Cooking apparatus and method for controlling a cooking apparatus

The present invention relates to a cooking apparatus, such as a waffle iron, a grilling apparatus or a pancake baking plate, comprising at least one baking mould, a first heating element and a second heating element. The invention further relates to a method for controlling such a cooking apparatus.

Waffle irons for baking various types of waffle, such as Brussels waffles or Liege waffles, are generally known and typically comprise an upper and a lower baking mould between which the waffles are baked. Known waffle irons typically have a simple on/off control which ensures that the heating elements arranged in the baking moulds are supplied with power when the appliance is turned on. DE 3021557 describes a waffle iron in which a control with two switches and a diode is provided, whereby it is possible to supply only half the maximum power to the heating elements. There are also control systems which make use of the temperature of the baking moulds and which control the power supply as a function thereof.

Known waffle irons have the drawback that the electric power available at for instance small waffle stalls is often limited, and that the available electric power is not utilized optimally. The present invention has for its object to propose a cooking apparatus which makes better use of the available electric power.

A first embodiment of a cooking apparatus according to the present invention ~~comprises for this purpose~~ has the features of claim 1. The cooking apparatus comprises at least one baking mould, a first heating element, a second heating element and a control system configured to control the power supply to the first and the second heating element. The control system is configured to provide a first power to the first heating element, while the second heating element is provided with a second power which differs from the first power. The first and the second power

Claims

1. Cooking apparatus, comprising:
at least one baking mould with a first and a second heating element and a control system configured to control the power supply to the first and the second heating element, **characterized in that** the control system is configured to provide the first heating element with a first electric power, while the second heating element is provided with a second electric power which differs from the first electric power, wherein the first and the second electric power lie in a range from zero to a determined maximum electric power; wherein the control system is configured to provide the first heating element and the second heating element alternately with the first and second electric power.

2. Cooking apparatus as claimed in claim 1, **characterized in that** the cooking apparatus is a waffle iron; that the at least one baking mould comprises a first baking mould coupled to the first heating element and a second baking mould coupled to the second heating element; and that the first baking mould is mounted movably relative to the second baking mould, and the first and second baking moulds are configured to bake a waffle between the first and the second baking mould.

3. Cooking apparatus as claimed in claim 1, **characterized in that** the cooking apparatus is a grilling apparatus or a pancake baking machine.

4. Cooking apparatus as claimed in any of the foregoing claims, **characterized in that** the control system is configured to supply the first and the second heating element alternately with the determined maximum electric power.

5. Cooking apparatus as claimed in any of the foregoing claims, **characterized in that** the first and the second heating element comprise respectively a first and a second resistor.

with the second heating element and an additional second heating element, and that the control system is configured to supply the first heating element, the second heating element, the additional first heating element and the additional second heating element with a different electric power.

13. Cooking apparatus as claimed in claim 11, **characterized in that** the control system is configured to supply the first heating element, the second heating element, the additional first heating element and the additional second heating element alternately with a determined maximum electric power.

14. Cooking apparatus as claimed in any of the foregoing claims, **characterized in that** the control system is configured to control the supply of power to the first heating element and the second heating element using control signals which are such that the first heating element is supplied with power periodically during a first period and the second heating element is supplied with power periodically during a second period.

15. Cooking apparatus as claimed in claim 14, **characterized in that** the first period and the second period lie between 10 seconds and 120 seconds, preferably between 20 seconds and 90 seconds.

16. Method for controlling power supply to a cooking apparatus with at least one baking mould and a first heating element and second heating element for heating the at least one baking mould, **characterized in that** the first heating element is provided with a first electric power while the second heating element is provided with a second electric power which differs from the first electric power, wherein the first and the second electric power lie in a range from zero to a determined maximum electric power~~.~~; wherein the first heating element and the second heating element are provided alternately with the first and second electric power.