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Eremin E.L. (ereminel@mail.ru)
Amur state university

A MODIFIED ADAPTIVE SYSTEM FOR CONTROLLING THE SINGLE-CHANNEL PLANT WITH INLET SATURATION

The article carries a lot of information on dynamic correction of process of factor self-adjustment of an adaptive regulator in a control system of single-channel plant with input bound that functions under the prior uncertainty and external and parametric indignations. Algorithm synthesis of adaptive control system is based on hyperstability criterion and L -dissipativity. It is also connected with application of the filter-corrector and obvious reference model with two outputs. In contrast to the known process the offered modification of adaptation outline has a dynamic switch.

Keywords: control plant with saturation on an input, reference model with two outputs, the filter-corrector, adaptive control system, dynamic switch, hyperstability, L -dissipativity.

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