

Title (en)  
Riser tensioning construction

Title (de)  
Riser-Spannanordnung

Title (fr)  
Système tendeur de tuyaux de montée

Publication  
**EP 0945587 A1 19990929 (EN)**

Application  
**EP 98200984 A 19980327**

Priority  
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Abstract (en)  
The invention relates to a vessel (1) comprising a riser tensioning construction. A tensioning member (9) is movably carried on a support frame of the vessel, one side of the tensioning member carrying a riser (3,4) extending from a subsea structure to above water level. The other end of the tensioning member is attached to a weight (16,17) for exerting a tensioning force on the riser. The vessel according to the invention is characterised in that the second end of the tensioning member (9) extends outside the hull (1) of the vessel or in a well in the vessel such as to be located below water level. Hereby the movements of the weight upon pitch, roll or heave motions of the vessel are limited and additional space on the vessel is made available for production or processing equipment. One embodiment comprises a support frame which is carried by cables and sheaves that are supported on two spaced apart arms above deck level. The risers (3,4) are attached to the support frame (15) such that a substantially equalized tensional force on the risers is maintained during movements of the vessel. Weight guiding elements may be provided on the vessel or on the seabed or may be formed by the risers themselves for preventing lateral movement of the weights and preventing damage to the risers. Other embodiments comprise flexible lines as a tensioning member connected to the seabed. <IMAGE>

IPC 1-7  
**E21B 19/00**; **E21B 7/128**; **B63B 35/44**

IPC 8 full level  
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CPC (source: EP)  
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Citation (applicant)  
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