

Title (en)

MIXED OXIDE ACTIVE MATERIAL, ELECTRODE AND METHOD OF MANUFACTURING THE ELECTRODE AND ELECTROCHEMICAL CELL COMPRISING IT

Title (de)

MISCHOXID-AKTIVES MATERIAL, ELEKTRODE UND VERFAHREN ZUR HERSTELLUNG DIESER ELEKTRODE UND ELEKTROCHEMISCHE ZELLE DIE DIESE ENTHÄLT

Title (fr)

MATERIAU ACTIF A OXYDE MIXTE, ELECTRODE ET PROCEDE DE FABRICATION DE L'ELECTRODE, CELLULE ELECTROCHIMIQUE COMPRENANT CETTE DERNIERE

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Application

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Abstract (en)

[origin: WO0213302A1] The invention relates to a mixed oxide material with a high electron conductivity, of empirical formula ABO_y, where y ≠ 3 and where A comprises at least one metal selected from Na, K, Rb, Ca, Ba, La, Pr, Sr, Ce, Nb, Pb, Nd, Sm and Gd, and B comprises at least one metal selected from the group consisting of Cu, Mg, Ti, V, Cr, Mn, Fe, Co, Nb, Mo, W and Zr, where A and B cannot both be Nb and where the compound SrVO_{2.5} is excluded. The material may be a perovskite-type material, in which y = 3 - delta and delta ≠ 0, with values for delta in the range from approximately -0.2 to approximately -0.05 or in the range from +0.05 to +0.7. The material may also be a Brown-Millerite-type material, for which y = 2.5 - xi and xi has a value in the range from approximately -0.2 to approximately -0.05 or in the range from +0.05 to approximately 0.3. The invention also describes an electrode for an electrochemical cell which can be produced from a mixed oxide material of this type, a method for producing an electrode from a mixed oxide material and an electrochemical cell which comprises at least one electrode of this type made from mixed oxide material according to the invention.

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