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[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR DETERMINING LOCATIONS OF MULTIPLE CASINGS WITHIN A WELLBORE CONDUCTOR

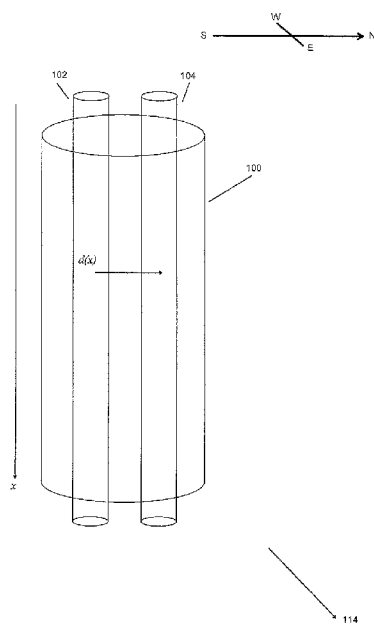


Figure 1

(57) Abstract: Certain embodiments described herein provide methods, systems and computer-readable media for determining at least one location of at least one wellbore casing within a wellbore conductor. Sensor measurements generated by at least one sensor within the conductor are provided, the measurements indicative of at least one location of the at least one casing within the conductor as a function of position along the conductor. In certain embodiments, a data memory stores the measurements. The at least one location of the at least one casing is calculated using the measurements and at least one geometric constraint. The at least one constraint originates at least in part from at least one physical parameter of the conductor, or at least one physical parameter of the at least one casing, or both. In certain embodiments, a computer system or computer-executable component calculates the at least one location of the at least one casing.



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**A. CLASSIFICATION OF SUBJECT MATTER**  
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 ADD.  
 According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**  
 Minimum documentation searched (classification system followed by classification symbols)  
 E21B  
 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)  
 EPO-Internal

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	HICKS S E ET AL: "Magnus: Utilisation of Conductor Sharing Wellhead Technology to Access Additional Hydrocarbons via a Slot-Constrained Platform", 2009 SPE OFFSHORE EUROPE OIL & GAS CONFERENCE & EXHIBITION,, no. SPE 124233, 8 September 2009 (2009-09-08), pages 1-10, XP007918440, pages 8-10; figures 11-18 the whole document	1-24
A	WO 2004/070159 A2 (WEATHERFORD LAMB [US]; GIROUX GREGORY G [US]; GALLOWAY GREGORY G [US];) 19 August 2004 (2004-08-19) paragraphs [0005], [0279], [0287], [0319] - [0327], [0345] the whole document	1,22-24
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Further documents are listed in the continuation of Box C.       See patent family annex.

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"P" document published prior to the international filing date but later than the priority date claimed	

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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  van Berlo, André
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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 655 602 A (COLLINS GARY J [US]) 12 August 1997 (1997-08-12) figures 1-28 -----	1,22-24
A	US 3 847 215 A (HERD D) 12 November 1974 (1974-11-12) figure 7 the whole document -----	1,22-24
A	WO 2009/014838 A1 (SCHLUMBERGER CA LTD [CA]; SCHLUMBERGER TECHNOLOGY BV [NL]; PRAD RES &) 29 January 2009 (2009-01-29) the whole document -----	1,13-19

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/US2009/067213
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