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(71) Applicant *(for all designated States except US)*: **G.I. VIEW LTD.** [IL/IL]; 6 HaHilazon Street, 52522 Ramat Gan (IL).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **CABIRI, Oz** [IL/IL]; 775 Nahal Natof Street, 71908 Macabim (IL). **GROSS, Yossi** [IL/IL]; 10 HaNotea Street, 73160 Moshav Mazor (IL). **DEGTIAR, Boris** [IL/IL]; 1 hativat Eftah Street, Modi'in (IL). **SHOR, Eran** [IL/IL]; P.O. Box 136, 60946 Moshav Bizaron (IL).

(74) Agents: **SANFORD T. COLB & CO.** et al.; P.O. Box 2273, 76122 Rehovot (IL).

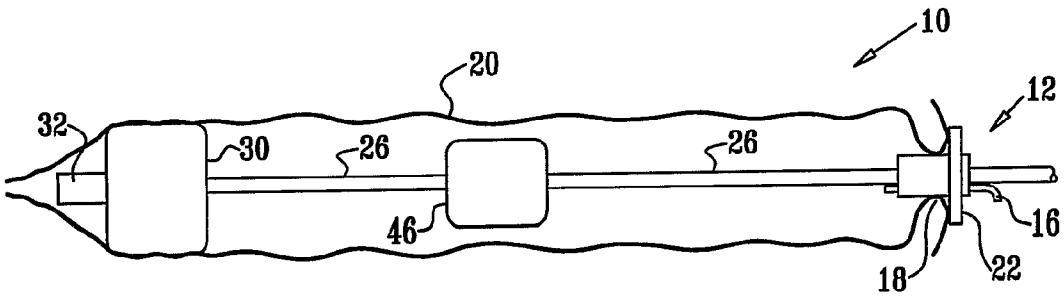
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(54) Title: PRESSURE-PROPELLED SYSTEM FOR BODY LUMEN



(57) Abstract: Apparatus (10) is provided for use with a biologically-compatible-fluid pressure source (16), the apparatus (10) including an elongate carrier (26), adapted to be inserted through a proximal opening (18) of a body lumen (20), and a piston head (30) coupled to a distal portion of the carrier (26). The piston head (30) is adapted to form a pressure seal with a wall of the lumen (20) after the carrier (26) has been inserted into the lumen (20), and to be advanced distally through the body lumen (20) in response to pressure from the fluid pressure source (16). The apparatus (10) is configured to facilitate distal advancement of the piston head (30) by facilitating passage of fluid out of the lumen (20) from a site within the lumen (20) distal to the piston head (30). The apparatus (10) additionally includes an optical system (32), coupled to the carrier (26) in a vicinity of the distal portion, the optical system (32) having distal and proximal ends. The optical system (32) includes an image sensor (232), positioned at the proximal end of the optical system (32); an optical member (234) having distal and proximal ends, and shaped so as to define a lateral surface, at least a distal portion of which is curved, configured to provide omnidirectional lateral viewing; and a convex mirror (240), coupled to the distal end of the optical member (234), wherein the optical member (234) and the mirror (240) have respective rotational shapes about a common rotation axis.

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