AIR FRYER

~~CROSS-REFERENCE TO RELATED APPLICATION~~

~~This application is based on and claims priority to Chinese Patent Application Serial No. 202010054166.7, filed on January 17, 2020, the entire content of which is incorporated herein by reference.~~

FIELD

The present application relates to the field of electric appliance manufacturing technologies, and more particularly to an air fryer.

BACKGROUND

The air fryers rapidly crisp food surface by using hot air, and lock moisture inside the food, to achieve cooking effect of crispy outside and tender inside. The cooking taste of deep frying is realized without adding oil.

In the air fryers of the related art, a fan is arranged above a frying basket to circulate hot air through the entire cooking space. However, lots of space in an up-and-down direction needs to be occupied, which cannot meet some users' requirements for the kitchen space.

To this end, some air fryers employ the frying basket and the fan arranged in a front-and-rear direction. However, the hot air is difficult to evenly circulate in the frying basket, affecting the cooking effect.

SUMMARY

Embodiments of the present application seek to solve at least one of the problems existing in the related art. To this end, the present application proposes an air fryer which has advantages of even heating, good cooking effect, etc.

In order to achieve the above purpose, embodiments of the present application propose an air fryer, which includes a housing defining a cooking cavity and a heating cavity, the heating cavity being located behind the cooking cavity; a heating device arranged in the housing to heat the cooking cavity; and a food container configured to receive food to be fried, the food container being adapted to be placed in the cooking cavity.

The air fryer according to embodiments of the present application has the advantages of even heating, good cooking effect, etc.

Additionally, the air fryer according to embodiments of the present application may

CLAIMS

What is claimed is:

1. An air fryer, comprising:

a housing defining a cooking cavity and a heating cavity, the heating cavity being located behind the cooking cavity;

a heating device arranged in the housing to heat the cooking cavity; and

a food container configured to receive food to be fried, the food container being adapted to be placed in the cooking cavity.

2. The air fryer according to claim 1, wherein the heating cavity has a lower portion provided with a heating-cavity air outlet, the food container has a rear end provided with an air guiding edge, and when the food container is placed in the cooking cavity, the air guiding edge is located below the heating-cavity air outlet to guide airflow from the heating-cavity air outlet to the food container.

3. The air fryer according to claim 2, wherein the air guiding edge obliquely extends rearwards and upwards in a front-and-rear direction.

4. The air fryer according to claim 2 or 3, wherein a ratio of a length of the air guiding edge in a front-and-rear direction to a height of the air guiding edge in an up-and-down direction is 1~5~~.~~

~~5. The air fryer according to any one of claims 2 to 4, wherein a ratio of a length of the air guiding edge in a front-and-rear direction to a height of the air guiding edge in an up-and-down direction is,~~ 2~4, or~~.~~

~~6. The air fryer according to any one of claims 2 to 5, wherein a ratio of a length of the air guiding edge in a front-and-rear direction to a height of the air guiding edge in an up-and-down direction is~~ 2.5~3.5.

5~~7~~. The air fryer according to any one of claims 2 to ~~6~~4, wherein the air guiding edge extends rearwards and upwards in an arc shape, and a minimum angle between a tangent line at a rear end of the air guiding edge and a horizontal direction is 45~90 degrees, ~~.~~

~~8. The air fryer according to any one of claims 2 to 7, wherein the air guiding edge extends rearwards and upwards in an arc shape, and a minimum angle between a tangent line at a rear end of the air guiding edge and a horizontal direction is~~ 50~70 degrees~~.~~

~~9. The air fryer according to any one of claims 2 to 8, wherein the air guiding edge extends rearwards and upwards in an arc shape, and a minimum angle between a tangent line at a rear end~~

~~of the air guiding edge and a horizontal direction is~~, or 60 degrees.

~~10~~6. The air fryer according to any one of claims 1 to ~~9~~5, wherein the heating device comprises a heating member and a hot air fan, and the heating cavity has a front surface provided with a heating-cavity air inlet.

~~11~~7. The air fryer according to any one of claims 2 to ~~10~~6, wherein the heating-cavity air outlet comprises a plurality of sub air outlets spaced apart in a left-and-right direction.

~~12~~8. The air fryer according to claim ~~11~~7, wherein each sub air outlet is provided with an air blocking piece extending upwards.

~~13~~9. The air fryer according to claim ~~12~~8, wherein the air blocking piece is located at a left edge or a right edge of each sub air outlet.

~~14~~10. The air fryer according to claim ~~13~~9, wherein the heating device comprises a heating member and a hot air fan, the hot air fan rotates clockwise when viewed from rear to front, the air blocking piece is located at the left edge of each sub air outlet; or the hot air fan rotates clockwise when viewed from front to rear, the air blocking piece is located at the right edge of each sub air outlet.

~~15~~11. The air fryer according to any one of claims ~~12~~ 8 to ~~14~~10, wherein a length of each air blocking piece in a vertical direction increases gradually from inside to outside.

~~16~~12. The air fryer according to any one of claims 1 to ~~15~~14, wherein the heating device comprises a heating member and a hot air fan, and the heating cavity comprise:

a vertical portion, the heating-cavity air outlet being defined in a lower surface of the vertical portion; and

a circular portion located above the vertical portion and coupled to the vertical portion, the heating member and the hot air fan being arranged in the circular portion.

~~17~~13. The air fryer according to claim ~~16~~12, wherein a central axis of the hot air fan and a central axis of the circular portion are misaligned.

~~18~~14. The air fryer according to claim ~~16~~ 12 or ~~17~~13, wherein the hot air fan rotates clockwise when viewed from rear to front, and in a left-and-right direction a central axis of the hot air fan is located at a left side of a central axis of the circular portion; or the hot air fan rotates clockwise when viewed from front to rear, and in the left-and-right direction, the central axis of the hot air fan is located at a right side of the circular portion.

~~19~~15. The air fryer according to any one of claims ~~16~~ 12 to ~~18~~14, wherein in an up-and-down direction, a central axis of the hot air fan is located below a central axis of the circular portion.

~~20~~16. The air fryer according to any one of claims ~~16~~ 12 to 19, wherein a distance between

an outer circumferential edge of the hot air fan and an inner circumferential face of the circular portion increases gradually in a rotation direction of the hot air fan.

~~21~~17. The air fryer according to any one of claims ~~16~~ 12 to ~~21~~16, wherein the heating member is coiled in the circular portion.

~~22~~18. The air fryer according to any one of claims 1 to ~~21~~17, wherein the heating device comprises a heating member and a hot air fan, the heating cavity has a front surface provided with a heating-cavity air inlet, the heating-cavity air inlet comprises a plurality of air holes, and at least a part of the plurality of air holes is opposite to the heating member in a front-and-rear direction.

~~23~~19. The air fryer according to any one of claims 1 to ~~22~~18, wherein the food container fits with the cooking cavity in a pull-push manner between a closed position where the food container closes the cooking cavity and a separation position where the food container is separated from the cooking cavity.

~~24~~20. The air fryer according to any one of claims 1 to ~~23~~19, wherein the food container comprises:

an outer container, the outer container fitting with the cooking cavity in a pull-push manner between a closed position where the outer container closes the cooking cavity and a separation position where the outer container is separated from the cooking cavity; and

an inner container detachably fitted in the outer container, and the inner container having a bottom wall provided with a container air inlet and a rear wall provided with a container air outlet.

~~25. An air fryer, comprising:~~

~~a housing defining a cooking cavity and a heating cavity, the heating cavity being located behind the cooking cavity, the heating cavity having a lower portion provided with a heating-cavity air outlet;~~

~~a heating device arranged in the housing to heat the cooking cavity; and~~

~~a food container configured to receive food to be fried, the food container being adapted to be placed in the cooking cavity, the food container having a rear end provided with an air guiding edge, and when the food container is placed in the cooking cavity, the air guiding edge being located below the heating-cavity air outlet to guide airflow from the heating-cavity air outlet to the food container,~~

~~wherein the air guiding edge obliquely extends rearwards and upwards in a front-and-rear direction, and a ratio of a length of the air guiding edge in the front-and-rear direction to a height of the air guiding edge in an up-and-down direction is 1~5.~~

~~26. The air fryer according to claim 25, wherein the ratio of the length of the air guiding edge in the front-and-rear direction to the height of the air guiding edge in the up-and-down direction is 2~4.~~

~~27. The air fryer according to claim 25 or 26, wherein the ratio of the length of the air guiding edge in the front-and-rear direction to the height of the air guiding edge in the up-and-down direction is 2.5~3.5.~~

~~28. The air fryer according to any one of claims 25 to 27, wherein the air guiding edge extends rearwards and upwards in an arc shape, and a minimum angle between a tangent line at a rear end of the air guiding edge and a horizontal direction is 45~90 degrees.~~

~~29. The air fryer according to any one of claims 25 to 28, wherein the air guiding edge extends rearwards and upwards in an arc shape, and a minimum angle between a tangent line at a rear end of the air guiding edge and a horizontal direction is 50~70 degrees.~~

~~30. The air fryer according to any one of claims 25 to 29, wherein the air guiding edge extends rearwards and upwards in an arc shape, and a minimum angle between a tangent line at a rear end of the air guiding edge and a horizontal direction is 60 degrees.~~

~~31. The air fryer according to any one of claims 25 to 30, wherein the heating device comprises a heating member and a hot air fan, and the heating cavity has a front surface provided with a heating cavity air inlet.~~

~~32. The air fryer according to any one of claims 26 to 31, wherein the heating cavity air outlet comprises a plurality of sub air outlets spaced apart in a left-and-right direction.~~

~~33. The air fryer according to claim 32, wherein each sub air outlet is provided with an air blocking piece extending upwards.~~

~~34. The air fryer according to claim 33, wherein the air blocking piece is located at a left edge or a right edge of each sub air outlet.~~

~~35. The air fryer according to claim 34, wherein the heating device comprises a heating member and a hot air fan, the hot air fan rotates clockwise when viewed from rear to front, the air blocking piece is located at the left edge of each sub air outlet; or the hot air fan rotates clockwise when viewed from front to rear, the air blocking piece is located at the right edge of each sub air outlet.~~

~~36. The air fryer according to any one of claims 33 to 35, wherein a length of each air blocking piece in a vertical direction increases gradually from inside to outside.~~

~~37. The air fryer according to any one of claims 25 to 36, wherein the heating device comprises a heating member and a hot air fan, and the heating cavity comprise:~~

~~a vertical portion, the heating cavity air outlet being defined in a lower surface of the~~

vertical portion; and

a circular portion located above the vertical portion and coupled to the vertical portion, the heating member and the hot air fan being arranged in the circular portion.

38. The air fryer according to claim 37, wherein a central axis of the hot air fan and a central axis of the circular portion are misaligned.

39. The air fryer according to claim 37 or 38, wherein the hot air fan rotates clockwise when viewed from rear to front, and in a left-and-right direction a central axis of the hot air fan is located at a left side of a central axis of the circular portion; or the hot air fan rotates clockwise when viewed from front to rear, and in the left-and-right direction, the central axis of the hot air fan is located at a right side of the circular portion.

40. The air fryer according to any one of claims 37 to 39, wherein in the up-and-down direction, a central axis of the hot air fan is located below a central axis of the circular portion.

41. The air fryer according to any one of claims 37 to 40, wherein a distance between an outer circumferential edge of the hot air fan and an inner circumferential face of the circular portion increases gradually in a rotation direction of the hot air fan.

42. The air fryer according to any one of claims 37 to 41, wherein the heating member is coiled in the circular portion.

43. The air fryer according to any one of claims 25 to 42, wherein the heating device comprises a heating member and a hot air fan, the heating cavity has a front surface provided with a heating cavity air inlet, the heating cavity air inlet comprises a plurality of air holes, and at least a part of the plurality of air holes is opposite to the heating member in the front-and-rear direction.

44. The air fryer according to any one of claims 25 to 43, wherein the food container fits with the cooking cavity in a pull-push manner between a closed position where the food container closes the cooking cavity and a separation position where the food container is separated from the cooking cavity.

45. The air fryer according to any one of claims 25 to 44, wherein the food container comprises:

an outer container, the outer container fitting with the cooking cavity in a pull-push manner between a closed position where the outer container closes the cooking cavity and a separation position where the outer container is separated from the cooking cavity; and

an inner container detachably fitted in the outer container, and the inner container having a bottom wall provided with a container air inlet and a rear wall provided with a container air outlet.