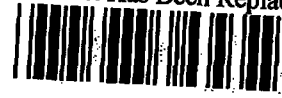


THIS SHEET HAS BEEN
REPLACED

This Sheet Has Been Replaced



14

OXY-FUEL BURNER SYSTEM DESIGNED FOR ALTERNATE FUEL USAGE

ABSTRACT

5 An oxy-fuel burner system for alternately or simultaneously burning gaseous and liquid fuels. A gaseous fuel jet emanating from an oxy-fuel burner is either undershot by an oxygen lance or is sandwiched between oxidant jets produced by two subsidiary oxidant jets which are preferably formed of oxygen. An actuable second fuel nozzle is provided for producing a second fuel jet composed of the liquid fuel which is angled toward the oxidant jet at an angle of less than 20° . When the liquid fuel to be used, the gaseous fuel is turned off and the liquid fuel is turned on and vice-versa or both can operate simultaneously where the oxidant supplies oxygen to both fuel streams.