

SYSTEMS AND METHODS FOR CLEANING A GAS TURBINE ENGINE

Abstract of the Disclosure

Provided herein are systems and methods for supplying a gas to one or more portions of an engine (10) during an engine cleaning operation to limit the ingress of cleaning fluid. The systems and methods can also be used to supply the gas to the engine (10) after a cleaning operation to remove residual cleaning fluid. In some embodiments, the methods include pressurizing a bleed system (60) to limit ingress of cleaning fluid or dry the bleed system (60). The methods may use a portion of a reverse bleed apparatus (90) associated with the bleed system (60) to supply the gas to the bleed system (60). In addition, an external gas supply system (130, 150, 166, 220, 240) may be coupled to a bleed duct (74) to supply the gas. In some embodiments, the methods include pressurizing a sump system (168) of the gas turbine engine (10) to limit ingress of cleaning fluid into the sump system (168) during the cleaning operation.

[Figure 1]