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(54) **CONTROL APPARATUS FOR PLANT**

(57) The present invention provides a control apparatus for a plant, which can suppress excessive correction for a spiky disturbance being applied and maintain a good controllability, when controlling the plant, which is a controlled object, with the self-tuning regulator. A detected equivalent ratio KACT is input to a high-pass filter 33, and a high-pass filter output KACTHP is input to a parameter adjusting mechanism 42. The parameter adjusting mechanism 42 calculates a corrected update

ing vector ($KID \cdot d\theta(k)$) by multiplying an updating component $d\theta$ of a model parameter vector by a correction coefficient KID , and adds the corrected updating vector to a preceding value $\theta(k-1)$ of the model parameter vector, to thereby calculate a present value $\theta(k)$. The correction coefficient KID is changed from "1.0" to a value near "0" upon detection of the spiky response where an absolute value of the high-pass filter output $KACTHP$ increases.

FIG. 2

