

Title (en)

APEX REINFORCEMENT OF A TYRE FOR A HEAVY CIVIL ENGINEERING VEHICLE

Title (de)

APEX-VERSTÄRKUNG EINES REIFENS FÜR EIN SCHWERES HOCH- UND TIEFBAUFAHRZEUG

Title (fr)

ARMATURE DE SOMMET DE PNEUMATIQUE POUR VEHICULE LOURD DE TYPE GENIE CIVIL

Publication

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Application

EP 14825127 A 20141217

Priority

- FR 1362848 A 20131218
- EP 2014078157 W 20141217

Abstract (en)

[origin: WO2015091609A1] A radial tyre intended to be fitted to a heavy civil engineering vehicle and aimed at desensitizing the apex of such a tyre from shocks occurring essentially in the centre of the tread. This objective has been attained by a tyre (1) comprising an apex reinforcement (3) radially interior to a tread (2) and radially exterior to a carcass reinforcement (4), the apex reinforcement (3) comprising, radially from the exterior to the interior, a protective reinforcement (5), a working reinforcement (6) and an additional reinforcement (7). The protective reinforcement (5) comprises at least one protection layer (51, 52) including elastic metallic reinforcement pieces which form an angle of at least 10° with the circumferential direction. The working reinforcement (6) comprises at least two working layers (61, 62) having respectively an axial width (L61, L62) and including non-elastic metallic reinforcement pieces, crossed from one working layer to the next, and forming an angle of at most 60° with the circumferential direction. The additional reinforcement (7), axially centred on an equatorial plane of the tyre, comprises at least one additional layer (71, 72) having an axial width (L71, L72) equal to at most 0.9 times the smallest of the axial widths (L61, L62) of the at least two working layers (61, 62) and includes metallic reinforcement pieces forming an angle of at most 25° with the circumferential direction. According to the invention, at least one additional layer (71, 72) comprises an axial discontinuity (81, 82), axially centred on the equatorial plane of the tyre, and the width (D, D2) of the axial discontinuity (81, 82) is equal to at least 0.1 times the axial width (L71, L72) of the at least one additional layer (71, 72).

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2015091609A1

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