

ABSTRACT

INLINE CONCENTRATION METER AND CONCENTRATION DETECTION METHOD

The present invention provides a concentration meter used in an organic raw material fluid supply system or the like that is simpler in configuration, smaller in size, lower in cost, and for realizing concentration measurement with high precision, high sensitivity, and high reproducibility.

The concentration meter of the present invention includes a light source unit for emitting mixed light containing at least two wavelengths with a phase difference, a detecting unit that has a light incident part for entering the mixed light emitted from the light source unit into a fluid passage of a detector body and at least two light detection parts for receiving the mixed light passed through the fluid passage, a computing processor unit for conducting frequency analysis of detection signals of at least two wavelengths emitted from the detecting unit and computing intensities of the detection signals corresponding to absorbances in at least three frequency ranges to compute concentration of fluid in the fluid passage based on the absorbance intensities of the detection signals in the at least three frequency ranges, and a recording/displaying unit for recording and/or displaying a value of the fluid concentration computed at the computing processor unit.

Figure 1.