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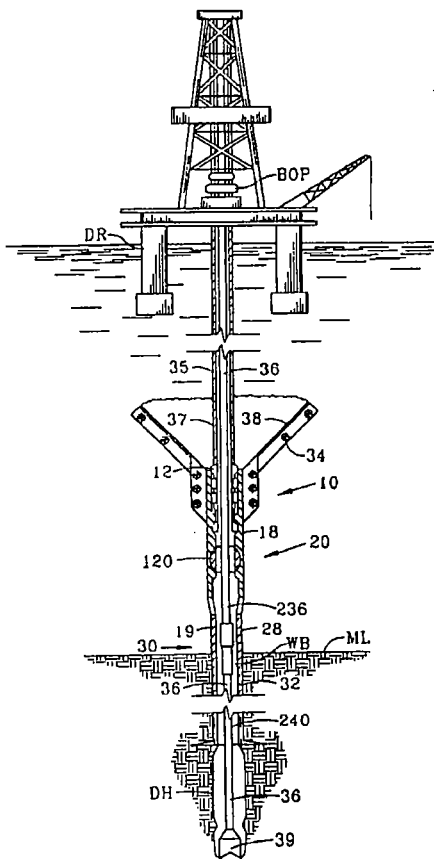
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(54) Title: SUBSEA RISER DISCONNECT AND METHOD



(57) Abstract: A subsea riser disconnect assembly (10) may be actuated from a drilling rig DR by axial movement of an upper riser (35) relative to a lower riser (28), for disconnecting the upper riser (35) from the lower riser (28). A subsea riser valve assembly (20) may be actuated from the drilling rig DR by axial movement of the upper riser (35) relative to the lower riser (28), for sealing an interior portion of the lower riser (28) and well bore WB below the subsea riser valve assembly (20). A drill pipe disconnect (30) may be actuated from a drilling rig DR, either onshore or offshore, for disconnecting an upper portion of drill pipe (236) from a lower portion of drill pipe (240). The drill pipe disconnect (30) may be actuatable by hydraulic and/or mechanical forces applied to the drill pipe disconnect (30) from the drilling rig DR. The drill pipe disconnect (30) may be compatible for use with or without the subsea riser disconnect assembly (10) and/or the subsea riser valve assembly (20). The component assemblies of this invention may improve the efficiency and lower the cost of recovering hydrocarbons by reducing drilling costs and time requirements. Also, the ability to relatively quickly disconnect a floating rig from a well may enhance the safety of persons and equipment facing hostile weather conditions or other emergency situations.

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