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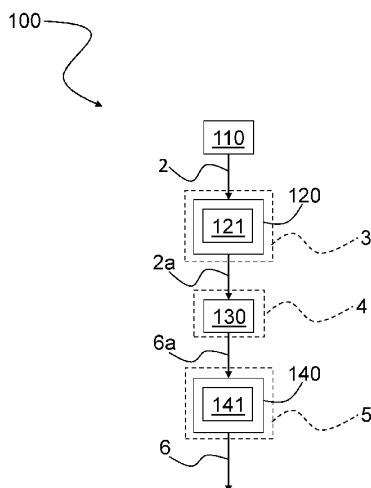
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(54) **Title:** DETERMINING APPROPRIATE SEQUENCES OF ACTIONS TO TAKE UPON OPERATING STATES OF INDUSTRIAL PLANTS



(57) **Abstract:** A computer-implemented method (100) for determining an appropriate sequence (6) of actions to take during operation of an industrial plant (1) or part thereof, comprising the steps of: • obtaining (110) values of a plurality of state variables (2) that characterize an operational state of the plant (1) or part thereof; • encoding (120), by at least one trained state encoder network (3), the plurality of state variables (2) into a representation (2a) of the operating state of the plant (1) or part thereof; • mapping (130), by a trained state-to-action network (4), the representation (2a) of the operating state to a representation (6a) of a sequence (6) of actions to take in response to the operating state; and • decoding (140), by a trained action decoder network (5), the representation (6a) of the sequence (6) of actions to the sought sequence (6) of actions to take.

Fig. 1