

METHOD OF APPLYING ENVIRONMENTAL AND BOND COATINGS TO TURBINE FLOWPATH PARTS

ABSTRACT

A method for coating an article such as a turbine engine shroud [10] with an environmental or bond coating, such as a MCrAlY composition, to produce a surface finish suitable for machining to predetermined dimensions and specifications. The method of applying an environmental or bond coating uses a thermal spray process such as hyper velocity oxygen fuel ("HVOF") to produce a thick and reasonably uniform coating [16] which can be machined to desired dimensions while still providing key quality characteristics required to protect the coated part [10] in a high temperature, oxidative and corrosive atmosphere and permitting application of long life thermal barrier topcoats.

Fig. 3