

Title (en)
METHOD FOR PRODUCING CERAMIC CATHODE LAYERS ON CURRENT COLLECTORS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON KERAMISCHEN KATHODENSCHICHTEN AUF STROMKOLLEKTOREN

Title (fr)
PROCÉDÉ DE PRODUCTION DE COUCHES CATHODIQUES CÉRAMIQUES SUR DES COLLECTEURS DE COURANT

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Application
EP 16819818 A 20161209

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Abstract (en)
[origin: WO2017129209A1] The invention relates to a method for producing a ceramic cathode layer on an electrically conducting substrate, in which first a coating in the form of a suspension, comprising at least one suspending agent and at least one ceramic material, is applied to this electrically conducting substrate. This is followed by heating the coating in a reducing atmosphere such that the ceramic material is fully or partially reduced to a fusible reaction product. After that, the coating is heated in a reducing atmosphere to temperatures above the melting point of the reaction product, thereby forming a molten substance. This is followed by densifying or sintering of the coating in a reducing atmosphere at temperatures that lie 100°C above the melting temperature of the reaction product. A reoxidation of the densified or sintered coating subsequently takes place in an oxidizing atmosphere in a temperature range between 400 and 1200°C, wherein the reaction product is oxidized again and reacts again into the original composition of the ceramic material used.

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