

Title (en)

LINEAR ROD PUMP APPARATUS AND METHOD

Title (de)

LINEARE KOLBENSTANGENPUMPE UND VERFAHREN

Title (fr)

APPAREIL ET PROCÉDÉ DE POMPE À TIGE LINÉAIRE

Publication

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Application

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Abstract (en)

[origin: WO2007146931A2] An apparatus and method for pumping fluids, such as water and/or hydrocarbons, from a subterranean formation or reservoir, include a linear rod pump having a mechanical rack and pinion drive arrangement, adapted for attachment to a pumping mechanism, such as the polished rod at the top of a rod string in a hydrocarbon well. The rack gear, of the rack and pinion drive arrangement, is adapted for connection to, and movement with, the polished rod. The pinion gear does not translate with the rack gear, and is driven by a reversible motor for affecting up and down reciprocating motion of the rack gear and pumping mechanism. Some forms of the invention include a compressible gas counter-balance arrangement. Some forms of the invention include an electronic drive configured for dealing with electric power generated by the motor during a portion of the pumping cycle.

IPC 8 full level

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