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SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application Number
EP 15 75 2339

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2013/231563 A1 (PARK SUNG CHAN [KR] ET AL) 5 September 2013 (2013-09-05) * abstract * * paragraphs [0007] - [0014], [0018], [0033] - [5161]; claims 1-20; figures 1,2 * -----	1-5	INV. A61B8/00
X	CARLOS FRITSCH ET AL: "A Digital Envelope Detection Filter for Real-Time Operation", IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 48, no. 6, 1 December 1999 (1999-12-01), XP011024874, ISSN: 0018-9456 * abstract * * page 1287, right-hand column, paragraph 3 * * page 1291, left-hand column, paragraph 2 - paragraph 3; figure 7 * * page 1290, left-hand column, paragraph 2 * -----	1-5	TECHNICAL FIELDS SEARCHED (IPC) A61B G01S
X	LEVESQUE P ET AL: "Real-Time Hand-Held Ultrasound Medical-Imaging Device Based on a New Digital Quadrature Demodulation Processor", IEEE TRANSACTIONS ON ULTRASONICS, FERROELECTRICS AND FREQUENCY CONTROL, IEEE, US, vol. 56, no. 8, 1 August 2009 (2009-08-01), pages 1654-1665, XP011271286, ISSN: 0885-3010, DOI: 10.1109/TUFFC.2009.1230	1	
A	* abstract; figure 3 * * page 1655, left-hand column, paragraph 2; figures 1,2 * -----	2-6	

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search	Date of completion of the search	Examiner
Munich	27 October 2017	Daoukou, Eleni

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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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
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L : document cited for other reasons

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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing claims for which payment was due.

☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due and for those claims for which claims fees have been paid, namely claim(s):

☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for those claims for which no payment was due.

LACK OF UNITY OF INVENTION

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:

see sheet B

☐ All further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for all claims.

☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.

☐ Only part of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:

☒ None of the further search fees have been paid within the fixed time limit. The present (supplementary) European search report has been drawn up for those parts of the European patent application which relate to the first mentioned in the claims, namely claims:

2, 4-6(completely); 1, 3(partially)

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LACK OF UNITY OF INVENTION
SHEET B

Application Number
EP 15 75 2339

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: 2, 4-6(completely); 1, 3(partially)

   Method for B-mode ultrasound imaging

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2. claims: 7-10(completely); 1, 3(partially)

   Method for Doppler ultrasound imaging

   ---

3. claims: 11-15(completely); 1, 3(partially)

   Method for elasticity ultrasound imaging

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 15 75 2339

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.

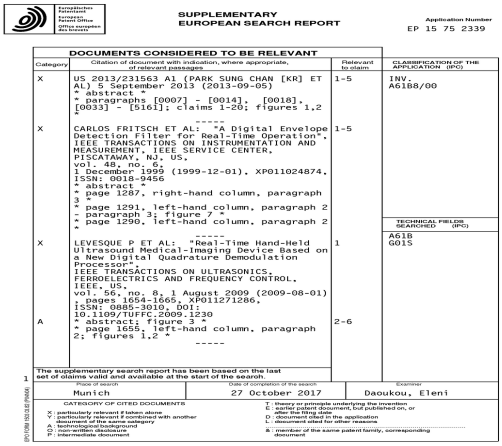
27-10-2017

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2013231563 A1	05-09-2013	KR 20130100607 A	11-09-2013
		US 2013231563 A1	05-09-2013

专利名称(译)	基于射频数据的超声成像方法和系统		
公开(公告)号	EP3108817A4	公开(公告)日	2018-03-21
申请号	EP2015752339	申请日	2015-02-09
[标]申请(专利权)人(译)	飞依诺科技(苏州)有限公司		
申请(专利权)人(译)	VINNO科技（苏州）有限公司.		
当前申请(专利权)人(译)	VINNO科技（苏州）有限公司.		
[标]发明人	CHEN HUIREN LING TAO GUO JIANJUN YIN DAJUN XI SHUI		
发明人	CHEN, HUIREN LING, TAO GUO, JIANJUN YIN, DAJUN XI, SHUI		
IPC分类号	A61B8/00		
CPC分类号	A61B8/5207 A61B8/14 A61B8/485 A61B8/488 A61B8/5269 G01S7/52077 G01S15/8977		
优先权	201510033038.3 2015-01-22 CN 201410057108.4 2014-02-20 CN		
其他公开文献	EP3108817A1 EP3108817B1		
外部链接	Espacenet		

摘要(译)

本申请公开了一种基于RF数据的超声成像处理方法，也称为RF数据平台技术。该方法包括以下步骤：S1，接收通过发送超声信号获得的回声信号; S2，波束形成回波信号; S3，获取回波信号的RF数据; S4，基于获得的RF数据直接进行超声成像处理，以获得目标图像。基于根据本申请的RF数据的超声成像处理方法和系统基于所获得的回波信号的RF数据直接进行超声成像处理，以获得目标图像。与现有技术相比，该系统简单且不丢失数据信息。此外，利用这种方法和系统改进了超声诊断设备的实时性能和图像质量，使诊断信息和轴向分辨率更加细致，清晰，同时降低了制造和使用成本。



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A		2-6	

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