

SOLENOID VALVE FOR REDUCING WEAR IN A GEARBOX DURING A WASH EVENT OF A GAS TURBINE ENGINE

ABSTRACT

A system (200) includes an accessory gearbox (45), a transfer gearbox (46) that is drivingly and fluidly coupled to the accessory gearbox (45), and a lubrication system (100) that is fluidly coupled to the accessory gearbox (45) and the transfer gearbox (46). The lubrication system (100) includes a lubricant reservoir (102) that is fluidly connected to the transfer gearbox (46) and the accessory gearbox (45). A solenoid valve (140) is in fluid communication with the lubricant reservoir (102). The solenoid valve (140) is selectively actuatable upon providing an electrical current (101) from a power source (88, 91) between an open position that allows lubricant (104) to flow from the lubricant reservoir (102) to the accessory gearbox (45) and the transfer gearbox (46) and a closed position that prevents the lubricant (104) to flow from the lubricant reservoir (102) to the accessory gearbox (45) and the transfer gearbox (46).

[Figure 2]