

Title (en)  
Wellbore real-time monitoring and analysis of fracture contribution

Title (de)  
Bohrloch mit Echtzeitüberwachung und Analyse des Bruchanteils

Title (fr)  
Surveillance en temps réel de puits de forage et analyse de contribution de fracture

Publication  
**EP 2639401 B1 20160504 (EN)**

Application  
**EP 13159586 A 20130315**

Priority  
US 201261611924 P 20120316

Abstract (en)  
[origin: EP2639401A1] Methods and apparatus are provided for calculating production of each of a plurality of fractured intervals (or fractures) and monitoring changes in the fracture contribution with time. Such real-time monitoring and analysis may be performed by combining temperature distribution (and pressure) measurements, a real-time surface multiphase flow measurement, and an inflow model for each fractured interval (or fracture). In this manner, the industry may be able to understand the behavior of fractures and, in turn, optimize the number of stages ( i.e., fractured intervals), the number of fractures, and the spacing between fractures and stages.

IPC 8 full level  
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**EP 2639401 A1 20130918; EP 2639401 B1 20160504**; AR 090353 A1 20141105; AU 2013201757 A1 20131003; AU 2013201757 B2 20151022; BR 102013006266 A2 20150707; BR 102013006266 A8 20170711; BR 102013006266 B1 20210217; CA 2808858 A1 20130916; CA 2808858 C 20160126; CN 103306664 A 20130918; US 2013245953 A1 20130919

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**EP 13159586 A 20130315**; AR P130100848 A 20130315; AU 2013201757 A 20130315; BR 102013006266 A 20130315; CA 2808858 A 20130311; CN 201310085039 A 20130318; US 201313828055 A 20130314