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(54) Leaned deswirl vanes behind a centrifugal compressor in a gas turbine engine

(57) A compressor (122) includes a deswirl assembly (206) to improve asrodyaamis coupling with the combustor (124). The assembly (206) includes an annular housing and a plurality of vanes (224). The annular housing includes an inner and an outer annular wall (220,222) disposed concentric to each other, and a flowpath (228) defined therebetween. The plurality of vanes (224) are disposed in the flowpath (228) in a substantially annular pattern. Each vane has a leading edge (302), a trailing edge (304), a convex surface (308), and concave surface (306), and each of the convex and concave surfaces (308,306) extends between the leading and trailing edges (302,304). Additionally, each vane (224) extends between and is angled relative to the inner and the outer annular walls (220,222) such that the concave surface (306) faces the outer annular wall (222) and the convex surface (308) faces the inner annular wall (220). The vanes (224) preferably have a uniform axial cross section for ease of manufacturing.

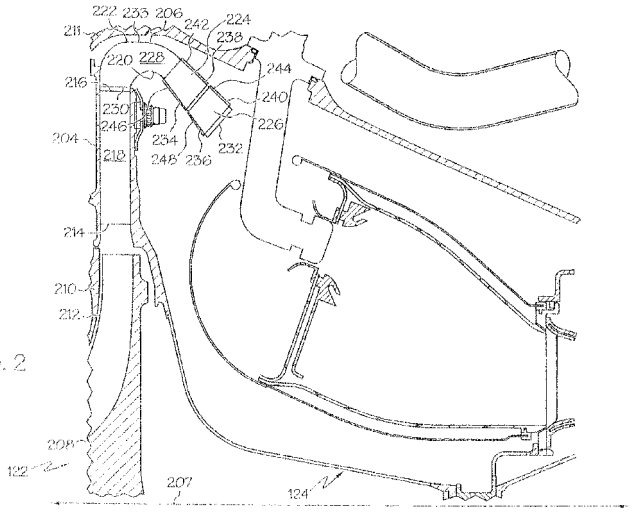


FIG. 2

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EUROPEAN SEARCH REPORT

Application Number
EP 07 10 1951

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The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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