



(43) International Publication Date
27 June 2013 (27.06.2013)

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| <p>(51) International Patent Classification:
 G01V 3/00 (2006.01)</p> <p>(21) International Application Number:
 PCT/US2012/070448</p> <p>(22) International Filing Date:
 19 December 2012 (19.12.2012)</p> <p>(25) Filing Language:
 English</p> <p>(26) Publication Language:
 English</p> <p>(30) Priority Data:
 13/331,003 20 December 2011 (20.12.2011) US</p> <p>(71) Applicant: GENERAL ELECTRIC COMPANY
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(54) Title: SYSTEM AND METHOD FOR MONITORING DOWN-HOLE FLUIDS

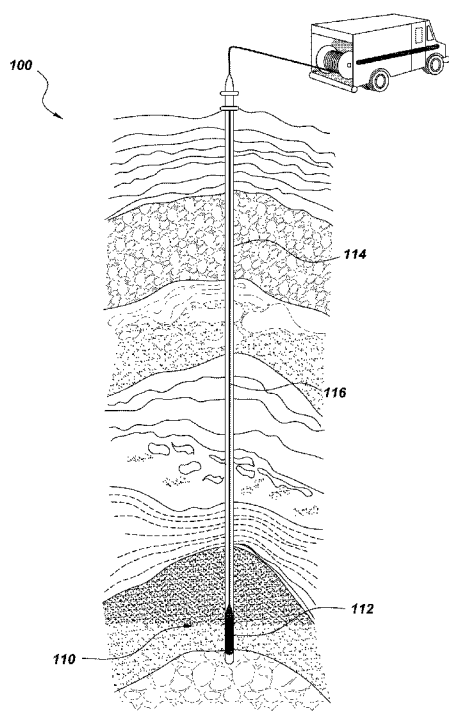


Fig. 1

(57) Abstract: In one aspect the present invention provides a down-hole monitoring system, comprising one or more pieces of down-hole equipment, for example a down-hole logging tool, and at least one resonant sensor for obtaining physical and chemical parameters of a down-hole fluid in proximity to the sensor. In another aspect, the present invention provides a method for detecting material properties of a down-hole fluid, the method comprising placing a resonant LCR sensor within a piece of down-hole equipment, taking sensor readings down-hole, transmitting the sensor readings to a reader device, and analyzing the sensor readings.



TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Declarations under Rule 4.17:

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

Published:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*