

Title (en)
HELICOPTER WITH HORIZONTAL CONTROL

Title (de)
HUBSCHRAUBER MIT HORIZONTALER STEUERUNG

Title (fr)
HÉLICOPTÈRE AVEC COMMANDE HORIZONTALE

Publication
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Application
EP 08713970 A 20080124

Priority
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• US 62791907 A 20070126

Abstract (en)
[origin: WO2008092022A1] A helicopter includes a system to effect motion in a horizontal dimension thereby to direct the desired direction. The rotor blades are driven by a rotor shaft and which is hinge mounted on this rotor shaft, such that the angle between the plane of rotation of the main rotor and the rotor shaft may vary. A control for moving the angle of incidence of at least one blade of the rotor cyclically along at least part of a 360-degree rotation path around the rotor shaft. This causes a variation in a lift force of the blade along at least part of the rotations path. This causes the body to be urged in a relatively horizontal direction from a relative position of rest. The control includes an actuator for engaging with an assembly depending from the rotor, the inter-engagement of the actuator and assembly effecting a change in the angle of incidence of at least the one blade of the rotor. The system includes a rotor, preferably complemented with a stabilizer rotor. There is a control ring attached to the main rotor, and an actuator device connected with the helicopter body structure. The control ring is generally centered around the vertical rotor axis, and moves with the rotor when tilted around the feather axis.

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