

Title (en)  
DOUBLE HYDRAULIC ACTIVATED RECEPTACLE PUMP

Title (de)  
HYDRAULISCH AKTIVIERTE DOPPELBEHÄLTERPUMPE

Title (fr)  
POMPE HYDRAULIQUE DOUBLE ACTIVÉE À RÉCEPTACLE

Publication  
**EP 3921512 A4 20221005 (EN)**

Application  
**EP 20751883 A 20200203**

Priority  
• US 201962800863 P 20190204  
• US 202016779237 A 20200131  
• US 2020016409 W 20200203

Abstract (en)  
[origin: US2020248680A1] A downhole well pump has a housing with a housing bore having an upper section, a lower section and an intermediate section with a larger inner diameter than inner diameters of the upper and lower sections. A plunger has an upper plunger portion in the upper section of the housing bore, a piston in the intermediate section of the housing bore, and a lower plunger portion in the lower section of the housing bore. A hydraulic pump at the surface alternately supplies hydraulic fluid pressure to the upper and lower sides of the piston to cause the plunger to move upward and downward. A standing valve in the housing admits well fluid into the housing during the lifting stroke. A travelling valve moves in unison with the plunger for discharging well fluid from the housing during the lifting stroke.

IPC 8 full level  
**E21B 43/12** (2006.01); **F04B 9/105** (2006.01); **F04B 47/08** (2006.01); **F04B 53/14** (2006.01)

CPC (source: EP US)  
**E21B 43/129** (2013.01 - EP); **F04B 9/105** (2013.01 - EP); **F04B 47/08** (2013.01 - EP US)

Citation (search report)  
• [XAI] US 2005109516 A1 20050526 - WILSON BROWN L [US], et al  
• [A] US 2004241024 A1 20041202 - BRADFORD FLOYD JOHN [US]  
• [A] US 2006124298 A1 20060615 - GEIER HOWARD [CA]  
• [A] US 4778355 A 19881018 - HOLLAND JOHN H [US]  
• See also references of WO 2020163232A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)  
**US 2020248680 A1 20200806**; AU 2020217565 A1 20210826; AU 2020217565 B2 20221201; BR 112021014417 A2 20210921;  
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**US 202016779237 A 20200131**; AU 2020217565 A 20200203; BR 112021014417 A 20200203; CN 202080010556 A 20200203;  
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