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ABSTRACT

This Sheet Has Been Replaced

BURNER APPARATUS

A burner apparatus (10) for burning petroleum products during well testing, comprises a plurality of burner nozzles (12) for mixing air, oil or other flammable hydrocarbon, and in some cases steam, and discharges the mixture for burning. Each module may have a plurality of burner nozzles, and a plurality of such modules may be connected together. Each burner nozzle (12) has a body (18) with an air inlet (24) and a fluid inlet (36), a nozzle insert (42) disposed in the body (18) and having an air port (60,62) in communication with the air inlet (24) and a fluid port in communication with the fluid inlet (36). Sealing (52) is provided between the nozzle insert (42) and the body (18). The body may also have a steam inlet, and the nozzle insert may also have a steam port in communication with the steam inlet, for directing steam into the apparatus to increase the mixing energy and temperature, thereby facilitating atomization. A single pilot and igniter system may be used for substantially simultaneously igniting the air and fluid mixture discharged from the nozzle inserts.

FIG.4