

COMBUSTOR REAR FACING STEP HOT SIDE CONTOUR METHOD AND APPARATUS

ABSTRACT OF THE DISCLOSURE

A combustor liner has a stepped combustor liner surface and an overhang portion forming an air cooling slot. A contoured rear facing edge of the overhang portion reduces turbulence of combustion gas flow and reduces a combustor liner surface area exposed to combustion gases. A thermal barrier coating is also
5 applied to the contoured rear facing edge, reducing heat flow into the overhang portion and hence reducing the operating temperature of the combustor liner. Thus, the amount of cooling air is reduced, which can reduce exhaust emissions, increase engine performance and extend a working life of the combustor assembly.

Figure 3.