

Title (en)
A TREAD FOR WINTER AND ENDURANCE

Title (de)
WINTER- UND DAUERLAUFSTREIFEN

Title (fr)
BANDE DE ROULEMENT POUR L'HIVER ET L'ENDURANCE

Publication
EP 3807104 A4 20220112 (EN)

Application
EP 18922339 A 20180615

Priority
JP 2018022843 W 20180615

Abstract (en)
[origin: WO2019239570A1] Present invention provides a tread having a contact face, the tread being provided with a plurality of grooves and a plurality of contact elements, each the plurality of contact elements having a top face, the tread comprising two rubber layers, a cap rubber layer configuring the contact face when the tread being brand new and a base rubber layer being provided radially inward of the cap rubber layer, the cap rubber layer and the base rubber layer being composed of different rubber compositions each other, the base rubber layer being located totally radially inward of radially innermost part of the plurality of grooves, a rubber composition constituting the cap rubber layer comprises solid particles, and a rubber composition constituting the base rubber layer is devoid of said solid particles, and a shore A hardness of the rubber composition constituting the base rubber layer is at least equal to 6 points higher than a shore A hardness of the rubber composition constituting the cap rubber layer.

IPC 8 full level
B60C 11/00 (2006.01); **B60C 1/00** (2006.01); **B60C 11/14** (2006.01)

CPC (source: EP)
B60C 1/0016 (2013.01); **B60C 11/005** (2013.01); **B60C 11/0306** (2013.01); **B60C 2011/0016** (2013.01); **B60C 2011/0355** (2013.01); **B60C 2011/1209** (2013.01); **B60C 2011/142** (2013.01)

Citation (search report)

- [Y] US 3853164 A 19741210 - MIRTAIN H
- [Y] JP H03295704 A 19911226 - YOKOHAMA RUBBER CO LTD
- [Y] JP H05338410 A 19931221 - BRIDGESTONE CORP
- [Y] US 4290470 A 19810922 - WILLIAMS ARTHUR R, et al
- [Y] CN 201515736 U 20100630 - XIANNENG WAN
- [Y] JP H03262707 A 19911122 - SUMITOMO RUBBER IND
- See references of WO 2019239570A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
WO 2019239570 A1 20191219; CA 3103194 A1 20191219; CN 112351895 A 20210209; EP 3807104 A1 20210421; EP 3807104 A4 20220112; JP 2021534027 A 20211209

DOCDB simple family (application)
JP 2018022843 W 20180615; CA 3103194 A 20180615; CN 201880094610 A 20180615; EP 18922339 A 20180615; JP 2020570070 A 20180615