

Title (en)  
VTOL VEHICLE AND METHOD OF OPERATION THEREFOR

Title (de)  
VTOL FAHRZEUG SOWIE VERFAHREN ZUM BETRIEB

Title (fr)  
VTOL VEHICULE ET PROCEDE POUR SON OPERATION

Publication  
**EP 1478570 A2 20041124 (EN)**

Application  
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Priority  
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Abstract (en)  
[origin: WO03066429A2] A VTOL vehicle including a fuselage with two foldable wings, two tiltable nacelles attached to the wings, a vertical stabilizer, a horizontal stabilizer, and two auxiliary thrusters. Each nacelle contains a system of vanes located at the rear opening thereof, and actuators are provided for extending and retracting the vanes in conjunction with nacelle tilting mechanisms to deflect the airflow over a predetermined range of angles from the horizontal. Each nacelle also contains two rotary engines, each of which directly drives a fan. The fans face each other and operate in counter-rotating directions at the same rotational speed. An alternative embodiment includes two additional nacelles attached to the fuselage instead of having the auxiliary thrusters. A redundant computerized flight control system maintains stability of the vehicle as it transitions from one flight mode to another.

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