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(54) METHOD FOR CONTROLLING MULTI-MOVER DIRECT DRIVE TRANSMISSION SYSTEM AND RELATED DEVICE

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(57) **ABSTRACT**

A method for controlling a multi-mover direct drive transmission system and related devices, including: S1: detecting a real-time position of the mover units movable in the feedback segments; S2: determining whether the mover unit enters junction region between the feedback and transition segments: if yes, calculating, by using preset algorithm, an electrical angle at which the mover unit moves in the transition segment, and determining real-time position of the mover unit through the electrical angle; and setting cooperative control mode of the stator windings in a range of the transition segment according to the real-time position of the mover unit; and S3: determining whether the mover unit enters the junction region between the transition segment and the feedback segment: if yes, feeding back real-time position of the mover unit through the displacement sensor of the feedback segment. The above solution has a good control effect, low costs, and low mounting requirements.