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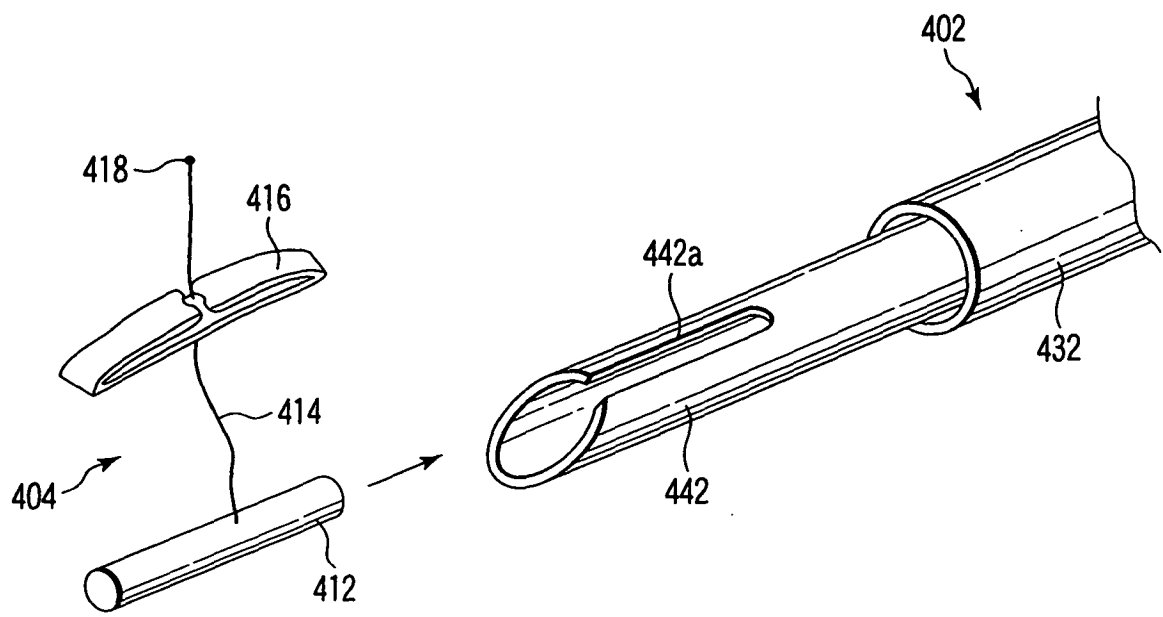
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(54) **Ultrasonic endoscope, therapeutic system, endoscopic system, T-bar, und T-bar suturing device**

(57) An ultrasonic endoscope (10) includes an insertion section (12), an operation section (14), an optical observation system and an ultrasonic observation system. The insertion section has a distal end and a proximal end. The operation section is disposed on the proximal end of the insertion section. The optical observation system is disposed in the insertion section. The optical observation system has an objective lens (38) on a distal end surface of the insertion section. The ultrasonic ob-

servation system is disposed in the insertion section. The ultrasonic observation system has an ultrasonic transducer (52; 52a; 52c) on the distal end surface of the insertion section or further forward than the distal end thereof. A focal position of the optical observation system and a scanning surface of the ultrasonic transducer are approximately on the same plane.

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EUROPEAN SEARCH REPORT

Application Number
EP 08 02 0764

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 3 March 2010	Examiner Giménez Burgos, R
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专利名称(译)	超声内窥镜，治疗系统，内窥镜系统，T形杆和T形杆缝合装置		
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[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.		
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发明人	SATO, MASATOSHI KAJI, KUNIHIDE SUZUKI, TAKAYUKI SHIONO, JUNJI MIKKAICHI, TAKAYASU SHINICHI, TSUTAKI TOSHIHIRO, SHIZUKA NAKAZATO, TAKEHARU SATO, SUNAO MIZUNUMA, AKIKO		
IPC分类号	A61B1/005 A61B1/018 A61B8/12 A61B17/00		
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优先权	60/823669 2006-08-28 US		
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摘要(译)

超声波内窥镜 (10) 包括插入部 (12) , 操作部 (14) , 光学观察系统和超声波观察系统。插入部分具有远端和近端。操作部分设置在插入部分的近端上。光学观察系统设置在插入部分中。光学观察系统在插入部分的远端表面上具有物镜 (38) 。超声波观察系统设置在插入部分中。超声波观察系统在插入部分的远端表面上或者比其远端更向前具有超声换能器 (52; 52a; 52c) 。光学观察系统的焦点位置和超声波换能器的扫描表面大致在同一平面上。

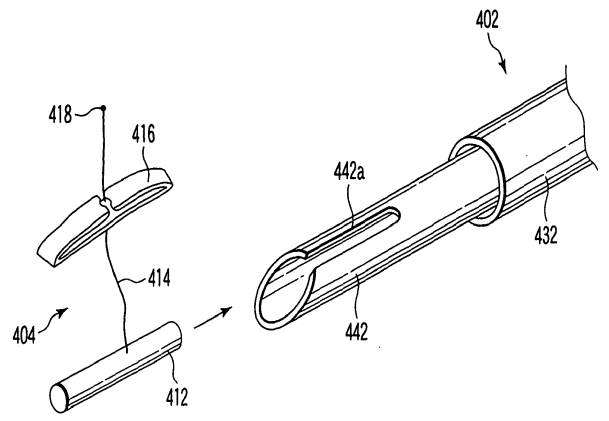


FIG. 34A