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[Continued on next page]

(54) Title: METHODS AND APPARATUS FOR DETERMINING DOWNHOLE FLUID PARAMETERS

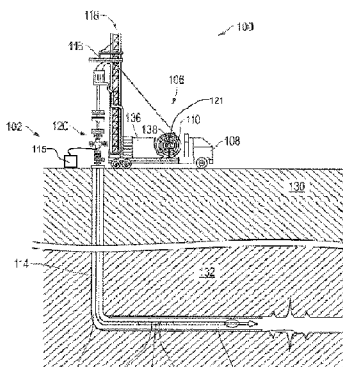


FIG. 1A

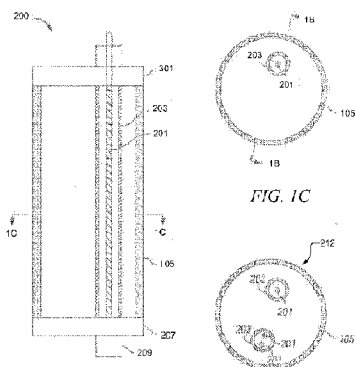


FIG. 1B

FIG. 1D

(57) Abstract: Apparatus and methods for determining downhole fluid parameters are disclosed herein. An example method includes disposing a sensor in a fluid in a wellbore. The sensor includes a heater and a temperature sensor, and the fluid is flowing at a velocity of about zero centimeters per second to about ten centimeters per second. The fluid includes particulates, paraffin or asphaltenes. The example method further includes obtaining a first measurement via the heater and obtaining a second measurement via the temperature sensor. Based on the first measurement and the second measurement, the velocity of the fluid is determined.



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ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
E21B G01K G01F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

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C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2010/228502 A1 (ATHERTON ERIC [GB]) 9 September 2010 (2010-09-09)	1-3,5-20
Y	abstract paragraphs [0016], [0023], [0026] -----	3,5
X	WO 99/34198 A2 (HONEYWELL INC [US]) 8 July 1999 (1999-07-08)	1,2,4, 6-20
Y	abstract page 4, paragraph 1 page 4, paragraph 2 -----	3,5



Further documents are listed in the continuation of Box C.



See patent family annex.

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Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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