

Title (en)  
GAS WATER HEATER AND BURNER THEREOF

Title (de)  
GAS-WASSERERHITZER UND BRENNER DAFÜR

Title (fr)  
CHAUFFE-EAU À GAZ ET BRÛLEUR ASSOCIÉ

Publication  
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Application  
**EP 18020562 A 20181029**

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Abstract (en)  
[origin: EP3597999A1] The present invention relates to the technical field of water heaters, and discloses a gas water heater and a burner thereof, the burner including an injector and a fire hole plate, wherein the injector is internally provided with at least two non-communicating parallel fuel gas-air mixing channels, one end of the injector is provided with at least two injection holes that are respectively in communication with the fuel gas-air mixing channels in one-to-one correspondence, the other end of the injector is provided with at least two jet holes that are respectively in communication with the fuel gas-air mixing channels in one-to-one correspondence, the fire hole plate is arranged covering the end of the injector that provides the jet holes, and there is provided a plurality of fire holes opened on the fire hole plate above each jet hole. As at least two non-communicating fuel gas mixing channels are provided in a single burner, increased gas utilization efficiency, low NO<sub>x</sub> and CO emissions as well as controllable number of combustive fuel gas-air mixing channels in a single burner can be achieved, thereby effectively increasing a turndown ratio.

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