

as the process value (PV), calculates the command value (OP) of the opening degree of the valve 6 by PID control or the like so that the flow rate becomes the set point (SP), and transmits the command value (OP) to the valve 6.

5 **[0024]** Fig. 10 illustrates an example of temporal changes of the PV, the OP, and the index values of the monitoring target device 5 illustrated in Fig. 9. In the periods T1 to T2, the process state is stable, and the fluctuation range of the PV and the fluctuation range of the
10 OP are small. Therefore, since the plot region has a shape close to a small square, the length L of the diagonal line is short and the angle θ is close to 45° . In the periods T3 to T4, for example, it is assumed that blockage has occurred downstream and the amount of liquid flowing out of the
15 container 9 is smaller than normal. When such an abnormality occurs, since it is necessary to increase the opening degree of the valve 8 in order to maintain the liquid level constant, the fluctuation range of the PV still remains small, but the fluctuation range of the OP becomes large.
20 Therefore, since the plot region is a horizontally long rectangle, the length L of the diagonal line is long and the angle θ is close to 0° .

[0025] Fig. 11 illustrates an example of temporal changes of the PV, the OP, and the index values of the
25 monitoring target device 5 illustrated in Fig. 9. The periods T1 to T2 are similar to those in the case of Fig. 10.