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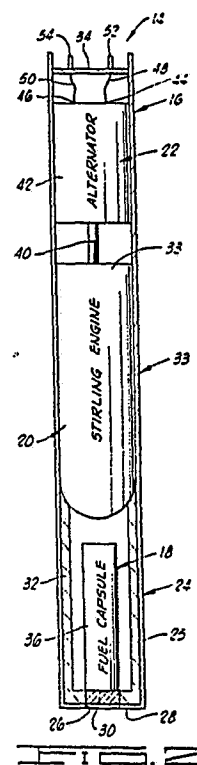
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54 Thermomechanical electrical power supply apparatus for a downhole tool.

57 A downhole tool for an oil or gas well includes a self-contained power supply having a housing (6) in which a primary fuel source (18), a Stirling cycle engine (20), and a linear alternator (22) are disposed. The primary fuel source includes a radioisotope which, by its radioactive decay, provides heat to operate the Stirling engine which in turn drives the linear alternator to provide a suitable electrical output for use by the circuit of the downhole tool.





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EUROPEAN SEARCH REPORT

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EP 87 30 2375

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)
A	US-A-4 491 738 (KAMP) * Column 9, lines 41-49 * ---	1,3,6,8	E 21 B 41/00 F 02 G 1/043//
A	US-A-4 183 214 (BEALE) * Column 3, lines 40-49,57-63; column 8, lines 23-27 * ---	1,3,6,8	E 21 B 47/06 E 21 B 43/116
A	US-A-4 355 517 (CEPERLEY) * Abstract; column 5, lines 16-19 * ---	1,3,6,8	
A	US-A-3 563 028 (GORANSON) * Abstract; column 3, line 73 - column 4, line 3 * ---	1,2,4,7 ,9	
A	US-A-3 996 749 (DENIS) * Abstract; column 7, lines 14-20 * ---	1,3,4,6 -9	
A	US-A-4 432 204 (WALSH) * Column 5, lines 46-51 * ---	1,3,6,8	
A	US-A-3 876 471 (JONES) * Abstract * ---	1,3,5,6 ,8,10	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
A	US-A-3 666 030 (BOHN) * Abstract * -----	1,3,5,6 ,8,10	E 21 B F 02 G
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12-12-1988	Examiner SOGNO M.G.
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			