

Title (en)

LIQUID UNLOADING METHOD AND SYSTEM

Title (de)

FLÜSSIGKEITSENTLADEVERFAHREN UND -SYSTEM

Title (fr)

SYSTÈME ET PROCÉDÉ DE DÉCHARGEMENT DE LIQUIDE

Publication

EP 3109398 A1 20161228 (EN)

Application

EP 15174090 A 20150626

Priority

EP 15174090 A 20150626

Abstract (en)

The present invention relates to a liquid unloading method for unloading liquid in a malfunctioning gas well having a top end and a bottom end and a gas production zone, the gas well having liquid accumulated in the bottom end and at least above the production zone. The method comprises the steps of providing a foaming agent on top of or in the liquid in the gas well; arranging a downhole tool at least partly submerged in the liquid; agitating fluid of the foaming agent and the liquid by the downhole tool; and forming foam of the liquid and the foaming agent at least partly above the gas production zone. Furthermore, the present invention relates to a downhole liquid unloading system for unloading liquid in a malfunctioning gas well.

IPC 8 full level

E21B 43/12 (2006.01)

CPC (source: EP US)

E21B 43/13 (2020.05 - EP US)

Citation (search report)

- [XI] US 2012073820 A1 20120329 - RANKIN E EDWARD [US]
- [XI] US 2010051288 A1 20100304 - GAUDETTE SEAN L [US]
- [XA] US 2015053410 A1 20150226 - ARELLANO JOSE LUIS [US], et al
- [A] US 2007181307 A1 20070809 - YANG JIANG [US]

Cited by

CN115945115A

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)

EP 3109398 A1 20161228

DOCDB simple family (application)

EP 15174090 A 20150626