

Title (en)

PNEUMATIC OBJECT PROVIDED WITH A GAS-TIGHT LAYER COMPRISING A THERMOPLASTIC ELASTOMER AND EXPANDED THERMOPLASTIC MICROSPHERES

Title (de)

DRUCKLUFTOBJEKT MIT GASDICHTER SCHICHT, DIE EIN THERMOPLASTISCHES ELASTOMER UND EXPANDIERTE THERMOPLASTISCHE MIKROKUGELN UMFASST

Title (fr)

OBJET PNEUMATIQUE POURVU D'UNE COUCHE ETANCHE AUX GAZ A BASE D'UN ELASTOMERE THERMOPLASTIQUE ET DE MICROSPHERES THERMOPLASTIQUES EXPANSEES

Publication

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Application

**EP 09760498 A 20091130**

Priority

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- FR 0858238 A 20081203

Abstract (en)

[origin: WO2010063428A1] The invention relates to a pneumatic object provided with an elastomer layer sealed against an inflation gas such as air, said layer comprising at least, as the predominant elastomer, a thermoplastic polystyrene and polyisobutylene block copolymer, such as a SIBS (styrene/isobutylene/styrene) copolymer, and expanded thermoplastic microspheres at a level preferably from 1 to 30 pce. Said copolymer contains preferably from 5 to 50 wt % of styrene, the number-average molecular weight thereof is from 30000 to 500000 g/mol, and the T<sub>g</sub> thereof is less than -20 °C. Optionally, the sealed elastomer layer also comprises, as a plasticizer, an extension oil, particularly a polybutene oil, at a level preferably between 5 and 100 pce. Said sealed layer has not only excellent sealing properties but also a density and a hysteresis that are both comparatively lower than butyl rubber layers. The invention particularly relates to a tire for an automobile.

IPC 8 full level

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CPC (source: EP US)

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