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MIXTURE AND TECHNIQUE FOR COATING AN INTERNAL SURFACE OF AN ARTICLE

ABSTRACT

[0105] A mixture and technique for coating an internal surface of an article is generally described. In one aspect, a method includes introducing a mixture comprising an aluminum source and an organo halocarbon activator into an internal cavity of an article. In some embodiments, the method may further include heating the article and the mixture to a temperature sufficient to form an aluminum halide, which deposits on a surface of the internal cavity to form a coated article. In further embodiments, the method may also include depositing on an external surface of the article a first layer comprising Pt, Si, and a reactive element selected from the group consisting of Hf, Y, La, Ce, Zr, and combinations thereof, and depositing a second layer comprising Al on the first layer to form an alloy including a γ -Ni + γ' -Ni₃Al phase constitution, where the second layer is deposited with the organo halocarbon activator.

FIG. 4A



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