

MICROCIRCUIT COOLING FOR BLADES

ABSTRACT OF THE DISCLOSURE

A turbine engine component such as a turbine blade includes an airfoil portion formed by a suction side wall and a pressure side wall, and a cooling microcircuit incorporated in at least one of the suction side wall and the pressure side wall. The cooling microcircuit comprises a channel through which a cooling fluid flows, at least one exit hole for distributing cooling fluid over a surface of the turbine blade, and internal features within the channel for accelerating the flow of cooling fluid prior to the cooling fluid flowing through the at least one exit hole.

FIGURE 1