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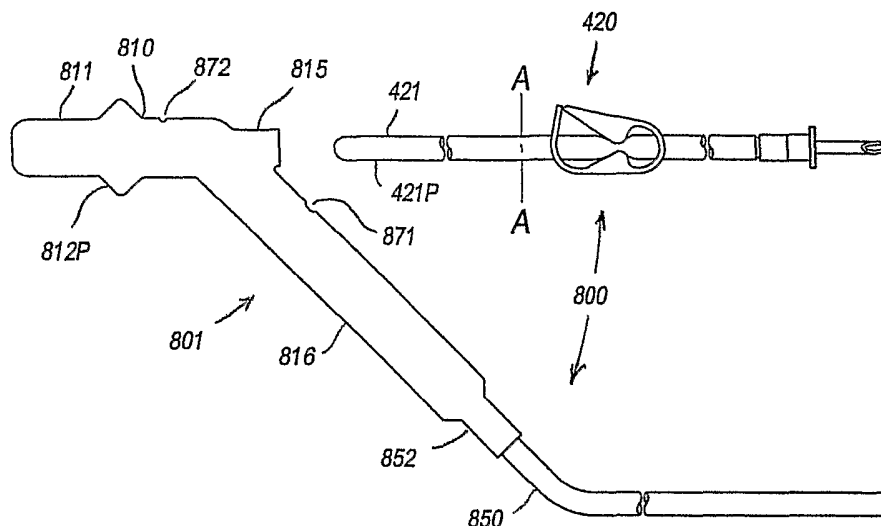
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(57) Abstract: Colorectal lavage device (800) including a drain assembly (801), and a colonic tube assembly (420) including an inflow tube (421), a flow control mechanism (430) to control flow through the inflow tube (421) and an outflow tube (850). The drain assembly (801) has a tubular body (810) defining an interior space (811L) and having a proximal portion (811) insertable into an anus of a person to cause the anus to constrict around the proximal portion (811) and thereby seal the proximal portion (811) against the anal wall, a distal portion including a distal end (815) having an opening in line with an opening in the proximal portion (811) and a side tube (816) arranged at an angle to the proximal portion (811). The inflow tube (421) passes through the tubular body (810) and has a tip (424) with one or more apertures (429) through which the lavage fluid operatively flows. The outflow tube (850) is connected to the side tube (816).

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER Int. Cl. <i>A61M 3/02</i> (2006.01) and US CL: 604/39, 604/41 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) 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) DWPI; IPC A61M, A61F 5/442 and keywords (clean, flush, irrigate, lavage, rectum, rectal, anus, anal, colon, vacuum, suction, aspirate, drain, seal, limit, stop, tube, hose, conduit, catheter, bifurcate, arm, branch, angle) and similar terms USPTO, ESP@CE keywords; (irrigate, colon, seal) and similar terms ECLA: IPC A61M 3/02, 3/02H2, 3/02H4 and keyword: seal		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6761702 B2 (SMITH) 13 July 2004 See entire specification	1-14
P, X	US 2005/0070933 A1 (LEIBOFF) 31 March 2005 See entire specification	1-14
X	WO 2001/032239 A1 (M. I. TECH. CO., LTD.) 10 May 2001 See entire specification	1-14
P, X	Derwent Abstract Accession No. 2005-133872/15, Class P34, DE 420015357 U1 (ULLRICH) 17 February 2005 See abstract and figure	1-14
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input checked="" type="checkbox"/> See patent family annex		
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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. 571-273-3201		Authorized officer Blaine R. Copenheaver Telephone No : 571-272-7774

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5351674 A (HAWKS) 4 October 1994 See entire specification	1-14
X	CA 2510623 A1 (THE MOLLENNIUM LABORATORIES, JP) 24 June 2004 See figure 1 and abstract	1-14
X	US 5443445 A (PETERS et al.) 22 August 1995 See entire specification	1-14
X	DE 4114390 A1 (KIEF) 5 November 1992 See abstract and figure	1-14
P, X	EP 1491223 A1 (INTERMARK MEDICAL INNOVATIONS LTD) 29 December 2004 See abstract and figure 1	1-14
X	US 4842580 A (OUELETTE) 27 June 1989 See entire specification	1-14
X	US 4943285 A (HAWKS) 24 July 1990 See entire specification	1-14
X	US 2004/0039348 A1 (KIM et al.) 26 February 2004 See entire specification	1-14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. These particulars are merely given for the purpose of information.

Patent Document Cited in Search Report	Patent Family Member		
US 6761702	EP 1262205	GB 2375961	GB 2375964
	JP 2003010324	US 2002188244	
US 2005070933	WO 2005030042		
WO 2001032239	CN 1338953	EP 1140253	KR 2001070180
DE 420015357			
US 5351674			
CA 2510623	AU 2003289279	EP 1593375	WO 2004052338
US 5443445	AU 15326/92	EP 0580630	WO 1992017219
DE 4114390			
EP 1491223	GB 2403151	US 2005004533	
US 4842580	CA 1264132	EP 0274415	
US 4943285			
US 2004039348	AU 2003207608	BR 0305770	CA 2462570
	EP 1531884	WO 2004018022	

END OF ANNEX