

Title (en)
GAS LIFT VALVE

Title (de)
GASLIFTVENTIL

Title (fr)
SOUPAPE DE POUSSÉE DE GAZ

Publication
EP 2893125 A4 20151209 (EN)

Application
EP 13834902 A 20130906

Priority
• US 201261698629 P 20120908
• US 201261698627 P 20120908
• US 2013058364 W 20130906

Abstract (en)
[origin: WO2014039740A1] A gas lift valve is provided with increased longevity and reliability for preventing backflow. A wide cylindrical sliding member stabilizes axial movement of a valve element in the gas lift valve. A wide spring around the sliding member biases the valve element toward closure during back flow. The spring is physically supported and guided by the sliding member and protected from gas flow injection by the same sliding member. A one-piece poppet version of the valve element provides a consistent closing seal, and the sliding member protects the valve seat and poppet from full force of an injected gas. A dart version of the valve element includes a hexagonal race for movement of the sliding member, which prevents rotational wear of components and provides a straight flow path for the injection gas with no sharp transitions to wear and no sharp angles to erode.

IPC 8 full level
E21B 34/06 (2006.01); **E21B 34/08** (2006.01); **E21B 43/12** (2006.01)

CPC (source: EP US)
B21K 1/20 (2013.01 - US); **E21B 34/10** (2013.01 - US); **E21B 43/123** (2013.01 - EP US); **Y10T 29/49405** (2015.01 - EP US)

Citation (search report)
• [X] WO 2011131551 A2 20111027 - PETROLEUM TECHNOLOGY CO AS [NO], et al
• [X] US 2256704 A 19410923 - CRICKMER CHARLES S, et al
• [X] US 2144144 A 19390117 - CRICKMER CHARLES S
• [X] US 2009065215 A1 20090312 - TVEITEN MAGNAR [NO], et al
• See references of WO 2014039740A1

Cited by
CN109667974A

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

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2014039740 A1 20140313; BR 112015005036 A2 20170808; CA 2883895 A1 20140313; EP 2893125 A1 20150715; EP 2893125 A4 20151209; US 2015233220 A1 20150820

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US 2013058364 W 20130906; BR 112015005036 A 20130906; CA 2883895 A 20130906; EP 13834902 A 20130906; US 201314426637 A 20130906