

Title (en)  
Ignition system for a heater using a fuel.

Title (de)  
Zündeinrichtung für ein brennstoffbetriebenes Heizgerät.

Title (fr)  
Dispositif d'allumage pour appareil de chauffage utilisant un combustible.

Publication  
**EP 0456245 B1 19950118 (DE)**

Application  
**EP 91107574 A 19910510**

Priority  
DE 4015097 A 19900511

Abstract (en)  
[origin: EP0456245A2] An ignition system for a heater using a fuel is indicated, which has at least one glow element, preferably in the form of a glow coil. This glow element is at the same time used as a flame-monitoring device, the PTC action of the same being used, in which an additional resistance increase arises as a result of the flame temperature during flame formation. If a constant current is applied to the glow element during flame monitoring, the additional resistance increase during flame formation brings about a voltage drop which indicates that a flame has formed in the combustion chamber of the heater. Depending upon this, corresponding switching processes can then be triggered in the heater. For example, the ignition system can be switched off. Moreover, even with the ignition system switched off, the current signal can be applied constantly or in a clocked manner during the combustion operation of the heater, so that constant flame monitoring is possible for monitoring the flame formation even during combustion operation. Preferably, the ignition system is in the form of a rod glow plug and has a glow element which is embedded in a ceramic mass. In this connection, the glow element of the rod glow plug preferably consists of tungsten which has a PTC action. <IMAGE>

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**F23Q 7/06**

IPC 8 full level  
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Cited by  
US5893993A; US5922229A; WO2004082971A1; EP0834652B1

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