【CLAIMS】

~~【Claim 1】~~

~~A double input structure juice module comprising:~~

~~a juice drum accommodating a mesh body therein and coupled to an upper end of a main body, wherein a lid into which a juice object is input is coupled to an upper portion of the juice drum; and~~

~~a screw mounted inside the mesh body to rotate with respect to a screw rotation shaft, having a spiral rib formed on an outer circumferential surface, and receiving and crushing the juice object from the lid,~~

~~wherein the screw includes a support surface formed in a direction intersecting the screw rotation shaft to support the juice object input into the lid and a crushing portion formed on an upper end to intersect the support surface and cutting the juice object, and~~

~~wherein the lid includes an inlet into which the juice object is input, the inlet guiding the juice object to reach the spiral rib or the support surface.~~

~~【Claim 2】~~

~~The double input structure juice module according to claim 1, wherein the crushing portion is formed vertically with respect to the support surface, and a crushing blade cutting the juice object is formed on an upper end of the crushing portion.~~

~~【Claim 3】~~

~~The double input structure juice module according to claim 2, wherein the crushing blade forms an inclination angle with respect to the screw rotation shaft.~~

~~【Claim 4】~~

The double input structure juice module according to claim 3, wherein the inclination angle is formed in a direction in which the juice objectis drawn.

【Claim 5】

The double input structure juice module according to claim 1, wherein the crushing portion vertically intersects the support surface, and is formed at a predetermined height to cut the juice object.

【Claim 6】

The double input structure juice module according to claim 1, wherein the support surface is formed so that one side extends from a rear surface of the crushing portion and the other side is connected to a front endof the crushing portion.

【Claim 7】

The double input structure juice module according to claim 6, wherein the support surface is formed so that one side is formed at a position relatively higher than that of the other side.

【Claim 8】

The double input structure juice module according to claim 7, wherein the support surface includes a curved portion formed between the oneend and the other end.

【Claim 9】

The double input structure juice module according to claim 8, wherein the curved portion has an upper portion inclined in a convex shape.

~~【Claim 10】~~

~~The double input structure juice module according to claim 1, wherein the crushing portion includes an extension member formed to extend in an outer direction of the support surface.~~

~~【Claim 11】~~

~~The double input structure juice module according to claim 10, wherein the extension member intersects an inner surface of the lid and cuts the juice object.~~

~~【Claim 12】~~

~~The double input structure juice module according to claim 1,~~

~~wherein the screw further includes a transfer surface transferring the juice object in a rotational direction of the screw,~~

~~wherein the transfer surface is a cross-section formed at a lower end of the crushing portion.~~

~~【Claim 13】~~

~~The double input structure juice module according to claim 1, wherein the inlet includes a small diameter inlet guiding the juice object to thesupport surface and a large diameter inlet formed in a path different from that of the small diameter inlet and guiding the juice object to the spiral rib.~~

~~【Claim 14】~~

~~The double input structure juice module according to claim 13, wherein a diameter of the large diameter inlet is formed to be relatively larger than a diameter of the small diameter inlet.~~

~~【Claim 15】~~

~~The double input structure juice module according to claim 14, wherein the large diameter inlet includes an input guide portion guiding the juice object to be transferred to the spiral rib.~~

【Claim ~~16~~1】

A ~~double input structure~~ juice module comprising:

a juice drum accommodating a mesh body therein and coupled to an upper end of a main body;

a lid (400) including an inlet ~~in which a path~~ through which the juice object is input ~~is formed as at least two or more paths~~ and coupled to an upper end of the juice drum; and

a screw (300) mounted inside the mesh body, having a spiral rib (310) formed on an outer circumferential surface, and receiving and grinded the juice object from the inlet,

wherein the screw (300) includes a crushing portion (340) cutting or crushing the juice object and a support surface (350) supporting a part of the juice object input into the inlet.

【Claim 2】

The juice module according to claim 1, wherein the support surface (350) is formed so that one side extends from a rear surface of the crushing portion (340) and the other side is connected to a front end of the crushing portion (340).

【Claim 3】

The juice module according to claim 1, wherein the crushing portion (340) is formed in a vertical direction with respect to the support surface (350), and a crushing blade (344) cutting or crushing the juice object is formed on an upper end of the crushing portion.

【Claim 4】

The juice module according to claim 1, wherein the crushing portion (340) intersects the support surface in a vertical direction, and is formed at a predetermined height to cut the juice object.

【Claim 5】

The juice module according to claim 1, wherein a locking step projection (352) is formed on the support surface (350) in a partially protruding shape from an edge.

【Claim 6】

The juice module according to claim 1,

wherein the screw (300) further includes a transfer surface (330) transferring the juice object in a rotational direction of the screw (300), and

wherein the transfer surface (330) is a cross-section formed at a lower end of the crushing portion (340).

【Claim 7】

The juice module according to claim 1, wherein the screw (300) includes a transfer surface (330) is positioned in a radial direction with respect to the screw rotation shaft (320), and

wherein the transfer surface (330) is formed to a certain height and area.

【Claim 8】

The juice module according to claim 1, wherein the support surface (350) is formed so that one side is formed at a position relatively higher than that of the other side.

【Claim 9】

The juice module according to claim 1, wherein the crushing portion (340) includes an extension member (346) formed to extend in an outer

direction of the support surface (350).

【Claim 10】

The juice module according to claim 1,

wherein the lid (400) further includes a crushing rib (460) formed on an inner surface in a vertical direction, and

wherein the crushing rib (460) cuts or crushes the juice object by interaction with the crushing portion (340).

【Claim 11】

The juice module according to claim 1, wherein the inlet is formed as two or more paths.

【Claim ~~17~~12】

The ~~double input structure~~ juice module according to claim ~~16~~1, wherein the inlet includes a small diameter inlet and a large diameter inlet formed in a path different from that of the small diameter inlet.

~~【Claim 18】~~

~~The double input structure juice module according to claim 17, wherein a diameter of the large diameter inlet is formed to be relatively larger than a diameter of the small diameter inlet.~~

【Claim ~~19~~13】

The ~~double input structure~~ juice module according to claim ~~17~~12,

wherein the large diameter inlet includes an input guide portion (440) guiding the juice object to be transferred to the screw (300).

【Claim ~~20~~14】

The ~~double input structure~~ juice module according to claim ~~19~~13, wherein the input guide portion (440) is continuously connected from the large diameter inlet, is formed inclined toward a central shaft of the screw (300) to assista a side of the juice object to start crushing by the screw (300).

【Claim ~~21~~15】

The ~~double input structure~~ juice module according to claim ~~19~~13, wherein a part of the input guide portion (440) is formed in a structure extending beyond an outside from an upper area of the mesh body.

~~【Claim 22】~~

~~The double input structure juice module according to claim 19, wherein the input guide portion is formed outside with respect to the central shaft of the screw.~~

~~【Claim 23】~~

~~The double input structure juice module according to claim 17,~~

~~wherein the screw further includes a transfer surface transferring the juice object in a rotational direction of the screw,~~

~~wherein the transfer surface is a cross-section formed at a lower end of the crushing portion.~~

~~【Claim 24】~~

~~The double input structure juice module according to claim 23,~~ ~~wherein the support surface is formed extending from the crushing portion.~~

~~【Claim 25】~~

~~The double input structure juice module according to claim 24,~~

~~wherein the screw further includes an accommodation portion connected to the support surface,~~

~~wherein a height of the accommodation portion is formed at a relatively low position on the support surface.~~

~~【Claim 26】~~

~~The double input structure juice module according to claim 25, wherein~~

~~the screw further includes an accommodation groove guide portion formed to be inclined downward in a direction of the accommodation portion from the support surface,~~

~~wherein the accommodation groove guide portion has one side connected to the support surface and the other side connected to the accommodation portion.~~

~~【Claim 27】~~

~~The double input structure juice module according to claim 25,~~

~~wherein the screw further includes a crushing portion entry projection formed between the accommodation portion and the crushing portion.~~

~~【Claim 28】~~

~~The double input structure juice module according to claim 27,~~

~~wherein the screw further includes an upper flow projection formed to be inclined downward in ae direction of the accommodation portion from the crushing portion entry projection,~~

~~wherein the upper flow projection has one side connected to the accommodation portion and the other side connected to the crushing portion~~

~~entry projection.~~

~~【Claim 29】~~

~~The double input structure juice module according to claim 16, wherein a locking step projection is formed on the support surface in a partially protruding shape from an edge.~~

~~【Claim 30】~~

~~The double input structure juice module according to claim 16,~~

~~wherein the lid further includes a crushing rib formed on an inner surface in a vertical direction,~~

~~wherein the crushing rib crushes the juice object by interaction with the crushing portion.~~

~~【Claim 31】~~

~~The double input structure juice module according to claim 30, wherein the crushing rib has a shape that is wider from a top to a bottom.~~

~~【Claim 32】~~

~~The double input structure juice module according to claim 17, wherein the transfer surface includes a crushing accommodation groove formed in a part of an upper side in a certain size.~~

~~【Claim 33】~~

~~A screw for a juice module, the screw comprising:~~

~~a screw rotation shaft formed in a shape of a shaft in a central portion;~~

~~a spiral rib formed in a shape of a blade from an upper side to a lower side;~~

~~a space portion formed in a shape of a rotating plate on an upper side~~

~~of the screw rotation shaft; and~~

~~a cutting portion formed in a shape of a blade on an upper side of the space portion,~~

~~wherein the space portion and the cutting portion are formed vertically.~~

~~【Claim 34】~~

~~The screw according to claim 33, wherein the space portion includes a first space portion formed to be continuously connected from the cutting portion in a rotational direction of the screw rotation shaft, and having a partial area formed at a position relatively lower than a remaining area to forma step structure with the remaining area.~~

~~【Claim 35】~~

~~The screw according to claim 34, wherein the space portion includes a second space portion formed between the first space portion and a front surface of the cutting portion and positioned at a position relatively higher than the first space portion.~~

~~【Claim 36】~~

~~The screw according to claim 35, wherein the space portion further includes an upper flow projection inclined downward from the second space portion to the first space portion to connect the first space portion and the second space portion.~~

~~【Claim 37】~~

~~The screw according to claim 35, wherein the space portion further includes a third space portion having one side connected to a rear surface of the cutting and the other side connected to the first space portion.~~

~~【Claim 38】~~

~~The screw according to claim 37, wherein the space portion further includes an accommodation groove guide portion inclined downward from the third space portion to the first space portion to connect the third space portion and the first space portion.~~

~~【Claim 39】~~

~~The screw according to claim 38, wherein a locking step projection is formed on the third space portion in a partially protruding shape from an edge.~~