

Title (en)

METHOD AND ARRANGEMENT FOR ASSESSING THE CORROSION AND PASSIVATION OF THE REINFORCEMENT WHILE TAKING INTO ACCOUNT THE MOISTURE IN REINFORCED CONCRETE

Title (de)

VERFAHREN UND ANORDNUNG ZUR BEURTEILUNG DER KORROSION UND PASSIVIERUNG DER BEWEHRUNG UNTER BERÜCKSICHTIGUNG DER FEUCHTE IN BEWEHRTEM BETON

Title (fr)

PROCÉDÉ ET DISPOSITIF D'ÉVALUATION DE CORROSION ET DE PASSIVATION D'ARMATURE EN FONCTION DE LA TENEUR EN HUMIDITÉ DU BÉTON ARMÉ

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Application

EP 17801438 A 20171115

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Abstract (en)

[origin: WO2018091534A1] The invention relates to a method for determining a state of corrosion and passivation on a steel concrete component (1), in which an inert measuring electrode (3) is arranged on the surface, an electrically conductive connection to a reinforcing steel (2) is established, into which an electrical test signal is fed. A negative cathode protection current (I_{fc}) is fed into the measuring electrode (3). On the measuring electrode (3), a corrosion measurement signal (S_1, S_1') for determining the charges, which are transported by iron ions through the outer concrete layer (1.1), and a moisture measurement signal (S_2, S_2') for determining the moisture of the outer concrete layer (1.1) are simultaneously measured. The corrosion measurement signal (S_1, S_1') is compared to a predetermined limit value, when the moisture measurement signal (S_2, S_2') indicates at least one minimum measurement moisture. The invention further relates to an arrangement for carrying out the method.

IPC 8 full level

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