

SCALLOPED SURFACE TURBINE STAGE WITH PURGE TROUGH

ABSTRACT

A turbine stage includes a row of airfoils joined to corresponding platforms to define flow passages therebetween. Each airfoil includes opposite pressure and suction sides and extends in chord between opposite leading and trailing edges. Each platform has a scalloped flow surface including a purge trough commencing tangentially in a blend area of the platform. The purge trough extending axially toward the suction side of the airfoil, aft of the leading edge, to channel a purge flow.

Figure 1