

12 **EUROPEAN PATENT APPLICATION**

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71 Applicant: **Plexus Ocean Systems Limited**
Coach House 60A Hamilton Place
Aberdeen AB2 4BH Scotland(GB)

72 Inventor: **Van Bilderbeek, Bernard Herman**
60 Hamilton Place
Aberdeen AB2 4BH Scotland(GB)

74 Representative: **Pattullo, Norman et al**
Ian G. Murgitroyd and Company Mitchell
House 333 Bath Street
Glasgow G2 4ER Scotland(GB)

54 **Casing hanger systems.**

57 A casing hanger system, particularly for mudline hangers in offshore wells. An inner casing string (24) which includes a running hanger body (20) is suspended by a split ring hanger (40) from an outer casing (44) which includes a receiving hanger (52). The receiving hanger (52) and split ring hanger (40) have complementary profiles (58,60) which lock together when the split ring (40) expands. The split ring (40) is carried down through the outer casing (44) contracted into an annular recess (28) in the running hanger body (20), and temporarily restrained to the lower end of the recess (28). When the running hanger body (20) reaches the receiving hanger (52), the split ring (40) expands so that the complementary profiles (58,60) engage and suspend the ring from the receiving hanger (52). The temporary restraint is released, and the running hanger body (20) descends a further short distance until the upper end (30) of the annular recess lands on the ring (40) to suspend the inner casing string (24) on the ring (40). Two annular arms (48,46) on the recess (28) apply positive locking to the split ring hanger (40) in this position. With dual positive locking, the split ring hanger regains hoop strength.

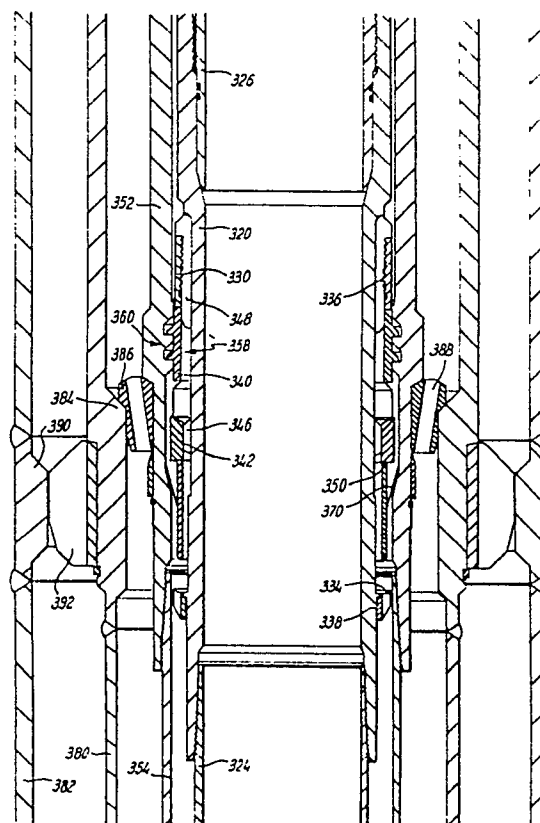


FIG. 12



EP 87 30 8330

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	GB-A-2 120 300 (DRIL-QUIP) * Figures; abstract; page 3, lines 40-56,84-115; page 3, line 126 - page 4, lines 2,35-42,66-130 *	1-3,7-10	E 21 B 33/043
A	---	4	
A	US-A-4 295 665 (PIERCE) * Figures; abstract *	1-10	
A	---		
A	US-A-4 355 825 (LEICHT) * Figures; abstract *	1	
A	---		
A	US-A-4 534 583 (MILBERGER) * Figures; abstract *	1	
A	---		
A	GB-A-2 165 609 (VETCO OFFSHORE) * Figures; abstract; page 2, lines 52-108 *	1	

The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
			E 21 B
Place of search		Date of completion of the search	Examiner
THE HAGUE		06-01-1989	WEIAND T.
CATEGORY OF CITED DOCUMENTS			
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