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**SUPPLEMENTARY
PARTIAL EUROPEAN SEARCH REPORT**
under Rule 46, paragraph 1 of the European Patent
Convention

Application Number

EP 00 98 9717

| DOCUMENTS CONSIDERED TO BE RELEVANT | | | |
|---|--|---|--|
| Category | Citation of document with indication, where appropriate, of relevant passages | Relevant to claim | CLASSIFICATION OF THE APPLICATION (Int.Cl.7) |
| X | US 5 769 790 A (WATKINS ET AL) 23 June 1998 (1998-06-23) | 30-41 | A61B17/00 A61N7/02 |
| Y | * the whole document * | 42-44 | |
| Y | US 5 921 994 A (ANDREAS ET AL) 13 July 1999 (1999-07-13) * column 1, lines 29-33 * | 42-44 | |
| X | FR 2 672 486 A (TECHNOMED INTERNATIONAL; INSTITUT NAL SANTE RECHERC MEDIC) 14 August 1992 (1992-08-14) * page 9, line 7 - page 13, line 23 * * figures 5-8 * | 30, 31, 36, 40 | |
| A | US 5 364 389 A (ANDERSON ET AL) 15 November 1994 (1994-11-15) * abstract * * column 5, lines 17-21 * | 30-44 | |
| | | | TECHNICAL FIELDS SEARCHED (Int.Cl.7) |
| | | | A61N A61B |
| LACK OF UNITY OF INVENTION | | | |
| <p>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:</p> <p>see sheet B</p> <p>The present partial 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.</p> | | | |
| Place of search | | Date of completion of the search | Examiner |
| Munich | | 29 June 2005 | Willig, H |
| CATEGORY OF CITED DOCUMENTS | | T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document | |
| X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document | | | |



European Patent
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INCOMPLETE SEARCH
SHEET C

Application Number
EP 00 98 9717

Claim(s) not searched:
1-29

Reason for the limitation of the search (non-patentable invention(s)):

Article 52 (4) EPC - Method for treatment of the human or animal body by
surgery and therapy



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: 30-44

Apparatus to seal a puncture in a vascular vessel with high-intensity focussed ultrasound comprising a controller to control the administration of the ultrasonic energy.

2. claims: 45-50

Apparatus to seal a puncture in a vascular vessel with high-intensity focussed ultrasound comprising a protective applicator shell sized to fit over the ultrasonic transducer.

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

EP 00 98 9717

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.

29-06-2005

| Patent document cited in search report | Publication date | Patent family member(s) | Publication date |
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| US 5769790 | A | 23-06-1998 | NONE |
| US 5921994 | A | 13-07-1999 | US 5902311 A 11-05-1999 DE 69623348 D1 02-10-2002 DE 69623348 T2 15-05-2003 EP 1092394 A2 18-04-2001 EP 0910288 A1 28-04-1999 JP 11507579 T 06-07-1999 WO 9700046 A1 03-01-1997 |
| FR 2672486 | A | 14-08-1992 | FR 2672486 A1 14-08-1992 |
| US 5364389 | A | 15-11-1994 | AU 714366 B2 23-12-1999 AU 5387398 A 09-04-1998 AU 684057 B2 04-12-1997 AU 5669994 A 22-06-1994 CA 2149779 A1 09-06-1994 EP 0735840 A1 09-10-1996 JP 8503635 T 23-04-1996 WO 9412106 A1 09-06-1994 |

| | | | |
|----------------|---|---------|------------|
| 专利名称(译) | 使用聚焦超声波进行血管密封 | | |
| 公开(公告)号 | EP1229839A4 | 公开(公告)日 | 2005-12-07 |
| 申请号 | EP2000989717 | 申请日 | 2000-10-25 |
| [标]申请(专利权)人(译) | 塞鲁斯公司 | | |
| 申请(专利权)人(译) | THERUS CORPORATION | | |
| 当前申请(专利权)人(译) | THERUS CORPORATION | | |
| [标]发明人 | WENG LEE PEROZEK DAVID ZHANG JIMIN | | |
| 发明人 | WENG, LEE PEROZEK, DAVID ZHANG, JIMIN | | |
| IPC分类号 | A61B8/00 A61B17/00 A61B17/12 A61B18/00 A61B19/00 A61N7/02 G10K11/32 G10K11/34 | | |
| CPC分类号 | A61B8/4422 A61B17/0057 A61B2017/00504 A61B2017/00641 A61B2017/00907 A61B2090/062 A61B2090/378 A61B2090/3904 A61B2090/3937 A61B2562/164 A61N7/02 G10K11/32 G10K11/346 | | |
| 优先权 | 60/163466 1999-10-25 US 60/171703 1999-12-23 US | | |
| 其他公开文献 | EP1229839A2 | | |
| 外部链接 | Espacenet | | |

摘要(译)

公开了一种用于定位血管开口并通过高强度聚焦超声 (HIFU) 治疗性密封伤口的方法和系统。耦合至施加器单元的控制单元 (6) 包括处理器 (74), 该处理器使所公开的过程自动化, 控制诊断和治疗模式的各种参数, 包括由施加器单元发射的超声能量的强度和持续时间。然后将所公开的方法和系统丢弃, 然后将其滑倒, 特别适用于密封在心血管介入手术期间插入导管的穿刺。