Title (en)

SYSTEM AND METHOD FOR INHIBITING CORROSION OF METAL CONTAINERS AND COMPONENTS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR VERHINDERUNG DER KORROSION VON METALLBEHÄLTERN UND KOMPONENTEN

Title (fr)

SYSTEMES ET PROCEDES DESTINES A EMPECHER LA CORROSION DES RECIPIENTS ET COMPOSANTS METALLIQUES

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Application

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Abstract (en)

[origin: WO9951362A1] A method and system for inhibiting corrosion of aluminum and other metal-containing components and structures exposed to water are disclosed. In one embodiment, the silicate solution is used as a test fluid medium for structural testing of aluminum-alloy or other metal container structures including propellant tanks (14), in which a structure filled with the medium is then subjected to various structural load testing. In another embodiment, the silicate solution is used as a test medium for proof pressure hydrostatic or load testing of launch vehicle (10) booster tanks. The silicate film (18) protects the underlying base metal surface against corrosion during these tests. The film (18) also protects the base metal surface in normal atmospheric conditions from exposure to humidity and other atmospheric moisture after removal of the test medium from the propellant tank (14) following completion of testing.

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