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(54) Ultrasonic endoscope, catheter with balloon, magnet indwelling device, and magnet set

(57) An ultrasonic endoscope (12) includes an elongated insertion section (22) and an operation section (24). The elongated insertion section (22) has a distal end and a proximal end. The operation section (24) is provided at the proximal end of the insertion section. The insertion section includes a distal end hard portion (32)

having a distal end surface at the distal end, the distal end surface of the distal end hard portion including an ultrasonic transducer (42), a forceps channel opening portion (38a) and an object lens (44) on a straight line.

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EUROPEAN SEARCH REPORT

Application Number EP 07 01 6469

	DOCUMENTS CONSID			
Category	Citation of document with in of relevant pass:	ndication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Х	US 2004/082883 A1 (29 April 2004 (2004 * paragraphs [0036] * figures 1-3 *		1-3	INV. A61B1/018 A61B8/12
A	US 2006/036182 A1 (ET AL) 16 February * paragraph [0018] * paragraphs [0032] * figure 1 *	*	1-3	
A	AL) 8 October 2002		1-3	
A	JP 11 089844 A (FUJ 6 April 1999 (1999- * abstract; figures		1-3	
A	JP 2005 118133 A (0 12 May 2005 (2005-6 * abstract; figures	5-12)	1-3	TECHNICAL FIELDS SEARCHED (IPC)
A	JP 09 084791 A (FUJ 31 March 1997 (1997 * abstract; figures		1-3	
	The present search report has	•		
	Place of search	Date of completion of the search		Examiner
	Berlin	19 December 2007	Abr	raham, Volkhard
X : parti Y : parti docu A : tech O : non	ATEGORY OF CITED DOCUMENTS cularly relevant if taken alone cularly relevant if combined with anot ment of the same category nological background written disclosure mediate document	L : document cited fo	ument, but publi e i the application r other reasons	shed on, or



Application Number

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CLAIMS INCURRING FEES
The present European patent application comprised at the time of filing more than ten claims.
Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.
LACK OF UNITY OF INVENTION
The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:
see sheet B
All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims: See annex
The present supplementary European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims (Rule 164 (1) EPC).



LACK OF UNITY OF INVENTION SHEET B

Application Number

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The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. claims: 1-3

An ultrasonic endoscope including an ultrasonic transducer, a forceps channel opening portion and an objective lens on a straight line

2. claims: 4-8

3. claims: 9-13

A magnet indwelling device comprising a magnet a puncture needle and a stylet

4. claims: 14-22

A magnet assembly comprising a cord like member, a plurality of magnets and a stopper $\,$

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 07 01 6469

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

19-12-2007

	Patent document ed in search report		Publication date		Patent family member(s)		Publication date
US	2004082883	A1	29-04-2004	DE JP JP	10348188 3894092 2004135937	B2	13-05-200 14-03-200 13-05-200
US	2006036182	A1	16-02-2006	NONE			
US	6461304	B1	08-10-2002	NONE			
JP	11089844	Α	06-04-1999	JР	3407617	B2	19-05-200
JP	2005118133	Α	12-05-2005	NONE			
JP	9084791	Α	31-03-1997	JP	3106930	B2	06-11-200

FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82



专利名称(译)	超声波内窥镜,带气囊的导管,磁	滋铁留置装置和磁铁装置				
公开(公告)号	EP1894514A3	公开(公告)日	2008-04-23			
申请号	EP2007016469	申请日	2007-08-22			
[标]申请(专利权)人(译)	奥林巴斯医疗株式会社					
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当前申请(专利权)人(译)	奥林巴斯医疗系统股份有限公司.					
[标]发明人	SATO MASATOSHI KAJI KUNIHIDE SUZUKI TAKAYUKI SHIONO JUNJI MIKKAICHI TAKAYASU MIZUNUMA AKIKO					
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IPC分类号	A61B1/018 A61B8/12 A61F2/958	3				
CPC分类号	A61B1/00082 A61B1/00179 A61B1/018 A61B1/31 A61B8/12 A61B8/4416 A61B8/445 A61B17/00491 A61B17/068 A61B17/1114 A61B17/221 A61B17/3478 A61B2017/00278 A61B2017/00818 A61B2017 /00876 A61B2017/0417 A61B2017/06052 A61B2017/0649 A61B2017/1103 A61B2017/1117 A61B201 /1139 A61B2017/3425					
优先权	11/511197 2006-08-28 US					
其他公开文献	EP1894514B1 EP1894514A2					
外部链接	Espacenet					

摘要(译)

超声波内窥镜(12)包括细长的插入部分(22)和操作部分(24)。细长插入部分(22)具有远端和近端。操作部分(24)设置在插入部分的近端。插入部分包括远端硬质部分(32),远端硬质部分(32)在远端具有远端表面,远端硬质部分的远端表面包括超声换能器(42),钳子通道开口部分(38a)和物镜(44)在直线上。

