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(56) Documents Cited:

EP 2798150 B1 WO 2021/021140 A1 US 20200355061 A1 US 20140196949 A1 LONG et al. Centralizer Selection and Placement Basis for Overcoming Liner Running Challenges in **Extended-Reach Horizontal Three Forks Shale** Completions. Unconventional Resources Technology Conference, San Antonio, Texas, USA, 1-3 August 2016, pages 1-18. pages 2-14

(58) Field of Search:

INT CL E21B

Other: eKOMPASS(KIPO internal)

- (54) Title of the Invention: Calibration of drillstring weight with drag for friction factor estimation Abstract Title: Calibration of drillstring weight with drag for friction factor estimation
- (57) A method comprises determining a value of at least one oppositional force for a drillstring at multiple depths in the wellbore, determining a value of a drag force for the drillstring at the multiple depths, determining a value of hook load for the drillstring at the multiple depths based on the value of the at least one opposition force and the value of the drag force at the multiple depths, and determining a calibrated drillstring weight based on a change in the value of the hook load over the multiple depths. From the calibrated drillstring weight, an adjusted estimated hook load can be determined. The drag force can be calculated based on a drag per centralizer and the number of centralizers in the wellbore. A centralizer friction factor can be determined and used to calibrate the value of the drag per centralizer.

