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(54) **HELICOPTER WITH CROSS-FLOW FAN**
(71) Applicant: **AIRBUS HELICOPTERS**
DEUTSCHLAND GMBH, Donauworth
(DE)
(72) Inventors: **Sebastian Mores**, Munich (DE);
Alessandro D'Alascio, Haar (DE);
Marius Bebesel, Augsburg (DE)

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(73) Assignee: **AIRBUS HELICOPTERS**
DEUTSCHLAND GmbH, Donauworth
(DE)

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Primary Examiner — Tien Dinh
Assistant Examiner — Vicente Rodriguez
(74) *Attorney, Agent, or Firm* — Brooks Kushman P.C.

(57) **ABSTRACT**

A helicopter with a fuselage (4), at least one engine, a roll axis, at least one main rotor, and at least one housing (2) mounted to said fuselage (4). An air inlet (8) and an air outlet (7) are provided along at least a part of a circumference of the at least one housing (2), said air inlet (8) and said air outlet (7) being formed by angularly offset and separate gaps between an inside segment (33) and an outside segment (34) essentially extending respectively longitudinally in direction of said roll axis. At least one rotatable compressor (1) with a plurality of airfoil blades (6) is provided radial inside said at least one housing (2) between said air inlet (8) and said air outlet (7), said at least one rotatable compressor (1) being drivable by said at least one engine about a fan axis (5) and each chord of said airfoil blades (6) is essentially radial oriented with regard to said fan axis (5).

19 Claims, 3 Drawing Sheets

