

Title (en)
VARIABLE GEAR RATIO DEVICE

Title (de)
VORRICHTUNG MIT VARIABLEM ÜBERSETZUNGSVERHÄLTNIS

Title (fr)
DISPOSITIF À RAPPORT DE TRANSMISSION VARIABLE

Publication
EP 3074303 A1 20161005 (EN)

Application
EP 14815058 A 20141127

Priority
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• IB 2014066384 W 20141127

Abstract (en)
[origin: WO2015079399A1] A variable gear ratio device (1) is provided for comprising a planet gear (10) defining a rotation axis (10a), suitable to continuously vary the gear ratio and comprising at least one rocker gear (11); a spider (12) suitable to support the rocker gear (11) and defining a spider axis (12a) inclined in relation to the axis (10a); a sun gear (13) and a crown (14) defining, respectively, an inner (13a) and outer contact area (14a) for the rocker gear (11); wherein the inner contact area (13a) and the outer contact area (14a) are tapered in the same direction along the rotation axis (10a); and respectively define, at the points of contact with the rocker gear (11) and in relation to the rotation axis (10a), a first angle of inclination and a second angle of inclination different from each other; and wherein, on account of said torque variation, the rocker gear (11) is apt to passively translate in relation to said spider (12) along said spider axis (12a) varying its distance from said rotation axis (10a) and said contact points with said contact area (13a, 14a) and thus, the gear ratio of the variable gear ratio device (1); a torque regulator (16) suitable to command a reciprocal translation of said contact areas (13a, 14a) depending on such translation of the rocker gear (11).

IPC 8 full level
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CPC (source: EP)
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