

HIGH STRENGTH CORROSION RESISTANT HIGH VELOCITY OXY FUEL (HVOF) COATING FOR DOWNHOLE TOOLS

ABSTRACT

A downhole tool comprises a body made of a metal or metal alloy. In addition, the downhole tool comprises a coating disposed on the body. The coating includes at least 75 vol % tungsten carbide having an average grain size less than 1.0 μm . The content of tungsten carbide in the coating with a grain size less than 0.5 μm is between 40 and 64 vol % of the coating.

FIG. 7