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(71) Applicant (for all designated States except US): **PRECISION MEDICAL DEVICES, INC** [US/US]; P.O. Box 480191, Fort Lauderdale, FL 33348-0191 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **SAYET, Peter, H.** [US/US]; 4051 N. Ocean Boulevard, Apt. 219, Fort

Lauderdale, FL 33308 (US). **SUTHERLAND, Lloyd, A.** [US/US]; 7430 San Clemente Place, Boca Raton, FL 33433 (US). **POLITANO, Victor** [US/US]; 13055 Biscayne Bay Drive, North Miami, FL (US).

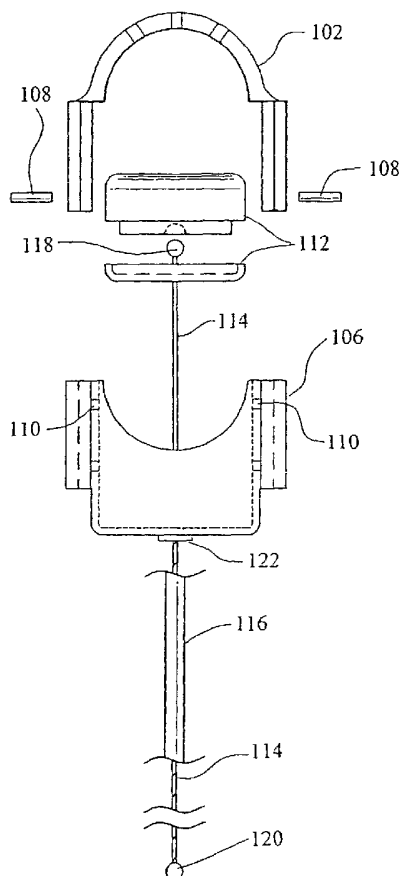
(74) Agent: **GREGORY, Nelson, A.**; Akerman Senterfitt, West Palm Beach, FL 33402-3188 (US).

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(54) Title: BODY FLUID FLOW CONTROL METHOD AND DEVICE



(57) Abstract: An implantable apparatus for controlling fluid flow within a host body includes a constricting member for allowing fluid flow within a body canal when in an open position, and for reducing fluid flow within a body canal when in a closed position. Remote telemetry (1910) can be used to operate the constricting member from a position outside the body. The constricting member (112) can include a piston (112) having at least two protrusions for contacting the vessel surface of the body canal. A fluid-operated member (210) can receive fluid to reduce fluid flow within the body canal and expel fluid to allow fluid flow within the body canal. An actuating member (114) is provided for operating the fluid-operated member (210) between the open and closed positions. The actuating member has structure for flowing fluid into and out of the fluid-operated member (210). A control device (202) is provided for operating the actuating member (114). An implantable drive mechanism (204) for a constricting member (112) or other medical device includes a sealed housing (1226) for implantation in a patient body, a drive magnet (1220) positioned within the housing (1226), an actuator (1222) for moving the drive magnet (1220), and a magnetically susceptible drive member (1230) positioned outside the housing (1226) such that movement of the drive magnet (1220) within the housing (1226) will move the drive member (1230) outside of the housing (1226).



GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61F 2/02, 2/04, 2/72; A61B 17/08

US CL : 600/030; 623/23.66, 26; 606/151

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/030; 623/23.66, 26; 606/151

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- A	US 5,509,888 A (Miller) 23 April 1996 (23.04.1996), abstract, column 3, lines 54-67, column 4, lines 1-65, column 6, lines 24-65, Figure 12..	1-5, 7, 10-12, 20 and 25-28 ----- 6,13-19 and 24 8 and 9
X	US 4,453,536 A (Abild) 12 June 1984 (12.06.1984), entire document	8 and 9
X	US 3,419,008 A (Plishner) 31 December 1968 (31.12.1968), entire document	21-23

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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"Y"

document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

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document member of the same patent family

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Name and mailing address of the ISA/US

Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (703) 305-3230

Authorized officer

Nikita R Veniaminov

Telephone No. (703) 308-0858