

Title (en)
HIGH REDUCTION RATIO TRANSMISSION

Title (de)
HOCHUNTERSETZENDES GETRIEBE

Title (fr)
TRANSMISSION À RAPPORT DE RÉDUCTION ÉLEVÉ

Publication
EP 4013979 A1 20220622 (DE)

Application
EP 20757852 A 20200812

Priority
• EP 19191460 A 20190813
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Abstract (en)
[origin: WO2021028451A1] The present invention relates to a transmission having a ring gear, in which there is arranged a flexible gearwheel, wherein the flexible gearwheel is connected to a wave generator and the wave generator deforms the flexible gearwheel so that said gearwheel is engaged in some regions with the ring gear, and wherein the flexible gearwheel comprises at least two tooth segments which are connected to one another by means of spring segments and at least one of the tooth segments has a recess in which there is arranged a pin element. The problem addressed by the present invention is that of providing a transmission that, even in the case of smaller transmission diameters in particular, allows a sufficient elastic deformation of the flexible gearwheel and has a very short overall length and yet a high torsional rigidity. To this end, it is provided in accordance with the invention that each of the spring segments has a middle plane that contains a central middle axis of the transmission and divides the corresponding spring segment into two regions of equal length, and each recess has a middle plane that includes the central middle axis of the transmission and divides the recess into two regions of equal size, and the middle plane of each spring segment is arranged at a different distance from the middle plane of the recess located on each side of the middle plane of the spring segment, adjacently to the spring segment.

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