

MICROCIRCUIT COOLING FOR VANES

ABSTRACT OF THE DISCLOSURE

A turbine engine component has an airfoil portion with a suction side. The component includes a cooling microcircuit embedded within a wall structure forming the suction side. The cooling microcircuit has at least one cooling film hole positioned ahead of a gage point for creating a flow of cooling fluid over an exterior surface of the suction side which travels past the gage point. The cooling microcircuit is formed using refractory metal core technology. A method for forming the cooling microcircuit is described.

FIGURE 1