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(54) **Processing device for ultrasonic tomographic image**

(57) A free-moving piece (jellyfish sign) having a high probability of separation in the near future in an unstable plaque is clearly displayed. Ultrasonic tomographic images (25) of a cross section including an axis of the carotid artery are successively obtained. Using a threshold value which sets a surface (48) of the unstable plaque

as a boundary between brightness and darkness, the plurality of ultrasonic tomographic images (25) are binarized. A difference is calculated between corresponding pixels of two binarized ultrasonic tomographic images so that a free-moving piece (52) is extracted and displayed overlapped over the ultrasonic tomographic image (25).

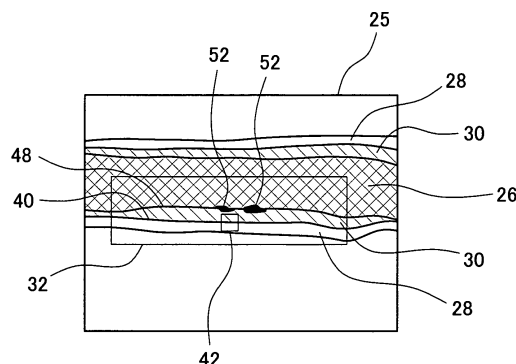


FIG. 5



EUROPEAN SEARCH REPORT

Application Number
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A	US 2006/171585 A1 (RINCK DANIEL [DE] ET AL) 3 August 2006 (2006-08-03) * abstract * * paragraph [0008] - paragraph [0010] * * paragraph [0018] * * paragraphs [0025], [0031] *	1-10	TECHNICAL FIELDS SEARCHED (IPC)
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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 31 August 2012	Examiner Turina, Andreas
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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EUROPEAN SEARCH REPORT

Application Number
EP 10 01 3970

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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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 31 August 2012	Examiner Turina, Andreas
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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**ANNEX TO THE EUROPEAN SEARCH REPORT
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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
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31-08-2012

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专利名称(译)	超声波断层图像处理装置		
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申请号	EP2010013970	申请日	2010-10-25
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CPC分类号	G06T7/215 A61B8/0891 A61B8/14 A61B8/5253 G06T7/136 G06T2207/10072 G06T2207/10136 G06T2207/20224 G06T2207/30048 G06T2207/30101		
优先权	2009253665 2009-11-05 JP		
其他公开文献	EP2335594B1 EP2335594A2		
外部链接	Espacenet		

摘要(译)

清楚地显示在不稳定的斑块中在不久的将来具有高分离概率的自由移动的片(水母标志)。连续获得包括颈动脉轴的横截面的超声断层扫描图像(25)。使用将不稳定斑块的表面(48)设定为亮度和暗度之间的边界的阈值,将多个超声断层图像(25)二值化。计算两个二值化超声波断层图像的相应像素之间的差异,从而提取重叠在超声断层图像(25)上的自由移动片(52)。

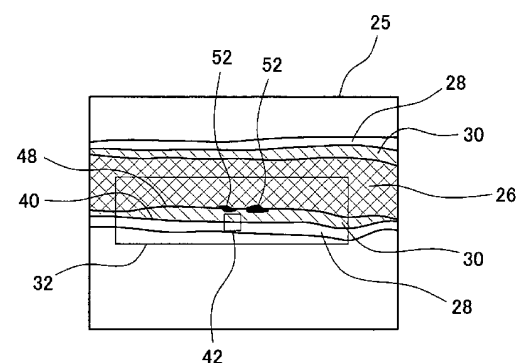


FIG. 5