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(54) **MOTOR ANGULAR POSITION CONTROL**

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(57) **ABSTRACT**

A motor controller to control rotational speed of an output shaft of an electric motor. The motor controller includes a proportional controller and a time-optimal controller. The proportional controller controls the rotational speed when a present rotational position of the shaft is between a target rotational position and a switching point, inclusively. The time-optimal controller controls the rotational speed when the present rotational position is not between the target rotational position and the switching point. Also introduced herein are aspects pertaining to determining the switching point in a manner that minimizes overshooting the target rotational position while maximizing expediency at which the target rotational position is reached.