

Title (en)  
DOWNHOLE WELL PUMP.

Title (de)  
AM BODEN EINES BOHRLOCHS SICH BEFINDENDE PUMPE.

Title (fr)  
POMPE SITUEE AU FOND D'UN Puits DE FORAGE.

Publication  
**EP 0119210 A4 19850926 (EN)**

Application  
**EP 83902739 A 19830811**

Priority  
US 42150382 A 19820922

Abstract (en)  
[origin: WO8401191A1] Methods and means wherein a downhole reciprocating oil well pump powered by a source of pressurized fluid via one tubing string (32) pumps liquid from the well through another tubing string (30). The downhole pump having internal means to vent gas and vapor from the pump chamber (52) and to cause a pump stroke only when the pump chamber becomes filled with liquid. The pump chamber is sensed to be filled with liquid by a flow sensitive flow restrictor (184) which monitors the venting of the gas and vapor and causes the vent to close when liquid flows past the restrictor thereby closing a power valve (150) to allow the flow of power fluid towards the pump plunger (74). The plunger has a dome shaped head (80) and the cylinder has ports (62) to expel sediment from the pump chamber. The pump stroke speed may be independently regulated by adjusting the output of source of pressurized fluid and the return stroke may be adjusted by proper sizing of ports for return flow.

IPC 1-7  
**F04B 47/08**

IPC 8 full level  
**F04B 47/08** (2006.01)

CPC (source: EP)  
**F04B 47/08** (2013.01)

Citation (search report)  
• FR 2287634 A1 19760507 - DANSK IND SYNDIKAT [DK]  
• US 3035609 A 19620522 - DYER ALVAH F

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**US 8301233 W 19830811**; CA 434704 A 19830816; EP 83902739 A 19830811