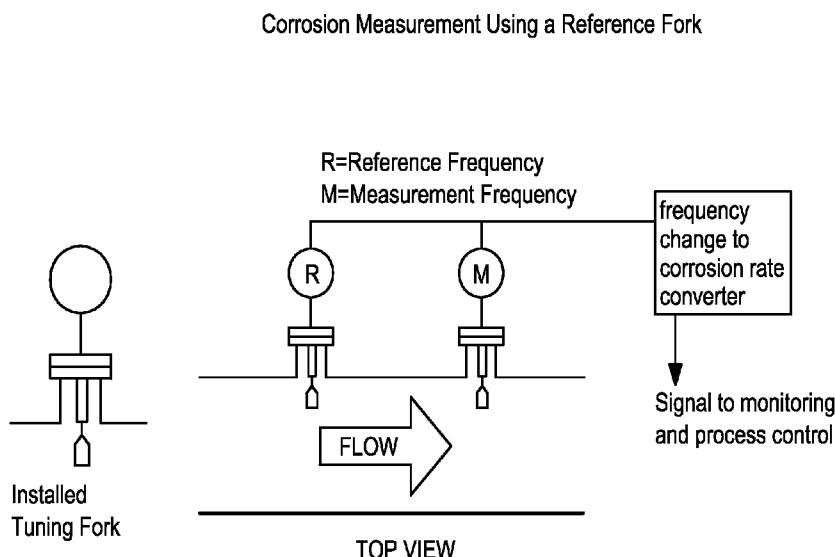




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(54) **Title:** DETECTION OF CORROSION RATES IN PROCESS PIPING AND VESSELS**FIG. 6**

(57) Abstract: For a monitored corrosion sensor, such as a sensor based on one or more mechanical oscillators disposed in a fluid flow, one or more values are measured over time. The values can be measured at a desired frequency, such as a once per second, once per minute, or another convenient frequency. The measured data can then be analyzed as a time series. The goal of the analysis is to identify variations in the time series data that are sufficiently unexpected relative to the prior behavior of the time series within a given time window. The identified variations can then, for example, be excluded from consideration when determining a corrosion-related value for the sensor.