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(54) **Title:** UNMANNED AERIAL VEHICLE WITH DECENTRALIZED CONTROL SYSTEM

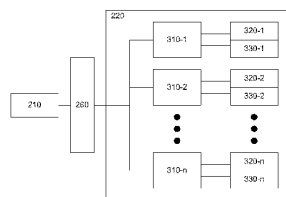
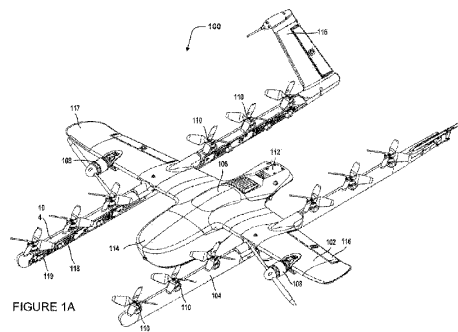


FIGURE 3

(57) **Abstract:** An aerial vehicle (100) may include a control unit (310) configured to send control signals in order to control flight of the aerial vehicle (100), propulsion units (110) configured to control the attitude of the aerial vehicle, propulsion controllers configured to send commands to a corresponding propulsion unit of the propulsion units (110) based on the control signals, and inertial measurement units (IMU 320). Each of the IMUs (320) is configured to provide attitude information to a corresponding one of the propulsion controllers. In this way, there is one propulsion controller for each of the propulsion units and one IMU for each of the propulsion controllers. When there is a failure at the control unit, each of the propulsion control unit units are configured automatically generate the commands and control the propulsion units in order to attempt to stabilize the aerial vehicle.

[Continued on next page]

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