

Title (en)
BURNER ASSEMBLY AND HEAT EXCHANGER

Title (de)
BRENNERBAUGRUPPE UND WÄRMETAUSCHER

Title (fr)
ENSEMBLE BRÛLEUR ET ÉCHANGEUR THERMIQUE

Publication
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Application
EP 16882441 A 20161222

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Abstract (en)
[origin: US2017184304A1] Systems and methods are disclosed that include providing a cooking system that comprises a burner assembly and a heat exchanger submerged in a vessel. The burner assembly includes a high velocity burner and a low velocity burner, the high velocity burner configured to provide the necessary high velocity, volumetric flowrate through a fluid duct of the heat exchanger that includes a plurality of compactly-arranged, alternately-disposed vertical and horizontal tubes passing through the fluid duct, and the low velocity burner configured to significantly reduce and/or substantially eliminate "lift off" that could result from operation of only the high velocity burner. The heat exchanger is submerged in the vessel with the tubes of the heat exchanger open to the vessel to allow ingress and egress of a fluid contained within the vessel.

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