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Tucker et al. (43) **Pub. Date: Nov. 10, 2022**(54) **ELECTRIC LINEAR ACTUATOR WITH
OPTIMIZED COUPLING****Publication Classification**(71) Applicant: **Nidec Motor Corporation**, St. Louis,
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(2013.01); **F16H 2025/2075** (2013.01)(57) **ABSTRACT**

A linear actuator includes a motor, a screw mechanism, and a bearing. The motor includes a stator and a rotor rotatable relative to the stator. The rotor includes a rotor shaft element. The screw mechanism includes a screw element and a follower drivingly engaged with the screw element, with rotation of the screw element causing the follower to shift axially along the screw element. The elements are drivingly intercoupled. The bearing rotatably supports a first one of the elements. The first one of the elements provides support to a second one of the elements such that the bearing also rotatably supports the second one of the elements.

