

ABSTRACT

A propulsion system assembly is provided including a driveshaft and a plurality of electric motor modules. The driveshaft is rotatably mounted to a casing about a drive axis, the driveshaft including a first shaft end and an opposite facing second shaft end. The plurality of electric motor modules are in axially stacked relationship with one another with respect to the drive axis to define an electric motor module stack, each electric motor module being configured for transmitting a torque to the driveshaft when coupled thereto independently of at least one other electric motor module. Each electric motor module includes a controllable clutch arrangement for selectively coupling and decoupling the respective electric motor module with respect to the driveshaft to respectively enable and disable transmission of torque between the respective electric motor module and the driveshaft.

(Fig. 1)