

Title (en)

PIEZOELECTRIC DEVICE HAVING IMPROVED PIEZOELECTRIC PROPERTIES

Title (de)

PIEZOELEKTRISCHE VORRICHTUNG MIT VERBESSERTEN PIEZOELEKTRISCHEN EIGENSCHAFTEN

Title (fr)

DISPOSITIF PIEZOELECTRIQUE AYANT DES PROPRIETES PIEZOELECTRIQUES AMELIOREES

Publication

EP 4094302 A1 20221130 (FR)

Application

EP 20845597 A 20201216

Priority

- FR 1915446 A 20191223
- FR 2020052471 W 20201216

Abstract (en)

[origin: WO2021130435A1] The invention relates to a piezoelectric device comprising at least one piezoelectric layer P interposed between two conductive layers E, each layer E forming an electrode, characterised in that the layer P comprises at least one piezoelectric composition made from at least one elastomer matrix principally comprising at least one diene elastomer, a piezoelectric inorganic filler, a carbon black and a crosslinking system and in that the amount of piezoelectric inorganic filler is greater than or equal to 5 vol% relative to the total volume of the piezoelectric composition and the amount of carbon black is greater than or equal to 6 vol% relative to the total volume of the piezoelectric composition. The invention also relates to a tyre comprising at least one piezoelectric device defined above.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2021130435A1

Designated contracting state (EPC)

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FR 3105589 A1 20210625; **FR 3105589 B1 20221230**; CN 114846634 A 20220802; EP 4094302 A1 20221130; KR 20220115808 A 20220818; US 2023122032 A1 20230420; WO 2021130435 A1 20210701

DOCDB simple family (application)

FR 1915446 A 20191223; CN 202080089164 A 20201216; EP 20845597 A 20201216; FR 2020052471 W 20201216; KR 20227025233 A 20201216; US 202017788341 A 20201216