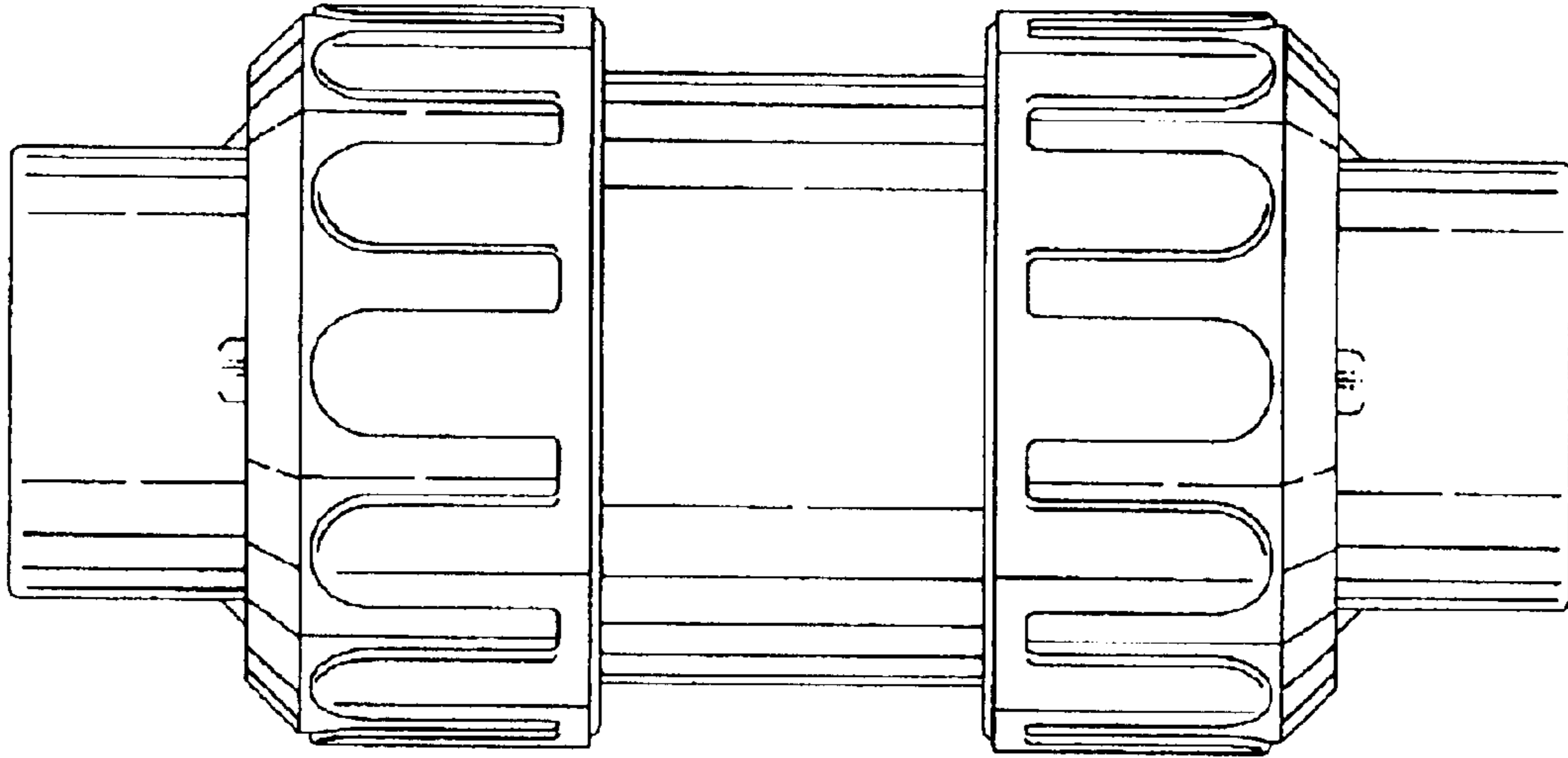


Fig.6

