

Title (en)

SOL-GEL METHOD FOR PRODUCING AN ANTI-CORROSION COATING ON A METAL SUBSTRATE

Title (de)

SOL-GEL-VERFAHREN ZUR HERSTELLUNG EINER KORROSIONSSCHUTZBESCHICHTUNG AUF EINEM METALLSUBSTRAT

Title (fr)

PROCÉDÉ SOL-GEL DE FABRICATION D'UN REVÊTEMENT ANTICORROSION SUR SUBSTRAT MÉTALLIQUE

Publication

**EP 3559309 A1 20191030 (FR)**

Application

**EP 17821630 A 20171220**

Priority

- FR 1663250 A 20161222
- EP 2017083957 W 20171220

Abstract (en)

[origin: WO2018115207A1] The invention relates to a sol-gel method for producing an anti-corrosion coating consisting of at least one layer (31, 32) of an oxide on a metal substrate (10). A non-aqueous solution (1) of a precursor of the oxide is prepared (S1) and deposited (S2) on one surface (11) at least of the metal substrate in order to cover said surface at least partially with a film (20) comprising the precursor of the oxide. Hydrolysis-condensation of the precursor of the oxide is carried out (S3) by exposing the film to a humid atmosphere in order to form an oxide network in the film. Then, a treatment for stabilising the film on the surface of the substrate is carried out (S4), followed by a heat treatment (S5) of the surface of the metal substrate in order to crystallise the network of oxide and form the anti-corrosion coating.

IPC 8 full level

**C23C 18/12** (2006.01)

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**C23C 18/1279** (2013.01 - EP KR US)

Citation (search report)

See references of WO 2018115207A1

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