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(54) **An annular barrier with a diaphragm**

(57) The present invention relates to an annular barrier arranged in a borehole for providing zone isolation between a first zone and a second zone. Furthermore,

the present invention relates to an annular barrier system as well as to a method of using annular barriers in an annulus to seal off a first zone from a second zone.

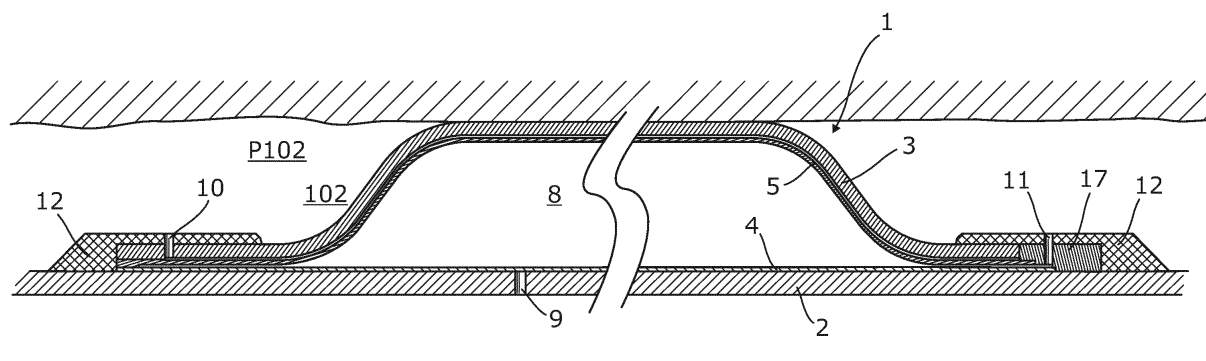


Fig. 7



EUROPEAN SEARCH REPORT

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	US 2006/027371 A1 (GORRARA ANDREW J [GB] GORRARA ANDREW JOHN [GB]) 9 February 2006 (2006-02-09) * paragraphs [0015], [0073] * * figures 10-12 *	1,5	INV. E21B33/127
Y	US 2005/072579 A1 (GAMBIER PHILIPPE [US]) 7 April 2005 (2005-04-07) * paragraphs [0022] - [0024]; figures 1,2,7 *	1,5	
A	US 6 640 893 B1 (RUMMEL FRITZ [DE] ET AL) 4 November 2003 (2003-11-04) * abstract *	1-11	
			TECHNICAL FIELDS SEARCHED (IPC)
			E21B
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 2 March 2015	Examiner Schouten, Adri
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
ON EUROPEAN PATENT APPLICATION NO.**

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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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02-03-2015

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006027371 A1	09-02-2006	EP 1624152 A2	08-02-2006
		NO 331627 B1	06-02-2012
		US 2006027371 A1	09-02-2006

US 2005072579 A1	07-04-2005	CA 2482137 A1	03-04-2005
		GB 2406593 A	06-04-2005
		GB 2416796 A	08-02-2006
		GB 2417270 A	22-02-2006
		GB 2417271 A	22-02-2006
		GB 2417272 A	22-02-2006
		US 2005072579 A1	07-04-2005

US 6640893 B1	04-11-2003	AT 268429 T	15-06-2004
		DE 60011254 D1	08-07-2004
		DE 60011254 T2	08-09-2005
		DK 1165933 T3	11-10-2004
		EP 1165933 A1	02-01-2002
		ES 2223487 T3	01-03-2005
		FR 2791732 A1	06-10-2000
		JP 2002540330 A	26-11-2002
		PT 1165933 E	29-10-2004
		US 6640893 B1	04-11-2003
WO 0058601 A1	05-10-2000		
