Title (en)

METHOD TO SELECT AN ELASTOMERIC MATERIAL FOR MAKING AN UNDERLAYER OF A BRAKING PAD AND CORRESPONDING BRAKING PAD

Title (de)

VERFAHREN ZUR AUSWAHL EINES ELASTOMEREN MATERIALS ZUR HERSTELLUNG EINER UNTERSCHICHT EINES BREMSBELAGES UND ENTSPRECHENDER BREMSBELAG

Title (fr)

PROCÉDÉ PERMETTANT DE SÉLECTIONNER UN MATÉRIAU ÉLASTOMÈRE POUR FABRIQUER UNE SOUS-COUCHE D'UNE PLAQUETTE DE FREIN ET PLAQUETTE DE FREIN CORRESPONDANTE

Publication

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Application

EP 21770316 A 20210916

Priority

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• IB 2021058461 W 20210916

Abstract (en)

[origin: WO2022058928A1] It is disclosed a method to select an elastomeric material for making an underlayer of a braking pad to reduce the cold noise, said underlayer comprising at least one elastomeric material and said method comprising the steps of characterizing the viscoelastic properties of the elastomeric material through the DMTA method by calculating the elastic modulus and the viscous modulus of a specimen of the underlayer through the following formulas Elastic modulus (I) Viscous modulus (II) wherein: F force applied by the mechanical probe D displacement of the probe Ω frequency of the probe stress frequency m the mass of the specimen L, h and b are the length, height and thickness of the specimen, respectively Δ is the phase shift between the applied force F and the displacement D - Calculating the damping tan δ as the ratio between the viscous modulus and elastic modulus according to the following formula: (III) - Selecting an underlayer having a tan δ ≥0.06 between a temperature of -40°C and 0°C and with a frequency of between 20 Hz and 20 kHz.

IPC 8 full level

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CPC (source: EP)

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