CLAIMS:

1. A centrifugal ceiling fan comprising:

a casing comprising an upper surface comprising an air inlet and a lower surface comprising an air outlet, said lower surface comprising an upper section in proximity of the upper surface and a lower section opposite the upper section; ~~and having a variable diameter between said upper and lower sections, said diameter being greater at the upper section than the lower section;~~

a centrifugal propeller comprising a rotation shaft and a plurality of blades provided around said rotation shaft; ~~, said blades being curved to push the air in substantially all directions between a first direction substantially perpendicular to the rotation shaft and a second direction substantially parallel to the rotation shaft;~~

a motor operatively connected to said centrifugal propeller for rotating said centrifugal propeller; ~~said motor and said centrifugal propeller being provided within said casing;~~

wherein the blades are curved and have a width that varies along a direction of the rotation shaft, and wherein rotation of the centrifugal propeller causes air to be received from said air inlet and to be pushed from said air outlet in substantially all directions between ~~the~~ a first direction substantially perpendicular to the rotation shaft and ~~the~~ a second direction substantially parallel to the rotation shaft.

2. The centrifugal ceiling fan of claim 1, wherein the width of the blades diminishes toward the lower section of the lower surface. ~~have a variable width corresponding to the variable diameter.~~

~~3. The centrifugal ceiling fan of claim 1, wherein the lower surface has a bowl-like shape.~~

43. The centrifugal ceiling fan of claim 1, wherein direction of the air is substantially perpendicular to the rotation shaft in proximity of the upper section, and substantially parallel to the rotation shaft in proximity of the lower section. ~~the upper section and the lower section are connected by linking members.~~

~~5. The centrifugal ceiling fan of claim 4, wherein the linking members are spaced apart and define openings therebetween which form the air outlet.~~

~~6~~4. The centrifugal ceiling fan of claim ~~4~~ 1, ~~wherein at least one of the linking members is provided with~~ further comprising a heating element for heating the air pushed out of the casing.

~~7~~5. The centrifugal ceiling fan of claim 4, wherein ~~at least one~~ the heating element is provided within the casing. ~~between two linking members for heating the air.~~

~~8~~6. The centrifugal ceiling fan of claim 1, further comprising an air regulator for directing the air to a desired location. ~~provided at an outer side of the casing.~~

~~9~~7. The centrifugal ceiling fan of claim ~~8~~6, wherein an angle of orientation of the air regulator with respect to the casing is adjustable. ~~comprises a plurality of rings which are spaced apart and placed one over the other between the upper section and the lower section of the lower surface for directing the air.~~

~~10~~8. The centrifugal ceiling fan of claim ~~9~~1, wherein the air outlet comprises a plurality of openings separated by linking members. ~~a space between at least two rings is adjustable.~~

~~11~~9. The centrifugal ceiling fan of claim ~~9~~1, wherein said motor and said centrifugal propeller are provided within said casing. ~~an angle of orientation of at least one ring is adjustable.~~

~~12~~10. The centrifugal ceiling fan of claim 1, wherein the upper surface defines a lid and the upper section of the lower surface defines an opening for receiving said lid.

~~13~~11. The centrifugal ceiling fan of claim 1, wherein the centrifugal propeller comprises ~~an upper plate and a lower plate connected to the rotation shaft, said upper and lower plates having openings therein~~openings for receiving ~~an upper edge and a lower edge of each blade, respectively~~the blades.

~~14~~12. The centrifugal ceiling fan of claim ~~13~~1, wherein the motor has a cylindrical shape and comprises a flange between a first and a second end thereof;

the fan further comprising a static plate ~~which rests on an inner side of the casing above said upper plate~~, said static plate comprising an opening therein, said opening having a diameter which is greater than a diameter of said motor and smaller than a diameter of said flange;

wherein the motor is supported by said static plate using said flange and a portion of said motor below said flange passes through said opening for connection to the centrifugal propeller.

~~15~~13. The centrifugal ceiling fan of claim ~~14~~4, wherein the heating element is provided within the fan between the centrifugal propeller and the casing. ~~a plurality of spacers are provided between the motor and the portion of said motor above the flange for maintaining said motor in position.~~

~~16~~14. The centrifugal ceiling fan of claim ~~14~~, wherein the heating element is provided at one of the openings defining the air outlet. ~~direction of air is substantially perpendicular to the rotation shaft in proximity of the upper section, and substantially parallel to the rotation shaft in proximity of the lower section.~~

~~17~~15. A centrifugal ceiling fan comprising:

a casing comprising an upper surface comprising an air inlet and a lower surface comprising an air outlet;

a centrifugal propeller operatively connected to a motor for generating an air current, said propeller and said motor being provided within said casing; and

an air regulator provided at an outer side of said casing for directing said air current~~.~~;

wherein the centrifugal propeller comprises a plurality of blades, said blades being curved and have a width that varies along a direction of the rotation shaft such that the blades become narrower toward a lower end of the casing opposite the air inlet, and wherein rotation of the blades causes air to be received from said air inlet and to be pushed from said air outlet in substantially all directions between a first direction substantially perpendicular to the rotation shaft and a second direction substantially parallel to the rotation shaft.

~~18. The centrifugal propeller of claim 17, wherein the air regulator comprises a plurality of rings which are spaced apart and placed one over the other between an upper section and a lower section of the lower surface.~~

~~19. The centrifugal propeller of claim 18, wherein a space between at least two of the rings is adjustable.~~

~~20. The centrifugal propeller of claim 18, wherein an orientation of at least one of the rings is adjustable.~~

~~21. A centrifugal ceiling fan comprising:~~

~~a casing comprising an upper surface comprising an air inlet and a lower surface comprising an air outlet;~~

~~a centrifugal propeller operatively connected to a motor for generating an air current, said propeller and said motor being provided within said casing; and~~

~~a heating element for heating said air current.~~

~~22. The centrifugal ceiling fan of claim 21, wherein the heating element is provided at an outer side of the casing.~~

~~23. A centrifugal ceiling fan comprising:~~

~~a casing comprising an upper surface defining an air inlet and a lower surface defining an air outlet, said lower surface comprising an upper section and a lower section and having a variable diameter between said upper and lower sections, said diameter being greater at the upper section than the lower section; and~~

~~a centrifugal propeller operatively connected to a motor, and comprising a rotation shaft and a plurality of blades provided around said shaft, said blades being curved and having a width that varies in accordance with the diameter of the lower surface;~~

~~wherein rotation of the blades cause the air to be pushed in a direction substantially perpendicular to the rotation shaft in proximity of the upper section, and substantially parallel to the rotation shaft in proximity of the lower section of the lower surface.~~

~~24. The centrifugal ceiling fan of claim 23, wherein the upper section and the lower section of the lower surface are connected by linking members.~~

~~25. The centrifugal ceiling fan of claim 24, wherein the linking members are spaced apart and define openings therebetween which form the air outlet.~~

~~26. The centrifugal ceiling fan of claim 24, wherein at least one of the linking members is provided with a heating element for heating the air.~~

~~27. The centrifugal ceiling fan of claim 24, wherein at least one heating element is provided between two linking members for heating the air.~~

~~28. The centrifugal ceiling fan of claim 23, further comprising an air regulator provided at an outer side of the casing.~~

~~29. The centrifugal ceiling fan of claim 28, wherein the air regulator comprises a plurality of rings which are spaced apart and placed one over the other between the upper section and the lower section of the lower surface for directing the air.~~

~~30. The centrifugal ceiling fan of claim 29, wherein a space betw.een at least two rings is adjustable.~~

~~31. The centrifugal ceiling fan of claim 29, wherein an angle of orientation of at least one ring is adjustable.~~