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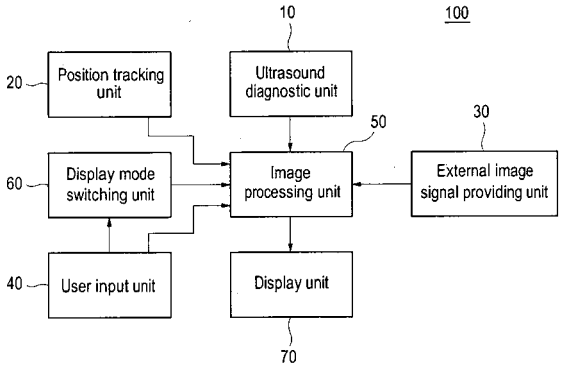
(54) Ultrasound system for fusing an ultrasound image and an external medical image

(57) There is provided an ultrasound system, which includes: an ultrasound diagnostic unit having a probe for transmitting an ultrasound beam to a target object and receiving ultrasound echo signals reflected from the target object to form ultrasound images; a position tracking unit for providing position information of the probe and ultrasound beam direction information; an external medical image signal providing unit for providing external medical image signals acquired from an external medical imaging device to form at least one external medical image; a user input unit for inputting position information of a lesion in the external medical image from a user; and an image processing unit for forming a fusion image of the ultrasound image and the external image based on the position information of the probe, the ultrasound beam direction information and the position information of the lesion in the external image.

FIG. 1



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EUROPEAN SEARCH REPORT

Application Number
EP 07 00 9599

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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TECHNICAL FIELDS SEARCHED (IPC)

A61B
G01S

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	17 January 2013	Zaneboni, Thomas

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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EUROPEAN SEARCH REPORT

Application Number
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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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& : member of the same patent family, corresponding document

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17-01-2013

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

专利名称(译)	用于融合超声图像和外部医学图像的超声系统		
公开(公告)号	EP1857834A3	公开(公告)日	2013-02-20
申请号	EP2007009599	申请日	2007-05-14
申请(专利权)人(译)	MEDISON CO.，LTD.		
当前申请(专利权)人(译)	MEDISON CO.，LTD.		
[标]发明人	LEE SEUNG WOO DISCUSSER & MEDISON BUILDING KIM CHEOL AN DISCUSSER & MEDISON BUILDING SHIN SEONG CHUL DISCUSSER & MEDISON BUILDING		
发明人	LEE, SEUNG WOO, DISCUSSER & MEDISON BUILDING, KIM, CHEOL AN, DISCUSSER & MEDISON BUILDING, SHIN, SEONG CHUL, DISCUSSER & MEDISON BUILDING,		
IPC分类号	G01S15/89 G01S7/52 G06T17/00 A61B8/00		
CPC分类号	G01S15/899 A61B5/06 A61B5/062 A61B6/032 A61B6/12 A61B6/5247 A61B8/4245 A61B8/4254 A61B8/4281 A61B8/466 A61B8/483 A61B8/5238 A61B8/5261 G01S7/5205 G01S7/52084 G01S15/8993		
代理机构(译)	LORENZ，WERNER		
优先权	1020060043668 2006-05-16 KR		
其他公开文献	EP1857834A2		
外部链接	Espacenet		

摘要(译)

提供一种超声系统，其包括：超声诊断单元，具有用于将超声波束发射到目标对象的探头，并接收从目标对象反射的超声回波信号，以形成超声图像;位置跟踪单元，用于提供探头的位置信息和超声波束方向信息;外部医学图像信号提供单元，用于提供从外部医学成像设备获取的外部医学图像信号，以形成至少一个外部医学图像;用户输入单元，用于从用户输入外部医学图像中的病变的位置信息;图像处理单元，用于基于探头的位置信息，超声波束方向信息和外部图像中的病变的位置信息，形成超声波图像和外部图像的融合图像。

FIG. 1