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(54) Title: DEPLOYABLE WING SYSTEM FOR AIR VEHICLE

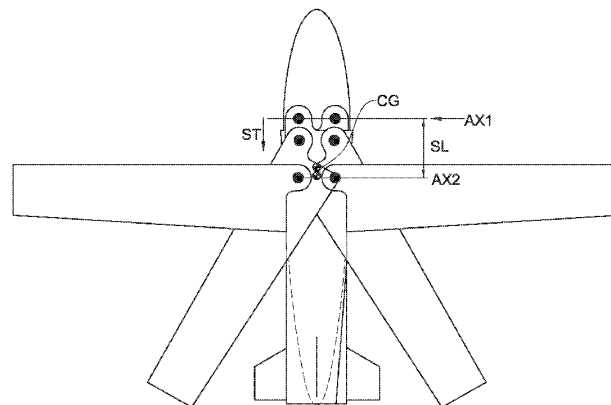


FIG. 3(b)

(57) Abstract: A wing system is provided for an air vehicle, the air vehicle having a fuselage including a fuselage longitudinal axis. The wing system includes a set of wings, configured for transitioning between a stowed configuration and a deployed configuration. The set of wings includes a first said wing having a first wing tip, a first wing longitudinal axis, and a first pivot axis; and a second said wing having a second wing tip, a second wing longitudinal axis, and a second pivot axis. The first pivot axis and the second pivot axis are non-coaxial. In the stowed configuration, the first wing and the second wing are in overlying relationship such that at least a majority of a pressure surface of one wing is facing a suction surface of the other wing, and the first wing tip is spaced from the second wing tip by a first lateral spacing. In the deployed configuration, the first wing is oriented with respect to the second wing such that the first wing tip is spaced from the second wing tip by a second lateral spacing greater than the first lateral spacing. The transitioning includes a pivoting

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operation, including: pivoting the first wing about the first pivot axis between the stowed configuration and the deployed configuration; and, pivoting the second wing about the second pivot axis between the stowed configuration and the deployed configuration.