



(12) **EUROPEAN PATENT APPLICATION**

(88) Date of publication A3:
20.02.2008 Bulletin 2008/08

(51) Int Cl.:
G01S 15/89 (2006.01) **A61B 8/12** (2006.01)
A61B 8/14 (2006.01)

(43) Date of publication A2:
08.11.2006 Bulletin 2006/45

(21) Application number: **06252210.7**

(22) Date of filing: **25.04.2006**

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR
Designated Extension States:
AL BA HR MK YU

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(30) Priority: **26.04.2005 US 114680**

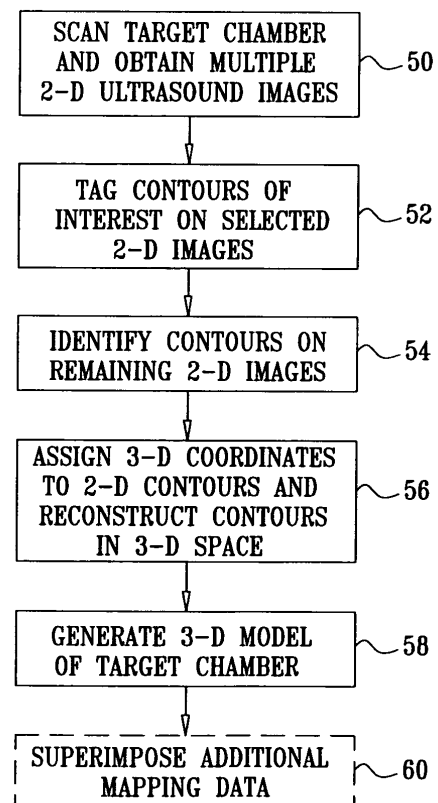
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(54) **Display of a two-dimensional fan shaped ultrasound field**

(57) A medical imaging system for imaging a patient's body includes a catheter having a position sensor and an ultrasonic imaging sensor wherein the position sensor transmits electrical signals indicative of positional information of a portion of the catheter in a patient's body and the ultrasonic imaging sensor transmits ultrasonic energy at a target in the patient's body, receives ultrasonic echoes reflected from the target in the patient's body and transmits signals relating to the ultrasonic echoes reflected from the target in the patient's body. A positioning processor is operatively connected to the catheter for determining positional information of the portion of the catheter based on the electrical signals transmitted by the position sensor. The system also includes a display and an image processor operatively connected to the catheter, the positioning processor and the display. The image processor generates an ultrasonic image of the target based on the signals transmitted by the ultrasonic sensor and depicts in real-time the generated ultrasound image on a display in a same orientation as an orientation of the portion of the catheter in the patient's body based on positional information derived from the position sensor.

FIG. 3





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 06 25 2210

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The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 8 January 2008	Examiner Anscombe, Marcel
CATEGORY OF CITED DOCUMENTS 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 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			

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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08-01-2008

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专利名称(译)	显示二维扇形超声场		
公开(公告)号	EP1720039A3	公开(公告)日	2008-02-20
申请号	EP2006252210	申请日	2006-04-25
[标]申请(专利权)人(译)	韦伯斯特生物官能公司		
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IPC分类号	G01S15/89 A61B8/12 A61B8/14		
CPC分类号	G06T17/10 A61B5/02055 A61B5/042 A61B5/06 A61B5/062 A61B8/12 A61B8/14 A61B8/145 A61B8/4254 A61B8/463 A61B8/543 A61B2090/364 A61B2090/3958 G01S15/8993 G06T7/30 G06T2207/30048 G06T2210/41		
代理机构(译)	MERCER, CHRISTOPHER PAUL		
优先权	11/114680 2005-04-26 US		
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摘要(译)

用于对患者身体成像的医学成像系统包括具有位置传感器和超声成像传感器的导管，其中位置传感器发送指示导管的一部分在患者体内的位置信息的电信号，并且超声成像传感器发送超声能量在患者体内的目标处，接收从患者体内的目标反射的超声回波，并发送与从患者体内的目标反射的超声回波有关的信号。定位处理器可操作地连接到导管，用于基于由位置传感器发送的电信号确定导管的该部分的位置信息。该系统还包括显示器和可操作地连接到导管，定位处理器和显示器的图像处理器。图像处理器基于由超声波传感器发送的信号生成目标的超声图像，并且在显示器上以与基于患者体内的导管部分的取向相同的取向实时描绘所生成的超声图像。来自位置传感器的位置信息。

