

Title (en)

ANGULAR CONTACT BALL BEARING, IN PARTICULAR A SPINDLE BEARING, HAVING IMPROVED CAGE GUIDANCE

Title (de)

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Title (fr)

ROULEMENT À BILLES À PORTÉE OBLIQUE, EN PARTICULIER UN PALIER DE BROCHE, À GUIDAGE PAR CAGE PERFECTIONNÉ

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Application

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Abstract (en)

[origin: WO2011047925A1] The invention relates to an angular contact ball bearing, comprising an outer ring, an inner ring, a plurality of balls, wherein the balls are arranged between the outer ring and the inner ring in a cage rotatably about a bearing axis, wherein the cage is guided via a cage guiding surface of the outer ring, and wherein the angular contact ball bearing has a nominal pressure angle of less than or equal to 30 degrees. The aim of the invention is to provide such an angular contact ball bearing which effects a reduction of the friction between the cage and the outer ring, wherein the balls continue to be securely guided, and which is simple and cost-effective to produce. To achieve said aim, according to the invention, in a sectional view, comprising the bearing axis, a circular arc running from a point of a track of the outer ring furthest away from the bearing axis along the track in the direction of a track end facing the cage guiding surface to an intersecting point of the circular arc and a straight line through the cage guiding surface has a central angle that is greater than or equal to 60 degrees.

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