

Title (en)

TYRE TREAD FOR A HEAVY CIVIL ENGINEERING VEHICLE

Title (de)

REIFENLAUFFLÄCHE FÜR EIN SCHWERES BAUFAHRZEUG

Title (fr)

BANDE DE ROULEMENT DE PNEUMATIQUE POUR VEHICULE LOURD DE TYPE GENIE CIVIL

Publication

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Application

EP 16728707 A 20160614

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Abstract (en)

[origin: WO2016202763A1] The present invention relates to the tread of a radial tyre for a heavy civil engineering vehicle, and aims to reduce the speed of wear thereof when used in mining. The tread is made up of a radial stack of a first portion (21) and a second portion (22) which is radially outside the first portion (21). The first portion (21) is made up of a radial stack of N layers C1i, each layer C1i having a substantially constant radial thickness E1i and consisting of a polymer material M1i having a dynamic shear modulus G1i. The second portion (22) is made up of a single layer C2, having a substantially constant radial thickness E2 and consisting of a polymer material M2 having a dynamic shear modulus G2. According to the invention, the following relations are simultaneously verified: a. $1/(E1/G1+E2/G2) > G0/(E1+E2)$, where E1 = Formula (I) where E1i, E1 and E2 are in mm, G1i, G1 and G2 are in MPa, and where $1 \text{ MPa} \leq G0 \leq 1.8 \text{ MPa}$; b. $G1 < G0$; c. $E1 \geq E1 \text{ min.} = 25 \text{ mm}$; d. $G2 > G0 > G1$; e. $E2 \leq E2 \text{ max.} = 70 \text{ mm}$; and f. Formula (II) for $1 \leq j \leq N-1$.

IPC 8 full level

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