

Title (en)
HYDRAULIC DELAY TOE VALVE METHOD

Title (de)
VERFAHREN FÜR HYDRAULISCHES VERZÖGERUNGSSPITZENVENTIL

Title (fr)
PROCÉDÉ DE CLAPET À PIED DE RETARD HYDRAULIQUE

Publication
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Application
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Priority
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• EP 16185314 A 20160823

Abstract (en)
[origin: EP3138993A2] An apparatus and method for providing a time delay in injection of pressured fluid into a geologic formation. In one aspect the invention is a toe valve activated by fluid pressure that opens ports after a predetermined time interval to allow fluid to pass from a well casing to a formation. The controlled time delay enables casing integrity testing before fluid is passed through the ports. This time delay also allows multiple valves to be used in the same well casing and provide a focused jetting action to better penetrate a concrete casing lining.

IPC 8 full level
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