

## **IMPINGEMENT COOLING OF LARGE FILLET OF AN AIRFOIL**

### **Abstract:**

A gas turbine engine blade has a relatively large fillet to improve the characteristics of the air flow thereover. The fillet has a thin wall which, together with an impingement rib, defines a fillet cavity therebetween, and cooling air is provided to flow through impingement holes in the impingement rib and impinge on the rear surface of the fillet. The impingement holes are elongated in cross sectional shape with their elongations being orient in a direction generally transverse to a radial direction.

**Figures 4A & 4B**