

(21) Application No: 1513427.3  
(22) Date of Filing: 21.11.2013  
Date Lodged: 30.07.2015  
(30) Priority Data:  
(31) 13734242 (32) 04.01.2013 (33) US  
(86) International Application Data:  
PCT/US2013/071336 En 21.11.2013  
(87) International Publication Data:  
WO2014/107245 En 10.07.2014

(51) INT CL:  
E21B 21/10 (2006.01) E21B 17/06 (2006.01)  
E21B 34/14 (2006.01)  
(56) Documents Cited:  
US 20100113208 A1 US 20050004338 A1  
US5180016A  
US4260017A  
US3878889A  
(58) Field of Search:  
INT CL B23P, E21B, F16H

(71) Applicant(s):  
Baker Hughes Incorporated  
PO Box 4740, Houston 77210-4740, Texas,  
United States of America  
(72) Inventor(s):  
William A Hered  
Jason J Barnard  
(74) Agent and/or Address for Service:  
Dehns  
St. Bride's House, 10 Salisbury Square, LONDON,  
EC4Y 8JD, United Kingdom

(54) Title of the Invention: Reinforced shear components and methods of using same  
Abstract Title: Reinforced shear components and methods of using same

(57) A shear component for releasably securing a first component to a second component, the shear component comprising a body having a first end, a second end, an outer wall surface, an inner wall surface defining a cavity, a shear plane, and a core disposed within the cavity and in sliding engagement with the inner wall surface of the body. The core comprises a first position in which the core is disposed in alignment with the shear plane, and a second position in which the core is disposed out of alignment with the shear plane. The shear component can be included in a downhole tool to maintain the downhole tool in the run-in or initial position until being compromised by a stimulus.

