

Title (en)  
ROPE GUIDING DEVICE

Publication  
**EP 0058159 B1 19850320 (EN)**

Application  
**EP 81901390 A 19800821**

Priority  
US 8001069 W 19800821

Abstract (en)  
[origin: WO8200675A1] An adjustable two-piece rope guiding device (21, 26), particularly adaptable for use on offshore guyed tower drilling and production structures (11). On such structures it is necessary to deflect a taut guy rope (14) into a direction that may not be precisely known, or that may vary with time. Such deflection must not damage the rope by excessive static or cyclic straining or by wearing. To minimize problems of clearance within the structure the guiding is performed in two parts: 1) a permanent deflection into a direction that satisfies the foregoing clearance requirements and 2) a variable deflection occurring beyond clearance problems that completes the required total deflection. When guiding the guy ropes (14) of an offshore oil production tower (11) from their vertical orientation at the clamping and jacking (tensioning) devices (20) on the tower to a seafloor anchoring system (15, 16) a first bending member (21) changes the vertical direction of the guy ropes (14) to a selected direction (plane) extending toward such anchoring system (15, 16). A second bending member (26) rotates the rope in a new direction at the periphery of the offshore structure (11) to accommodate positions of the anchoring system (15, 16) with respect to the plane of the selected direction. The first member is a fixed shoe (21) having a grooved rope contacting surface (23) and a sleeve (24). The second member (26) includes an outer fixed housing (45) and an inner rotatable housing (46) having a grooved surface (48) for contacting the rope. The inner surface of the inner housing (46) may have various configurations depending upon its application. In its use with guyed tower anchoring the inner surface is preferably a three-sided pyramidal configuration (52, 53, 54) one corner of which comprises the grooved rope-contacting surface (48).

IPC 1-7  
**E02D 21/00**; **B63B 21/00**

IPC 8 full level  
**B63B 21/04** (2006.01); **E02B 17/00** (2006.01)

CPC (source: EP)  
**B63B 21/04** (2013.01); **E02B 17/00** (2013.01)

Citation (examination)  
• GB 1495174 A 19771214 - LAIRD GROUP LTD, et al  
• GB 571328 A 19450820 - KNUTE BERGER

Designated contracting state (EPC)  
FR GB NL

DOCDB simple family (publication)  
**WO 8200675 A1 19820304**; BR 8009101 A 19820622; CA 1162752 A 19840228; EP 0058159 A1 19820825; EP 0058159 A4 19830114; EP 0058159 B1 19850320; ES 504851 A0 19830701; ES 8307961 A1 19830701; IT 1171474 B 19870610; IT 8149132 A0 19810820; JP S57501292 A 19820722; MY 8600687 A 19861231; NO 155059 B 19861027; NO 821203 L 19820413

DOCDB simple family (application)  
**US 8001069 W 19800821**; BR 8009101 A 19800821; CA 383354 A 19810806; EP 81901390 A 19800821; ES 504851 A 19810820; IT 4913281 A 19810820; JP 50189081 A 19800821; MY 8600687 A 19861230; NO 821203 A 19820413