

FANNED TRAILING EDGE TEARDROP ARRAY

ABSTRACT OF THE DISCLOSURE

A component for use in a gas turbine engine is provided. The component has an airfoil portion with a plurality of internal cooling passages and a non-linear trailing edge. The component further has a non-linear array of teardrop shaped assemblies which form a plurality of injection slots for injecting a coolant fluid into a fluid passing over the airfoil portion. The teardrop shaped assemblies are designed to maximize thermal performance of the component by reducing a relative diffusion angle between the injected coolant flow and the streamline direction of the fluid passing over the airfoil portion.

Figure 2