

Title (en)

Device for preparing a fluid, in particular a drilling fluid, method of preparation and associated system for analysis

Title (de)

Vorrichtung zur Zubereitung von Flüssigkeiten, insbesondere Bohrspülungen, Zubereitungsverfahren und Analyseaggregat

Title (fr)

Dispositif de préparation d'un fluide, notamment d'une boue de forage, procédé de préparation et ensemble d'analyse associés

Publication

EP 1645718 A3 20061227 (FR)

Application

EP 05292102 A 20051010

Priority

FR 0410692 A 20041011

Abstract (en)

[origin: EP1645718A2] The pumping cavity (77) is defined by at least two movable surfaces (103, 107), locally in contact, so displacement of the movable element relative to the fixed element causes relative displacement of these surfaces to ensure they are scraped at the points of local contact. Means of heating the fluid (151) are applied to one at least of the fixed and/or movable elements : The device includes a pump (65) comprising at least one fixed element (73) and at least one element (75) which moves relative to the fixed element, the elements defining a pumping cavity. One of the elements is a female element (73) defining a cavity and the other is a male element (75) placed inside the female element. The means of heating is placed in either the male or the female element. A thermally insulating envelope (301) is placed around the female element. The female element has a helical internal surface and the male element has a helical external surface so the two surfaces define a number of disjointed pumping cavities. The movable element is mounted to rotate about an axis (XX') and there are means (79) of driving the element in rotation. The means of heating is placed in the movable element and is electrically connected to a source of electrical energy (153) through the means of driving the element in rotation. An independent claimS are made for (a) a method of preparing a fluid, in particular a drilling mud, by pumping the fluid through such a device and heating it; and (b) an assembly for analysing at least one gas contained in a fluid, in particular a drilling mud, circulating in a pipe (25) and containing means of sampling the fluid from the pipe, a device as described above, means of extracting the gas from the sample and means of analysing the extracted gas.

IPC 8 full level

E21B 21/06 (2006.01); **F04C 2/107** (2006.01)

CPC (source: EP US)

E21B 21/067 (2013.01 - EP US)

Citation (search report)

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DOCDB simple family (application)

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