

Title (en)
ROLLING BEARING

Title (de)
WÄTZLAGER

Title (fr)
PALIER À ROULEMENT

Publication
EP 3247916 A1 20171129 (DE)

Application
EP 15816360 A 20151117

Priority
• DE 102015201101 A 20150123
• DE 2015200504 W 20151117

Abstract (en)
[origin: WO2016116086A1] A rolling bearing (1), having an outer ring (2) with an outer ring raceway (3) and having, arranged axially to the side thereof, at least one rim (4), having an inner ring (8) with an inner ring raceway (9) and having, arranged axially to the side thereof, at least one rim (10), and having rolling bodies (12) which are arranged radially between the outer ring raceway (3) and the inner ring raceway (9) and which are received in a rim-guided cage (11). To realize secure guidance of the cage (11) in the rolling bearing (1), provision is made whereby the cage (11) is composed of a material, the coefficient of thermal expansion of which is greater than the coefficient of thermal expansion of the material of the outer ring (2), of the inner ring (8) and of the rolling bodies (12), and whereby the cage (11) is designed such that, in the cold state of the rolling bearing (1), an inner circumferential surface (11a), which radially faces an outer circumferential surface (10a) of at least one rim (10) of the inner ring (8) and is complementary thereto, of the cage (11) is guided only on said outer circumferential surface (11a) with a small first radial clearance (S1), and such that, in the operationally warm state of the rolling bearing (1), an outer circumferential surface (11b), which faces an inner circumferential surface (4a) of at least one rim (4) of the outer ring (2) and is complementary thereto, of the cage (11) is guided on said inner circumferential surface (4a) of the rim (4) of the outer ring (2) with a small second radial clearance (S2).

IPC 8 full level
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Citation (search report)
See references of WO 2016116086A1

Citation (examination)
• US 3649093 A 19720314 - MURATORE JOHN B, et al
• EP 2270347 A1 20110105 - JTEKT CORP [JP]
• EP 2733373 A1 20140521 - NTN TOYO BEARING CO LTD [JP]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
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DOCDB simple family (application)
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