

Title (en)
MEMBRANE MADE OF A POLYCRYSTALLINE LLZO PRODUCT

Title (de)
MEMBRAN AUS EINEM POLYKRISTALLINEN LLZO-PRODUKT

Title (fr)
MEMBRANE EN UN PRODUIT POLYCRISTALLIN DE LLZO

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Application
EP 21739688 A 20210706

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Abstract (en)
[origin: WO2022008522A1] The invention relates to a molten solid electrolyte membrane having a thickness less than 5 mm and intended for a lithium-ion battery, the membrane consisting of a polycrystalline product comprising at least 3.0% amorphous phase and consisting, for more than 95% of its mass, of the elements Li, La, Zr, M and O, M being a dopant chosen from the group formed by Al, P, Sb, Sc, Ti, V, Y, Nb, Hf, Ta, the lanthanides with the exception of La, Se, W, Bi, Si, Ge, Ga, Sn, Cr, Fe, Zn, Na, K, Rb, Cs, Fr, Mg, Ca, Sr, Ba and the mixtures thereof, the contents of these elements, measured after a decarbonation operation without loss of lithium, being defined by the formula $\text{LiLaZrM}_2\text{O}_{10}$, wherein the atomic indices are such that: $2.500 < a < 8.500$, and $1.000 < b < 3.500$, and $0.600 < c < 2.000$, and $0 < d < 2.000$.

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Citation (search report)
See references of WO 2022008522A1

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