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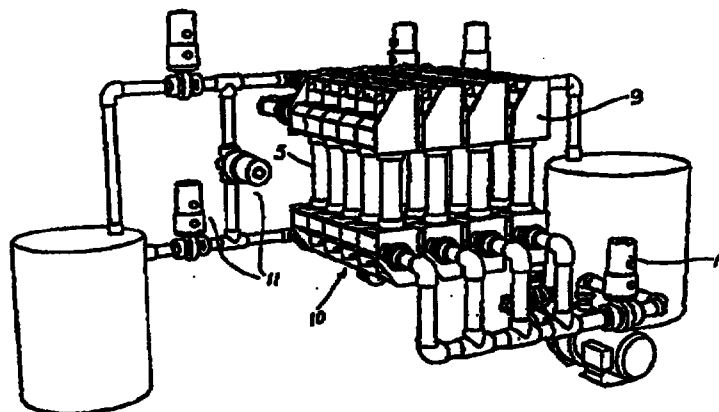
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(54) Title: FILTRATION MONITORING AND CONTROL SYSTEM



(57) Abstract

A method and apparatus for determining the fouling effect of a feedstream on a filter having known characteristics disclosed. The method comprises passing the feedstream through a filter (5) having known characteristics; determining the change in resistance to flow of the feedstream across the filter, either continuously or over a number of time intervals and from this data, calculating a feed fouling index (FFI) representative of the fouling characteristics of the feedstream with respect to the filter. A method and apparatus for monitoring the operation of a filtration system is also disclosed the method comprising sampling system parameter values at selected locations within the filtration system at a predetermined sampling rate; generating a parameter profile characteristic from the sampled parameter values at predetermined intervals of time; and analysing the parameter profile characteristic to determine correct operation of the filtration system. A further method and apparatus of monitoring and controlling a filtering system based on backwash efficiency is also disclosed, the method comprising determining resistance values of filtering elements used in the filtering system at predetermined times during the backwash cycle of the system by monitoring a number of operating parameters of the system; calculating a backwash efficiency value representative of the efficiency of the backwash cycle of the filtering system using the resistance values determined; and controlling the operation of the filtering system in dependence on the value of the backwash efficiency calculated.