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(57) Abstract :

The present disclosure discloses a device 100 for detection of purity of a fluid. The device 100 comprises an antenna 112 configured to generate a first set of signals having pre-defined frequency; and a channel 102 adapted to accommodate the fluid, wherein the generated first set of signals interact with the accommodated fluid. The device 100 comprises a controller 108 that actuates an actuator, which in turn generates actuation signal for actuating the antenna 112. Further, the controller 108 obtains a second set of signals from the channel 102, wherein the second set of signals pertain to transmission and reflection of the first set of signals during interaction with the accommodated fluid; and correspondingly derive parameters from the second set of signals. Further, the device 100 detects purity of the fluid by matching the derived parameters with pre-determined parameters of multiple fluid samples.

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