

Title (en)

LABYRINTH SEAL COMPRISING AN ABRADABLE ELEMENT WITH VARIABLE CELL DENSITY

Title (de)

LABYRINTHDICHTUNG MIT EINEM ABREIBBAREN ELEMENT MIT VARIABLER ZELLDICHTE

Title (fr)

JOINT D'ETANCHEITE A LABYRINTHE COMPORTANT UN ELEMENT ABRADABLE A DENSITE VARIABLE DE CELLULES

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Application

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Abstract (en)

[origin: WO2020208224A1] The present invention relates to a labyrinth seal for a turbine engine, in particular of an aircraft, comprising a rotor element and a stator element extending around the rotor element, the rotor element being suitable for rotating relative to the stator element about an axis of rotation having an axial direction (DA), the rotor element comprising an annular lip having an outer radial end extending towards an abradable element (57) carried by the stator element, the outer radial end of the annular lip having a corrugation in the axial direction (DA) and a non-zero axial expanse (E5) associated with the corrugation, the abradable element (57) comprising a plurality of cells (50a, 50b) arranged adjacent to one another along the axial direction (DA) and an ortho-radial direction (O), the cells (50a, 50b) comprising walls which extend in an essentially radial direction, the cells being distributed with a first cell density in a first densified annular zone (Z51) of the abradable element, said densified annular zone (Z51) being located opposite the radial end of the lip, said densified annular zone having an axial expanse less than or equal to the axial expanse of the outer radial end of the lip, the cells being distributed according to a reference density of cells outside said first zone, the first density being greater than the reference density.

IPC 8 full level

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