

AIR ASSIST FUEL INJECTOR FOR A COMBUSTOR

ABSTRACT OF THE DISCLOSURE

A fuel injector system provides an air assist fuel nozzle which includes a fuel shroud and an air portion. Air passes around the fuel shroud to air jets in the air portion to provide a focused application of air directly onto a fuel spray from each of a multiple
5 of main fuel jets to impart additional velocity to the fuel as it is flowing out of the fuel nozzle. The air jets increase the resulting fuel spray velocity to a level high enough to reach a prefilmer wall of a swirler even during snap deceleration conditions.

Figure 3A