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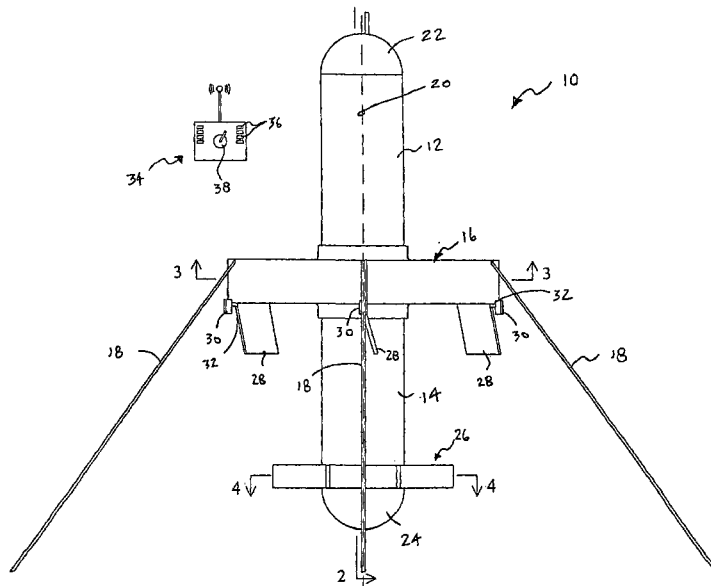
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(54) Title: CONVERTIBLE VERTICAL TAKE-OFF AND LANDING MINIATURE AERIAL VEHICLE



(57) Abstract: A vertical take-off and landing miniature aerial vehicle includes an upper fuselage segment (12) and a lower fuselage segment (14) that extend in opposite directions from a rotor guard assembly (16). A rotor (52) rotates within the rotor guard assembly (16) between the fuselage segments (12, 14). Plural turning vanes (28) extend from the rotor guard assembly (16) beneath the rotor (52). Moreover, plural grid fins (26) extend radially from the lower fuselage segment (14) below the turning vanes (28). The aerial vehicle is capable of taking off and landing vertically. During flight, the aerial vehicle can hover and transition between a horizontal flight mode and a vertical flight mode using the grid fins (26).



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