

SYSTEMS AND METHODS FOR CONTROL ALLOCATION FOR ELECTRIC VERTICAL TAKE-OFF AND LANDING AIRCRAFT

ABSTRACT

A method of controlling an electric aircraft that has a plurality of actuators that includes a plurality of electric propulsion units includes: receiving force and moment commands for the electric aircraft; determining control commands for the plurality of actuators based on the desired force and moment commands by solving an optimization problem that comprises a noise minimization term for minimizing noise generated by the electric propulsion units; and controlling the plurality of actuators according to the determined control commands to meet the force and moment commands for the electric aircraft.

FIG. 1A