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E 21 B 34/14

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⑤④ **Cement collar and method of use.**

⑤⑦ A cementing collar for inclusion in a well casing to permit primary multiple stage cementing comprises a tubular housing (12, 40, 64), a cementing port (52) and sleeve means (200) inside the housing and slidable in response to pressure changes to open and close the port.

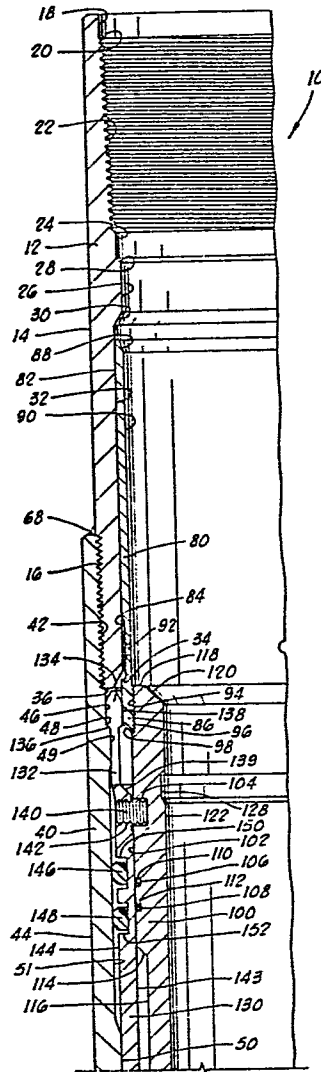


FIG. 1A

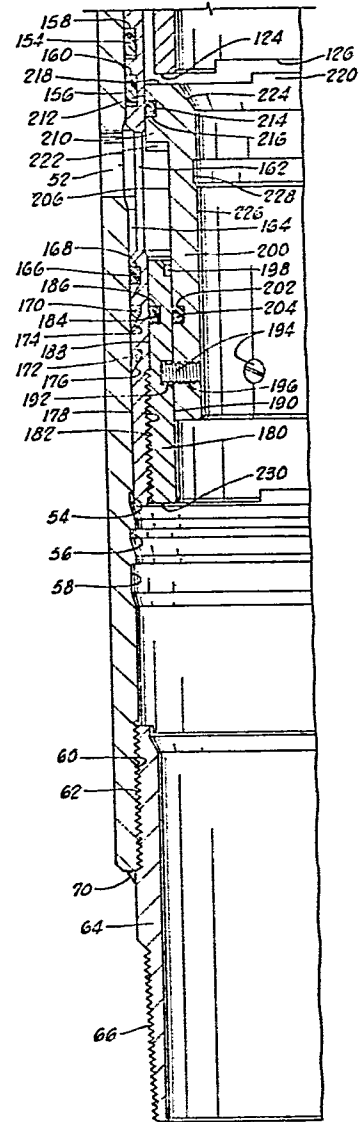


FIG. 1B



European Patent
Office

EUROPEAN SEARCH REPORT

0166568

Application number

EP 85 30 4357

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-2 080 365 (VANN) * Abstract; page 2, lines 79-80, 92-97, 107-110; figures *	1-5	E 21 B 33/16 E 21 B 34/14 E 21 B 34/10
Y		6-8	
X	--- US-A-4 429 747 (WILLIAMSON) * Column 6, lines 46-60; column 7, lines 7-20; figures *	1	
Y, D	--- US-A-3 768 556 (BAKER) * Abstract; column 4, lines 13-14, 48 - column 5, line 43; column 3, lines 3-11, 38-40; figures *	6-8	
A		9, 10	TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
A	--- US-A-4 332 298 (KUUS et al.) * Column 6, lines 38-50; column 9, lines 10-15 *	1-4	E 21 B
A, D	--- US-A-3 811 500 (MORRISETT et al.) * The whole document *	1	
A, D	--- US-A-4 246 968 (JESSUP et al.) * The whole document *	1	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 21-01-1987	Examiner HEDEMANN, G. A.
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			