

Title (en)
POLYAMIDE COMPOSITIONS HAVING A HIGH MODULUS AND A LOW DIELECTRIC CONSTANT AND USE THEREOF

Title (de)
POLYAMIDZUSAMMENSETZUNGEN MIT HOHEM MODUL UND NIEDRIGER DIELEKTRIZITÄTSKONSTANTE UND VERWENDUNG DAVON

Title (fr)
COMPOSITIONS DE POLYAMIDE PRESENTANT UN MODULE ELEVE ET UNE FAIBLE CONSTANCE DIELECTRIQUE ET LEUR UTILISATION

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Application
EP 21736630 A 20210609

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Abstract (en)
[origin: WO2021250352A1] The present invention relates to the use of a mixture of solid and hollow glass reinforcers with an alloy consisting of at least one polyamide and of at least one polyolefin, said mixture of solid and hollow glass reinforcers comprising from 5% to 60% by weight of hollow glass beads relative to the sum of the solid and hollow glass reinforcers, in particular from 5% to 55% by weight of hollow glass beads relative to the sum of the solid and hollow glass reinforcers, more particularly from 5% to 45% by weight of hollow glass beads relative to the sum of the solid and hollow glass reinforcers, the alloy-mixture proportions being from more than 50% to 75%, in particular from 55% to 70%, notably from 55% to 65% of said alloy and from 25% to less than 50%, in particular from 30% to 45%, notably from 35% to 45% by weight of said mixture of solid and hollow glass reinforcers, to prepare a composition having a modulus, when dry at 20 °C, of from 5 GPa to less than 8 GPa, in particular from 6 GPa to less than 8 GPa, and a dielectric constant Dk of less than or equal to 3.1, notably less than or equal to 3.0, in particular less than or equal to 2.9 as measured according to ASTM D-2520-13, at a frequency of at least 1 GHz, notably at a frequency of at least 2 GHz, in particular at a frequency of at least 3 GHz, at 23 °C, under 50% RH.

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