

Title (en)
FOUR-ROW TAPERED ROLLER BEARING

Title (de)
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Title (fr)
ROULEMENT A ROULEAUX CONIQUES A QUATRE RANGÉES

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Application
EP 06722841 A 20060506

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Abstract (en)
[origin: WO2006119738A1] The invention relates to a four-row tapered roller bearing (1) for machine mountings, with an inner ring (2) of two-part design axially and an outer ring (3) of single- or multi-part design axially, with an inner and/or an outer tapered-roller row (4, 5; 7, 6) being supported in each case by an inner ring part (2a, 2b). In order, firstly, to confer a large supporting width on the bearing and, secondly, to ensure as optimum as possible and as uniform as possible a loading of the rolling bodies in the form of the tapered rollers (8), the tapered-roller rows (4, 5, 6, 7) are arranged in an O-arrangement, and the roller axles (13) of the respectively adjacent outer and inner tapered rollers (8) of the two respectively adjacent outer and inner tapered-roller rows (4, 5; 7, 6) are arranged at an inclination in such a manner that those lines of influence (14) of the tapered rollers (8) which characterize the pressure angles ($\alpha_{1₁}$, $\alpha_{2₂}$) intersect in the region of the axis of rotation of the tapered roller bearing (1). In addition to other advantages, this bearing can be produced more cost-effectively and, with regard to production quality, more reliably than known four-row tapered roller bearings.

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