

We claim:

1. An automatic cooking apparatus (100) comprising:
 - at least one curved heating member (106) configured to move in an arcuate path,
characterized in that
 - 5 the at least one curved heating member (106) comprising at least one heating surface (106a, 106b); and
at least one dispensing mechanism comprising at least one rotatable feeder tank (124) rotatably
disposed in the proximity of the heating surface (106a, 106b), the at least one rotatable feeder tank (124)
configured to rotate in relation to the curved heating member (106) for dispensing the at least one semi-
solid liquid substance on the at least one heating surface (106a, 106b);
 - 10 the at least one curved heating member (106), in the course of dispensing of the at least one semi-solid
liquid substance on the at least one heating surface (106a, 106b) by rotating the at least one rotatable feeder
tank (124) towards the at least one heating surface (106a, 106b), is configured to move in the arcuate path
to spread the at least one semi-solid liquid substance on the at least one heating surface (106a, 106b), and
attains one or more cooking positions in the arcuate path after the at least one semi-solid liquid substance
15 is suitably spread on the at least one heating surface (106a, 106b) for cooking the at least one semi-solid
liquid substance.
2. The automatic cooking apparatus (100) as claimed in claim 1, wherein the at least one curved heating
member (106) comprises a drum- or semi-drum- or partial-drum-configuration having same or varying
20 diameter across its length and is configured to rotate, in clockwise and / or anticlockwise direction, by
about 360 degrees or less than 360 degrees in the arcuate path.
3. The automatic cooking apparatus (100) as claimed in claims 1 or 2, wherein the at least one heating surface
(106a, 106b) comprises a concave surface (106a) of the at least one curved heating member (106) or a
25 convex surface (106b) of the at least one curved heating member (106) or both concave and convex surfaces
(106a, 106b) of the at least one curved heating member (106).
4. The automatic cooking apparatus (100) as claimed in any one of previous claims, wherein the at least one
dispensing mechanism comprises at least one storage tank and /or at least one feeder tank mechanism
30 having at least one rotatable feeder tank (124) for dispensing the at least one semi-solid liquid substance on
the at least one heating surface (106a, 106b).

5. The automatic cooking apparatus (100) as claimed in any claim 4, wherein the feeder tank mechanism comprises a feeder motor (M) and a gear mechanism (G, G1, G2, GF) or cam mechanism for rotating the feeder tank (124) in a dispensing position and a retracted position.
- 5 6. The automatic cooking apparatus (100) as claimed in claims 4 or 5, wherein the feeder tank (124) comprises one or more separators (162) for separating the inner volume of the feeder tank (124), thereby enabling cooking of different varieties of food items in a single cooking operation.
- 10 7. The automatic cooking apparatus (100) as claimed in any one of previous claims, wherein the at least one dispensing mechanism is mounted on a base structure (104) and / or an elongated structure (122) supported on the base structure (104) to dispense the semi solid liquid substance on the cooking surface of the heating member (106).
- 15 8. The automatic cooking apparatus (100) as claimed in any one of previous claims comprises a peeling mechanism (120, 120a, 120b) for removing a cooked food item, prepared by cooking the at least one semi-solid liquid substance on the at least one heating surface (106a, 106b), from the at least one heating surface (106a, 106b).
- 20 9. The automatic cooking apparatus (100) as claimed in any one of previous claims comprises a driving mechanism comprising a worm wheel drive assembly or spur gear drive assembly for moving the at least one curved heating member (106) in an arcuate path.
- 25 10. A method of cooking a semi-solid liquid substance into a cooked food item, the method characterized by:
dispensing the at least one semi-solid liquid substance on at least one heating surface (106a, 106b) of
at least one curved heating member (106) by rotating at least one rotatable feeder tank (124) disposed in
the proximity of the heating surface (106a, 106b);
moving, in the course of dispensing of the at least one semi-solid liquid substance on the at least one
heating surface (106a, 106b) by rotating the at least one rotatable feeder tank (124) towards the at least one
heating surface (106a, 106b), the at least one curved heating member (106) in an arcuate path to spread the
30 at least one semi-solid liquid substance on the at least one heating surface (106a, 106b); and
attaining one or more cooking position in the arcuate path of the at least one curved heating member
(106) after the at least one semi-solid liquid substance is suitably spread on the at least one heating surface
(106a, 106b) for cooking the at least one semi-solid liquid substance.

11. The method as claimed in claim 10, wherein the step of dispensing of the at least one semi-solid liquid substance on the at least one heating surface (106a, 106b) is performed by rotation of at least one feeder tank (124) and / or squeezing at least one storage tank and / or by operating a valve opening or by operating a feed pump dispensing of liquid substance can be achieved.

5

12. The method as claimed in claims 10 or 11, wherein the step of moving the at least one curved heating member (106) in the arcuate path comprises rotating, in clockwise and / or anticlockwise direction, the at least one curved heating member (106) by about 360 degrees or less than 360 degrees in the arcuate path.

10

13. The method as claimed in any one of previous claims 10 to 12, wherein the step of attaining one or more cooking position in the arcuate path of the at least one curved heating member (106) in the cooking position comprises attaining a position not limited to one or combination of a topmost position, a bottommost position, a position between topmost position and the bottommost position of the heating member (106) for a pre-determined period to enable cooking of the at least one semi-solid liquid substance on the at least one heating surface (106a, 106b).

15

14. The method as claimed in any one of previous claims 10 to 13 further comprising the step of removing a cooked food item, prepared by cooking the at least one semi-solid liquid substance on the at least one heating surface (106a, 106b), from the at least one heating surface (106a, 106b).

20

15. The method as claimed in claim 14 further comprising the step of dispensing the at least one semi-solid liquid substance on the at least one heating surface (106a, 106b) simultaneously or consecutively to the step of the removing the cooked food item from the at least one heating surface (106a, 106b).

25

16. The method as claimed in claims 14 or 15, comprising the step of only removing the cooked food item from the at least one heating surface (106a, 106b) without simultaneously or consecutively dispensing the at least one semi-solid liquid substance on the at least one heating surface (106a, 106b) in the cooking operation of last food item.