

**IMAGE SENSING SYSTEM, SOFTWARE, APPARATUS AND METHOD
FOR CONTROLLING COMBUSTION EQUIPMENT**

ABSTRACT

5 In one aspect, the invention provides an automatic control system that includes an
optical image capture device as part of an imaging system. In another aspect, the invention
provides an imaging system that can control a flame generation system utilizing an optical
image capture device in connection with a computer system, including software (and
corresponding algorithms), and related apparatus as necessary. The system can be used to
10 control various aspects of flame generating equipment such as flares, burners, pilots and other
combustion equipment. Qualitative and quantitative analyses of flames, for example, can be
carried out. In another aspect, the invention provides a specific methodology for using the
inventive image sensing control system.

15 (no suitable figure)