Scope of claims

[Claim 1]

A processing equipment of excretory substances, comprising a sewage water tank unit 22, a cleanup processing unit 23, a suction motor unit 24, a water supply unit 25, and a return box unit 27 in a device house box 12 connected to a napkin cup main body 10 by a hose unit 11; in which rinse solution sent from a water supply pump 39 in said water supply unit 25 is sprayed to the inside of a napkin cup main body 10, the urinary organ and excretory substances are washed in the napkin cup main body, sewage is vacuumed up by work wind of a suction motor 31 closed and isolated inside said suction motor unit 24, sewage is divided into excretory substances and rinse solution and housed them separately in said sewage water tank unit 22, and only said work wind is cleaned up in the cleanup processing unit 23 and returned to said napkin cup main body 10 through the suction motor 31 and return box unit 27 by suction circulation tube 50; wherein said suction circulation tube 50 is led to a cooling unit 55 mounted outside said device house box 12 from the discharge side of said suction motor 31, is cooled down by heat exchange with outer air inside the cooling unit 55, and then returned to said return box unit 27.

[Claim 2]

The processing equipment of excretory substances according to Claim 1, equipping the cooling unit 55 comprising a box-like cooling box 61 like a metal box with a good heat conduction in which the suction circulation tube 50 curved is arranged.

[Claim 3]

The processing equipment of excretory substances according to Claims 2, in which a slight wind circulation tube 51 is mounted along the suction circulation tube 50 circulating from the napkin cup main body 10 to the napkin cup main body 10 through the sewage water tank unit 22, cleanup processing unit 23, cooling unit 55, and return box unit 27; and a slight wind motor 48 by which slight wind for drying circulates when the suction motor 31 doesn't operate is mounted at the slight wind circulation tube 51 inside said return box unit 27.

[Claim 4]

The processing equipment of excretory substances according to Claim 3, having multiple fins conducting heat exchange with outer air for the suction circulation tube 50 and slight wind circulation

tube 51 inside the cooling box 61.

[Claim5]

The processing equipment of excretory substances according to Claims 1, 2, 3, and 4, in which a partial discharge hose 19 is connected to the suction circulation tube 50 to discharge a part of work wind circulating and the same volume of air as discharged air is vacuumed up from outside at the napkin cup main body 10.

[Claim 6]

The processing equipment of excretory substances according Claim 1, cleanup processing unit 23, the suction motor unit 24, the water supply unit 25, and the return box unit 27 are made independent units and housed inside the device house box 12 and also connected in order in a detachable manner; said sewage water tank unit 22 is separated from said device house box 12, made a unit, and connected to said cleanup processing unit 23 in a detachable manner.

[Claim 7]

The processing equipment of excretory substances according to Claim 1, having a flat box-like cooling box 61 doubled with a seat on which the device house box 12 and the sewage water tank unit 22 are placed and of which the caster 70 is mounted at the bottom face.

[Claim 8]

The processing equipment of excretory substances according to Claim 1, a concave part receiving excretory substances is mounted in the napkin cup main body10, a defecation sensor13 and an urination sensor14 are equipped at the concave part, said defecation sensor13 is mounted at a site of stool's falling, comprising a sensor to detect stool's hardness in order to control the suction of excretory substances at a setting of suction power with a higher suction power for higher signals of stool's hardness by the control panel unit56, said urination sensor14 comprising a sensor evaluates for presence or absence of urine and has two contact points to control at the control panel unit56 in order to calculate a necessary suction power for vacuuming up excretory substances according to the degree of the signals and measures the resistance between the two points.

[Claim 9]

The processing equipment of excretory substances according to Claim 3, having the bimetal 57 equipped inside the return box unit 27, by which when air circulating by the slight wind motor 48

exceeds an appropriate temperature to human body set in advance, the slight wind motor 48 rotates inversely to vacuum up the air heated in the napkin cup main body 10 from the slight wind hose 17 and then discharge outside at the slight wind discharge hose 21.

[Claim10]

The processing equipment of excretory substances according to Claim 8, having the napkin cup main body10 made from resin, in which at least the surface of the concave part receiving excretory substances is protected by a coating material being unlikely to become tainted by sewage.

[Claim 11]

The processing equipment of excretory substances according to Claim 1, in which the water level sensor42 for notifying the full condition of excretory substance is installed inside the sewage water tank unit22.

[Claim 12]

The processing equipment of excretory substances according to Claim 1, having a negative pressure sensor 52 equipped in the cleanup processing unit 23 to detect if airtightness of the hoses connected to the napkin cup main body 10 is maintained.

[Claim 13]

The processing equipment of excretory substances according to Claim 1 having the water supply unit 25 comprising a rinse solution tank 36, a supplementary tank 37, a water supply pump 39, a hot water tank 38, a valve 46, and a safety tank 40; in which a water level sensor 41 is installed at said supplementary tank 37, a water level sensor 41, a temperature sensor 43, and a heater to produce hot water 44 are installed at said hot water tank 38, and a temperature sensor 45 is installed at said safety tank 40.

[Claim 14]

The processing equipment of excretory substances according to Claim 1, in which a unit to collect biological information of the person receiving care and transmit them is combined near the napkin cup main body10.

[Claim 15]

The processing equipment of excretory substances according to Claim 1, the suction motor 31, a cooling fan 32, and a filter 33 inside the suction motor unit 24 are covered by highly hard vibration-suppression material, placed on a vibration-preventive board processed by vibration preventive material, and held with

suspension by a vibration preventive spring 79.

[Claim 16]

The processing equipment of excretory substances, in which the device house box12 equips the sewage water tank unit22, cleanup processing unit23, suction motor unit24, water supply unit25, and return box unit27, the napkin cup main body10 and device house box12 are connected by the hose unit11, rinse solution sent from the water supply pump39 in said water supply unit25 is sprayed to the inside of the napkin cup main body10 when the urination sensor14 / defecation sensor13 inside said napkin cup main body10 detects to wash the urinary organ and excretory substances inside the cup main body10, the sewage is vacuumed up by work wind of the suction motor31 in said suction motor unit24 and divided into secretory substances and cleaning water which are housed separately, only said work wind is cleaned up in the cleanup processing unit23 and returned to said napkin cup main body10 through the suction motor31 and return box unit27 by the suction circulation tube50;

and moreover, the processing operation can be conducted by any of the modes including a frequent urination mode that the suction motor31 drives when the sensed signals are shorter than a set time of said urination sensor14 without sensed signals of said defection sensor13, minor mode that the suction motor31 drives when sensed signals are higher than a set time of said urination sensor14, and major mode that the suction motor31 drives when sensed signals of said defection sensor13 is present.

[Claim 17]

The processing equipment of excretory substances according to Claim 16, in which in the frequent urination mode, the suction motor31 drives when sensed short signals at each set time of the urination sensor14 are less than set number of times.

[Claim 18]

The processing equipment of excretory substances according to Claim 16, in which in the minor mode, when sensed short signals at each set time of urination sensor14 are higher than set number of times, the suction motor31 drives intermittently to clean multiple times.

[Claim 19]

The processing equipment of excretory substances according to Claim 16, in which in the major mode, when sensed signals of the

defecation sensor13 are present and the suction motor31 drives intermittently to clean multiple time, if the rinse solution is insufficient, set number of times is reduced to clean.

[Claim20]

The processing equipment of excretory substances according to Claims 16, 17, 18 or 19, in which the suction motor operates intermittently with a unit of several minutes each for driving and stop.

Amendments to the claims
were received by the International Bureau on 03 June 2013 (03.06.2013)

[Claim 1] (Amendment)

A processing equipment of excretory substances, comprising a sewage water tank unit 22, a cleanup processing unit 23, a suction motor unit 24, a water supply unit 25, and a return box unit 27 in a device house box 12 connected to a napkin cup main body 10 by a hose unit 11; in which rinse solution sent from a water supply pump 39 in said water supply unit 25 is sprayed to the inside of a napkin cup main body 10, the urinary organ and excretory substances are washed in the napkin cup main body, sewage is vacuumed up by work wind of a suction motor 31 closed and isolated inside said suction motor unit 24, sewage is divided into excretory substances and rinse solution and housed them separately in said sewage water tank unit 22, and only said work wind is cleaned up in the cleanup processing unit 23 and returned to said napkin cup main body 10 through the suction motor 31 and return box unit 27 by suction circulation tube 50; wherein said suction circulation tube 50 is led to a cooling unit 55 mounted outside said device house box 12 from the discharge side of said suction motor 31, is cooled down by heat exchange with outer air inside the cooling unit 55, and then returned to said return box unit 27; said cleanup processing unit 23, the suction motor unit 24, the water supply unit 25, and the return box unit 27 are made independent units and housed inside the device house box 12 and also connected in order in a detachable manner; said sewage water tank unit 22 is separated from said device house box 12, made a unit, and connected to said cleanup processing unit 23 in a detachable manner.

[Claim 2]

The processing equipment of excretory substances according to Claim 1, equipping the cooling unit 55 comprising a box-like cooling box 61 like a metal box with a good heat conduction in which the suction circulation tube 50 curved is arranged.

[Claim 3] (Amendment)

The processing equipment of excretory substances according to Claims 1 and 2, in which a slight wind circulation tube 51 is mounted along the suction circulation tube 50 circulating from the napkin cup main body 10 to the napkin cup main body 10 through the sewage water tank unit 22, cleanup processing unit 23, cooling unit 55, and return box unit 27; and a slight wind motor 48 by which slight wind for drying circulates when the suction motor 31 doesn't operate is mounted at the slight wind circulation tube 51 inside said return box unit 27.

[Claim 4]

The processing equipment of excretory substances according to Claim 3, having multiple fins conducting heat exchange with outer air for the suction circulation tube 50 and slight wind circulation tube 51 inside the cooling box 61.

[Claim5]

The processing equipment of excretory substances according to Claims 1, 2, 3, and 4, in which a partial discharge hose 19 is connected to the suction circulation tube 50 to discharge a part of work wind circulating and the same volume of air as discharged air is vacuumed up from outside at the napkin cup main body 10.

[Claim 6] (Amendment)

The processing equipment of excretory substances according Claims 2, 3, 4, and 5, having a flat box-like cooling box 61 doubled with a seat on which the device house box 12 and the sewage water tank unit 22 are placed and of which the caster 70 is mounted at the bottom face.

[Claim 7] (Amendment)

The processing equipment of excretory substances according to Claim 3, having the bimetal 57 equipped inside the return box unit 27, by which when air circulating by the slight wind motor 48 exceeds an appropriate temperature to human body set in advance, the slight wind motor 48 rotates inversely to vacuum up the air heated in the napkin cup main body 10 from the slight wind hose 17 and then discharge outside at the slight wind discharge hose 21.

[Claim 8] (Amendment)

The processing equipment of excretory substances according to Claim 1, having a negative pressure sensor 52 equipped in the cleanup processing unit 23 to detect if airtightness of the hoses connected to the napkin cup main body 10 is maintained.

[Claim 9] (Amendment)

The processing equipment of excretory substances according to Claim 1, having the water supply unit 25 comprising a rinse solution tank 36, a supplementary tank 37, a water supply pump 39, a hot water tank 38, a valve 46, and a safety tank 40; in which a water level sensor 41 is installed at said supplementary tank 37, a water level sensor 41, a temperature sensor 43, and a heater to produce hot water 44 are installed at said hot water tank 38, and a temperature sensor 45 is installed at said safety tank 40.

[Claim 10] (Amendment)

The processing equipment of excretory substances, in which the device

house box equips the sewage water tank unit, cleanup processing unit, suction motor unit, water supply unit, return box unit; the napkin cup main body and device house box are connected by the hose unit; rinse solution sent from the water supply pump in said water supply unit is sprayed to the inside of the napkin cup main body; the urinary organ and excretory substances are washed in the napkin cup main body; the sewage is vacuumed up by work wind of the suction motor in said suction motor unit and is divided into excretory substances and rinse solution which are then housed separately; and only said work wind is cleaned up in the cleanup processing unit and returned to the napkin cup main body through the suction motor and return box unit by the suction circulation tube; moreover a concave part receiving excretory substances is mounted in the napkin cup main body, a defecation sensor and an urination sensor are equipped at the concave part, said defecation sensor is mounted at a site of stool's falling, comprising a sensor to detect stool's hardness in order to control the suction of excretory substances at a setting of suction power with a higher suction power for higher signals of stool's hardness by the control panel unit, said urination sensor comprising a sensor evaluates for presence or absence of urine and has two contact points to control at the control panel unit in order to calculate a necessary suction power for vacuuming up excretory substances according to the degree of the signals and measures the resistance between the two points.

[Claim 11] (Amendment)

The processing equipment of excretory substances according to Claim 10, having the napkin cup main body made from resin, in which at least the surface of the concave part receiving excretory substances is protected by a coating material being unlikely to become tainted by sewage.

[Claim 12] (Amendment)

The processing equipment of excretory substances according to Claim 10, in which the water level sensor for notifying the full condition of excretory substance is installed inside the sewage water tank unit.

[Claim 13] (Amendment)

The processing equipment of excretory substances according to Claim 10, in which a unit to collect biological information of the person receiving care and transmit them is combined near the napkin cup main body.

[Claim 14] (Amendment)

The processing equipment of excretory substances, in which the device house box equips the sewage water tank unit, cleanup processing unit, suction motor unit, water supply unit, and return box unit, the napkin cup main body and device house box are connected by the hose unit, rinse

solution sent from the water supply pump in said water supply unit is sprayed to the inside of the napkin cup main body when the urination sensor / defecation sensor inside said napkin cup main body detects to wash the urinary organ and excretory substances inside the cup main body, the sewage is vacuumed up by work wind of the suction motor in said suction motor unit and divided into secretory substances and cleaning water which are housed separately, only said work wind is cleaned up in the cleanup processing unit and returned to said napkin cup main body through the suction motor and return box unit by the suction circulation tube; and moreover, the processing operation can be conducted by any of the modes including a frequent urination mode that the suction motor drives when the sensed signals are shorter than a set time of said urination sensor without sensed signals of said defection sensor, minor mode that the suction motor drives when sensed signals are higher than a set time of said urination sensor, and major mode that the suction motor drives when sensed signals of said defection sensor is present.

[Claim 15] (Amendment)

The processing equipment of excretory substances according to Claim 14, in which in the frequent urination mode, the suction motor drives when sensed short signals at each set time of the urination sensor are less than set number of times.

[Claim 16] (Amendment)

The processing equipment of excretory substances according to Claim 14,in which in the minor mode, when sensed short signals at each set time of urination sensor are higher than set number of times, the suction motor drives intermittently to clean multiple times.

[Claim 17] (Amendment)

The processing equipment of excretory substances according to Claim 14, in which in the major mode, when sensed signals of the defecation sensor are present and the suction motor drives intermittently to clean multiple time, if the rinse solution is insufficient, set number of times is reduced to clean.

[Claim 18] (Amendment)

The processing equipment of excretory substances according to Claim 14, in which the suction motor operates intermittently with a unit of several minutes each for driving and stop.

[Claim 19] (Amendment)

The processing equipment of excretory substances , in which the device house box 12 equips the sewage water tank unit 22, cleanup processing unit 23, suction motor unit 24, water supply unit 25, and return box unit 27, the

napkin cup main body 10 and device house box 12 are connected by the hose unit 11, rinse solution sent from the water supply pump 39 in said water supply unit 25 is sprayed to the inside of the napkin cup main body 10 to wash the urinary organ and excretory substances in the napkin cup main body 10, the sewage is vacuumed up by work wind of the suction motor 31 closed and isolated inside said suction motor unit 24 and is divided into excretory substances and cleaning water in said sewage water tank unit 22 which are then housed separately, only said work wind is cleaned up in the cleanup processing unit 23 and returned to said napkin cup main body 10 through the suction motor 31 and return box unit 27 by the suction circulation tube 50 for circulation; and moreover, the suction motor 31, a cooling fan 32, and a filter 33 inside the suction motor unit 24 are covered by highly hard vibration-suppression material, placed on a vibration-preventive board processed by vibration preventive material, and held with suspension by a vibration preventive spring 79.

[Claim 20] (Amendment)

The processing equipment of excretory substances according to Claim 19, in which the suction circulation tube 50 is led to the cooling unit 55 mounted outside the device house box 12 from the discharge side of the suction motor 31, cooled down by heat exchange with outer air inside the cooling unit 55, and returned to the return box unit 27.

Brief Statement under Article 19(1)

We received the International Search Report.

Cited documents were JP 2007-312920 A, JP 2002-113030 A, JP 2003-153931 A and JP 3144371 U. Special categories of all cited documents were all A.

Claim No.1-20 do not abvious to a person skilled in the art.

In amended claims, independed claims are follows.

The independed claim 1 is based on the claims 1 and 6.

The independed claim 10 is based on the claims 1 and 8.

The independed claim 14 is based on the claims 16.

The independed claim 19 is based on the claims 1 and a part of 15.

Therefore, Claim No.1-20 do not abvious to a person skilled in the art.

CLAIMS

1. A processing equipment of excretory substances, comprising a sewage water tank unit 22, a cleanup processing unit 23, a suction motor unit 24, a water supply unit 25, and a return box unit 27 in a device house box 12 connected to a napkin cup main body 10 by a hose unit 11; in which rinse solution sent from a water supply pump 39 in said water supply unit 25 is sprayed to the inside of a napkin cup main body 10, the urinary organ and excretory substances are washed in the napkin cup main body, sewage is vacuumed up by work wind of a suction motor 31 closed and isolated inside said suction motor unit 24, sewage is divided into excretory substances and rinse solution and housed them separately in said sewage water tank unit 22, and only said work wind is cleaned up in the cleanup processing unit 23 and returned to said napkin cup main body 10 through the suction motor 31 and return box unit 27 by suction circulation tube 50; wherein said suction circulation tube 50 is led to a cooling unit 55 mounted outside said device house box 12 from the discharge side of said suction motor 31, is cooled down by heat exchange with outer air inside the cooling unit 55, and then returned to said return box unit 27; said cleanup processing unit 23, the suction motor unit 24, the water supply unit 25, and the return box unit 27 are made independent units and housed inside the device house box 12 and also connected in order in a detachable manner; said sewage water tank unit 22 is separated from said device house box 12, made a unit, and connected to said cleanup processing unit 23 in a detachable manner.

2. The processing equipment of excretory substances according to Claim 1, equipping the cooling unit 55 comprising a box-like cooling box 61 like a metal box with a good heat conduction in which the suction circulation tube 50 curved is arranged.

3. The processing equipment of excretory substances according to Claims 1 or 2, in which a slight wind circulation tube 51 is mounted along the suction circulation tube 50 circulating from the napkin cup main body 10 to the napkin cup main body 10 through the sewage water tank unit 22, cleanup processing unit 23, cooling unit 55, and return box unit 27; and a slight wind motor 48 by which slight wind for drying circulates when the suction motor 31 doesn't operate is mounted at the slight wind circulation tube 51 inside said return box unit 27.

4. The processing equipment of excretory substances according to Claim 3, having multiple fins conducting heat exchange with outer air for the suction circulation tube 50 and slight wind circulation tube 51 inside the cooling box 61.

5. The processing equipment of excretory substances according to Claims 1, 2, 3 or 4, in which a partial discharge hose 19 is connected to the suction circulation tube 50 to discharge a part of work wind circulating and the same volume of air as discharged air is vacuumed up from outside at the napkin cup main body 10.

6. The processing equipment of excretory substances according Claims 2, 3, 4 or 5, having a flat box-like cooling box 61 doubled with a seat on which the device house box 12 and the sewage water tank unit 22 are placed and of which the caster 70 is mounted at the bottom face.

7. The processing equipment of excretory substances according to Claim 3, having the bimetal 57 equipped inside the return box unit 27, by which when air circulating by the slight wind motor 48 exceeds an appropriate temperature to human body set in advance, the slight wind motor 48 rotates inversely to vacuum up the air heated in the napkin cup main body 10 from the slight wind hose 17 and then discharge outside at

the slight wind discharge hose 21.

8. The processing equipment of excretory substances according to Claim 1, having a negative pressure sensor 52 equipped in the cleanup processing unit 23 to detect if airtightness of the hoses connected to the napkin cup main body 10 is maintained.

9. The processing equipment of excretory substances according to Claim 1, having the water supply unit 25 comprising a rinse solution tank 36, a supplementary tank 37, a water supply pump 39, a hot water tank 38, a valve 46, and a safety tank 40; in which a water level sensor 41 is installed at said supplementary tank 37, a water level sensor 41, a temperature sensor 43, and a heater to produce hot water 44 are installed at said hot water tank 38, and a temperature sensor 45 is installed at said safety tank 40.

10. A processing equipment of excretory substances, comprising a device house box 12 equipping a sewage water tank unit 22, a cleanup processing unit 23, a suction motor unit 24, a water supply unit 25, and a return box unit 27; a napkin cup main body 10 and a device house box 12 connected through a hose unit 11; spraying rinse solution sent from a water supply pump 39 of said water supply unit 25 to the inside of the napkin cup main body 10 to rinse the urinary organ and excretory substances inside the napkin cup main body 10; vacuuming in waste materials by work wind of a suction motor 31 of said suction motor unit 24; separating and putting in excretory substances and rinse solution from the waste materials in said sewage water tank unit 22 and decontaminating only said work wind at the cleanup processing unit 23 and making the work wind return to said napkin cup main body 10 through the suction motor 31 and the return body unit 27 by means of a suction circulation tube 50; wherein said napkin cup main body 10 equips a bottom plate part 71 having a concave portion 77 for placing the gluteal part on and receiving excretory substances 77 and a

front plate part 72 having a discharge hole 74 connected to the concave portion 77, with said concave portion 77 equipping a defecation sensor 13 and a urination sensor 14, with an anus-rinse solution discharge hole 76b and a cup rinse solution discharge hole 76c at the opposite side to said sewage discharge hole 74, said front plate part 72 equipping a pubic rinse-solution discharge hole 76a, said defecation sensor 13 being placed at a stool's falling portion which outputs a voltage and detection wave shapes of the time axis at the time of stool's detection and also outputs signals indicating whether or not the voltage is higher than the set value and whether or not the detection time is short to evaluate the stool's hardness, said urination sensor 14 having a configuration of a pair of two pieces which outputs signals to evaluate for presence or absence of urination by voltage wave shapes accompanying change of resistance level between the pair of sensors, and a suction power necessary for vacuuming in excretory substances is calculated according to the degree of the hardness of said stool and presence or absence of urination for a control panel unit 56 to control.

11. The processing equipment of excretory substances according to Claim 10, having the napkin cup main body made from resin, in which at least the surface of the concave part receiving excretory substances is protected by a coating material being unlikely to become tainted by sewage.

12. The processing equipment of excretory substances according to Claim 10, in which the water level sensor for notifying the full condition of excretory substance is installed inside the sewage water tank unit.

13. The processing equipment of excretory substances, comprising the device house box 12 equipping the sewage tank unit 22, the cleanup processing unit 23, the suction motor unit 24, the water supply unit 25, and the return box unit 27; the napkin cup main

body 10 and the device hour box 12 connected through the hose unit 11, spraying the rinse solution sent from the water supply pump 39 of said water supply unit 25 into the inside of the napkin cup main body 10 when the urination sensor 14 and / or the defecation sensor 13 inside said napkin cup main body detects to cleanse the urinary organ and excretory substances in the napkin cup main body 10, vacuuming in the waste materials by work wind of the suction motor 31 of said suction motor unit 24, separating and housing in the excretory substances and rinse solution from the waste materials at said sewage tank unit 22 and cleaning up only the work wind at the cleanup unit 23 and making the wind return to said napkin cup main body 10 through the suction motor 31 and the return box unit 27 by means of the suction circulation tube 50; wherein said napkin cup main body 10 equips the bottom plate part 71 having the concave portion 77 for placing the gluteal part on and receiving excretory substances and the waste-material discharge hole 74 connected to the concave portion 77 for receiving excretory substances, with said concave portion 77 equipping the defecation sensor 13 and the urination sensor 14 and with the anus rinse-solution discharge hole 76b and the cup rinse-solution discharge hole 76c at the opposite side to said sewage discharge hole 74, said front plate part 72 equips the pubic rinse-solution discharge hole 76a, said defecation sensor 13 is equipped at a stool's falling position and outputs a voltage and detection wave shapes of the time axis at the time of stool's detection and also outputs signals to indicate for whether or not the voltage is higher than the set value and whether or not the detection time is short to evaluate for the hardness of the stool, said urination sensor 14 has the configuration of one pair of two pieces and outputs signals to evaluate for presence or absence of urination by voltage wave shapes accompanying change in the resistance level between those two sensors, and the processing operation is made by any of following selections, the frequent urination mode driving the suction motor 31 when the detection signal is shorter than the set time of said urination sensor 14 without the detection signal of said defecation sensor

13, the minor mode driving the suction motor 31 when the detection signal is higher than the set time of said urination sensor 14 without the detection signal of said defecation sensor 13, and the major mode driving the suction motor 31 when the detection signal of said defecation sensor 13 is present.

14. The processing equipment of excretory method according to Claim 13, in which in the frequent urination mode, the suction motor drives when sensed short signals at each set time of the urination sensor are less than set number of times.

15. The processing equipment of excretory method according to Claim 13, in which in the minor mode, when sensed short signals at each set time of urination sensor are higher than set number of times, the suction motor drives intermittently to clean multiple times.

16. The processing equipment of excretory method according to Claim 13, in which in the major mode, when sensed signals of the defecation sensor are present and the suction motor drives intermittently to clean multiple time, if the rinse solution is insufficient, set number of times is reduced to clean.

17. The processing equipment of excretory substances according to Claim 13, having the suction motor 31 which can conduct the intermittent operation with five-minute drive and one-minute stoppage.

18. A processing equipment of excretory substances, comprising a device house box 12 equipping a sewage tank unit 22, a cleanup unit 23, a suction motor unit 24, a water supply unit 25, and a return box unit 27, a napkin cup main unit 10 and the device house box 12 connected through a hose unit 11; spraying rinse solution sent from a

water supply pump 39 of said water supply unit 25 into the inside of the napkin cup main body 10; cleaning up the urinary organ and excretory substances in the napkin cup main body 10, vacuuming in waste materials by work wind of a suction motor 31 isolated inside said suction motor unit 24, separating and housing in excretory substances and rinse solution at said sewage tank unit 22, cleaning up only said work wind at the cleanup unit 23 and making the wind return to said napkin cup main body 10 through the suction motor 31 and the return box unit 27 by means of a suction circulation tube 50; wherein said suction motor 31 equips a cooling fan 32 taking in air to cool down the suction motor 31 from a cool-air intake hole 34 through a filter 33 and discharging from a cool-wind discharge hole 35, said suction motor 31 is closed and isolated inside said suction motor unit 24; these suction motor 31, cooling fan 32 and filter 33 are covered by highly dumping rigid materials, are placed on a vibration control table processed by anti-vibration materials, are kept with hanging by anti-vibration spring 79; a suction circulation tube 50 connected to the discharge side of said suction motor 31 is led out to a cooling box 61 of a cooling unit 55 mounted outside said device house box 12, is divided off by a dividing-off plate 62 to cool down by heat-exchange with outer air inside the cooling box 61 and is housed in with a bending condition, and said suction circulation tube 50 led out from a discharge hole 60 is connected to said return box unit 27.

19. The processing equipment of excretory substances according to Claim 18, having the cooling box 61 being placed at the bottom portion of the main body of the device house box 12 and being formed like a flat box; wherein the box body and the inner dividing-off plate 62 are comprised by metal plates with good heat conductivity and the suction circulation tube 50 led to the inside of the cooling box 61 being divided off by the dividing off plate 62 is bent, is led out to outside from the discharge hole 60, and is connected to the return box unit 27.