

WEAR-RESISTANT QUASICRYSTALLINE COATING

ABSTRACT

A thermally sprayed coating formed with a quasicrystal-containing alloy, the alloy consisting essentially of, by weight percent, 10 to 45 Cu, 7 to 22 Fe, 0 to 30 Cr, 0 to 30 Co, 0 to 20 Ni, 0 to 10 Mo, 0 to 7.5 W and balance aluminum with incidental impurities. The alloy contains at least 50 weight percent ψ phase. The coating has a macrohardness of at least HR15N 75.