

Title (en)

HYDRODYNAMICALLY EFFECTIVE SEALING RING AND ROTARY FEEDTHROUGH WITH SUCH A SEALING RING

Title (de)

HYDRODYNAMISCH WIRKSAMER DICHRING UND DREHDURCHFÜHRUNG MIT EINEM SOLCHEN DICHRING

Title (fr)

BAGUE D'ÉTANCHÉITÉ À ACTIVITÉ HYDRODYNAMIQUE ET JOINT ROTATIF POURVU D'UNE TELLE BAGUE D'ÉTANCHÉITÉ

Publication

EP 3810963 A1 20210428 (DE)

Application

EP 19730331 A 20190612

Priority

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- EP 2019065284 W 20190612

Abstract (en)

[origin: WO2019243123A1] The invention relates to a sealing ring as is used for sealing rotary feedthroughs of rotating shafts from a surrounding housing, and to a corresponding rotary feedthrough. Provision is made here for a radial bevel which is hydrodynamically effective in the radial direction to be provided on the at least one flank of the sealing ring and to be directed at an angle α towards the clamping surface into a flank surface of the flank, for the hydrodynamically effective radial bevel to have an extent of $\geq 0.3\text{mm}$, preferably $\geq 0.5\text{mm}$, in the radial direction, and for the hydrodynamically effective radial bevel to have a maximum depth of $20\text{ }\mu\text{m}$ to $50\text{ }\mu\text{m}$ axially in relation to the flank surface. Furthermore, provision is made for the clamping surface opposite the at least one lateral sealing flank to be directed at a decreasing angle β into an axial bevel which is hydrodynamically effective in the axial direction. A sealing ring of low friction and wear is provided by the hydrodynamically effective radial or axial bevel.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2019243123A1

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