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(54) **A device and method for controlling the pressure of a steam turbine of a combined cycle plant of the "2+1" type and a bypass system thereof**

(57) A control device of a steam turbine of a combined cycle plant includes an acquisition module (13), for acquiring measures of operative quantities (Q_{HP1} , Q_{HP2} , P_{HP}) of a combined cycle plant (1) including a steam turbine (5) and a first and second steam feeding systems (100, 101). The device further includes a plurality of calculation modules (47-56, 47'-56'), configured for determining, according to corresponding control modes: a pressure set point (P_{HPCV}) for a high-pressure inlet valve (25); a pressure set point (P_{IPCV}) for an intermediate-pressure inlet valve (30) of the steam turbine (5); and pressure set points (P_{HPBP1} , P_{HPBP2} , P_{IPBP1} , P_{IPBP2}) for high-pressure bypass valves (28a, 28b) and intermediate-pressure bypass valves (33a, 33b). Furthermore, a supervisor module (45) is configured to detect an operating condition of the plant (1) on the basis of operative quantities (Q_{HP1} , Q_{HP2} , P_{HP}) acquired by the acquisition module (13) and selectively activate one of the calculation modules (47-56, 47'-56') in response to the detected operating condition.

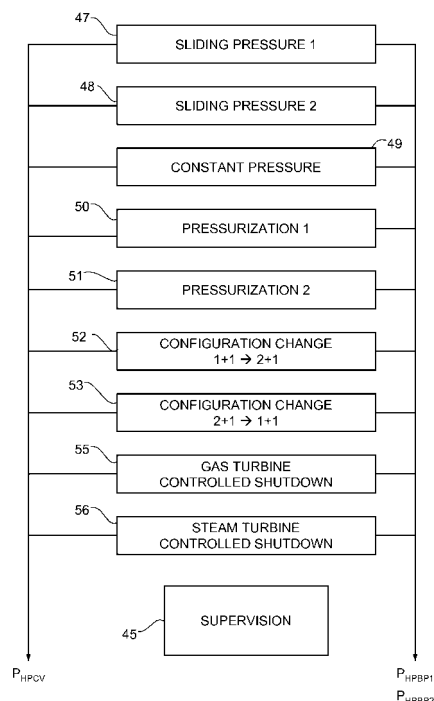


Fig.6