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(54) **METHOD, DEVICE, AND SYSTEM FOR CONTROLLING STATE PARAMETER BY COMMUNICATING DEVICE**

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(57) **ABSTRACT**

A method for controlling a state parameter by a communicating device, referred to as processing device, in a set of communicating devices, a subset of communicating devices being associated to said processing device, said subset including the processing device and the communicating devices from which the processing device receives data for updating a local value of the state parameter, the processing device estimating an aggregated state parameter aggregating the local values of the state parameter of the communicating devices of the subset by using a Kalman filter which applies a process model, an error introduced by the process model, the processing device updating its local value of the state parameter based on the estimated aggregated state parameter; wherein the processing device determines a convergence level of the local values of the state parameter and modifies a covariance matrix of the process noise based on the determined convergence level.