

AIR CONDITIONING DEVICE UTILIZING TEMPERATURE DIFFERENTIATION OF EXHAUSTED GAS TO EVEN TEMPERATURE OF EXTERNAL HEAT EXCHANGER

5

BACKGROUND OF THE INVENTION

(a) Field of the Invention

This invention relates to a cooling/heating air conditioning device for regulating temperature, which pumps an airflow exhausted from a space
10 in an air conditioning object such as inside of a room or vehicle to the external through the external heat exchanger disposed at the external of the air conditioning object such as outside of the room or vehicle so as to equalize the temperature of the fluid flowing through the internal of the external heat exchanger by means of the temperature difference between
15 the internal and external of the air conditioning object for achieving an energy saving effect.

(b) Description of the Prior Art

Conventionally, during the use of a cooling/heating air conditioning
20 device, due to the need for external ventilation, vent holes are typically disposed in a window type air conditioning device to perform the external ventilation, alternatively, a window type main unit is cooperated with a ventilating device such as a ventilator or total heat exchanging ventilating device to perform the external ventilation. However, the pity is that,
25 heretofore, when the aforementioned window type air conditioning device or split type air conditioning device is operated as a cooler, the airflow of a relatively lower temperature exhausted from the space of an air conditioning object such as inside of a room has not been used to facilitate the decreasing of the temperature of an external heat exchanger which is
30 disposed outdoors as a condenser, and when the air conditioning device is

operated as a heater, the exhausted airflow of a relatively higher temperature has not been used to facilitate the increasing of the temperature of the external heat exchanger which is disposed outdoors as an evaporator.

5

SUMMARY OF THE INVENTION

This invention relates to a cooling/heating air conditioning device for regulating temperature, which pumps an airflow exhausted from a space
10 in an air conditioning object such as inside of a room or vehicle to the external through the external heat exchanger disposed at the external of the air conditioning object such as outside of the room or vehicle so as to equalize the temperature of the fluid flowing through the internal of the external heat exchanger device by means of the temperature
15 differentiation between the two fluids. When the air conditioning device is operated as a cooler, the airflow of a relatively lower temperature exhausted from the space of the air conditioning object such as the inside of the room can be used to facilitate the decreasing of the temperature of the external heat exchanger which is disposed outdoors as a condenser,
20 and when the air conditioning device is operated as a heater, the exhausted airflow of a relatively higher temperature can be used to facilitate the increasing of the temperature of the external heat exchanger which is disposed outdoors as an evaporator; the characteristic of energy saving of the present invention is applicable in the internal or external space of a
25 gas-state cooling/warming air conditioning device or liquid-state temperature regulating device installed in a fixed member such as the internal of an architecture, factory, public building or camp; or applicable in the internal or external space of a gas-state cooling/warming air conditioning device or liquid-state temperature regulating device installed
30 in a moveable member such as a road vehicle, rail vehicle or aircraft; or

applicable in the internal or external space of a gas-state cooling/warming air conditioning device or liquid-state temperature regulating device installed in an equipment device.

5

BRIEF DESCRIPTION OF THE DRAWINGS

Fig. 1 is a diagram of the operating principles of this invention illustrated by the integral air conditioning device.

Fig. 2 is a structural schematic view of an embodiment of present invention having an integral air conditioning device with an external heat
10 exchanger airflow exhausting fan unit (104) and a fluid exhausting path (106) so as to pump an air conditioning object space exhausted fluid (105) and an external airflow (1051) to flow together through an external heat exchanger (1021).

Fig. 3 is a structural schematic view of an embodiment of present
15 invention having an integral air conditioning device without a heat exchanger airflow exhausting fan unit (104) and a ventilating device (1041) commonly constructed with a fluid exhausting path (106) so as to pump an air conditioning object space exhausted fluid (105) to flow through an external heat exchanger (1021).

Fig. 4 is a structural schematic view of an embodiment of present
20 invention having a fluid exhausting path (1060) and an external heat exchanger airflow exhausting fan unit (104) so as to pump an air conditioning object space exhausted fluid (105) and an external airflow (1051) to flow together through an external heat exchanger (1021) in the
25 air conditioning device assembly (1000).

Fig. 5 is a structural schematic view of an embodiment of present invention having a separately mounted blowing pump (1041) and an exhaust amount regulating device (1061) and having an air conditioning device assembly (1000) without the external heat exchanger airflow
30 exhausting fan unit (104).

Fig. 6 is a structural schematic view of an embodiment of present invention having an integral air conditioning device assembly (1000) mounted with an external heat exchanger airflow exhausting fan unit (104) and the fluid exhausting path (1060) and the blowing pump (1041).

5 Fig. 7 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) with an external heat exchanger airflow exhausting fan unit (104) and a split type air conditioning device main unit (2001) mounted with the fluid exhausting path (1060).

10 Fig. 8 is a structural schematic view of an embodiment of present invention having the split type air conditioning device main unit (2001) commonly constructed with the blowing pump (1041) and having a split type air conditioning device outdoor unit (2002) without the external heat exchanger airflow exhausting fan unit (104).

15 Fig. 9 is a structural schematic view of an embodiment of present invention having the separately mounted fluid exhausting path (1060), the split type air conditioning device main unit (2001) and the split type air conditioning device outdoor unit (2002) with the external heat exchanger airflow exhausting fan unit (104).

20 Fig. 10 is a structural schematic view of an embodiment of present invention having the separately mounted blowing pump (1041), the split type air conditioning device main unit (2001) and the split type air conditioning device outdoor unit (2002) without the external heat exchanger airflow exhausting fan unit (104).

25 Fig. 11 is a structural schematic view of an embodiment of present invention having the split type air conditioning device main unit (2001), the split type air conditioning device outdoor unit (2002) with the external heat exchanger airflow exhausting fan unit (104) and the separately mounted blowing pump (1041).

30 Fig. 12 is a structural schematic view of an embodiment of present

invention having a water-cooled air conditioning device main unit (2005), a powered fan provided cooling tower (2003) and the separately mounted blowing pump (1041).

Fig. 13 is a structural schematic view of an embodiment of present invention having a water-cooled air conditioning device main unit (2005) and a powered fan provided cooling tower (2003).

Fig. 14 is a structural schematic view of an embodiment of present invention having a water-cooled air conditioning device main unit (2005), a natural draft cooling tower (2003) and the separately mounted blowing pump (1041).

Fig. 15 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204) and an exhaust amount regulating device (1061), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021).

Fig. 16 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204), a blowing pump (1041) and an

exhaust amount regulating device (1061), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount
5 regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

Fig. 17 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting
10 fan unit (104) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a
15 coolant fluid pipeline (103) installed between the above two, and separately mounting a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061)
20 and the external heat exchanger (1021).

Fig. 18 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and a split type air conditioning device outdoor main station (2007), having a split type air
25 conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a blowing
30 pump (1041) and a exhaust amount regulating device (1061) in the

thermal insulation device (110), and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

5 Fig. 19 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006)
10 composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a blowing pump (1041) and a exhaust amount
15 regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

20 Fig. 20 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air
25 conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204) and an exhaust amount regulating device (1061), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above
30 three, and installing a fluid exhausting path (1060) and introducing

external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021).

Fig. 21 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204), a blowing pump (1041) and an exhaust amount regulating device (1061), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

Fig. 22 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat

exchanger (1021).

Fig. 23 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

Fig. 24 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110) and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061),

the blowing pump (1041) and the external heat exchanger (1021).

DESCRIPTION OF MAIN COMPONENT SYMBOLS

	101 : air conditioning device main unit
5	103 : coolant fluid pipeline
	104 : external heat exchanger airflow exhausting fan unit
	105 : air conditioning object space exhausted fluid
	106 : fluid exhausting path
	107 : water pipe
10	108 : cooling tower fan unit
	109 : water in and out pipe
	110 : thermal insulation device
	111 : water pump
	120 : air conditioning object space
15	130 : external temperature differentiation space
	201 : control device
	202 : airflow regulating device
	203 : internal heat exchanger
	204 : conditioned airflow blowing fan
20	1000 : air conditioning device assembly
	1021 : external heat exchanger
	1041 : blowing pump
	1051 : external airflow
	1060 : fluid exhausting path
25	1061 : exhaust amount regulating device
	1070 : external airflow intake pipe
	2001 : split type air conditioning device main unit
	2002 : split type air conditioning device outdoor unit
	2003 : powered fan provided cooling tower
30	2004 : natural draft cooling tower

2005 : water-cooled air conditioning device main unit

2006 : split type air conditioning device indoor unit

2007 : split type air conditioning device outdoor main station

5 DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Conventionally, during the use of a cooling/heating air conditioning device, due to the need for external ventilation, vent holes are typically disposed in a window type air conditioning device to perform the external ventilation, alternatively, a window type main unit is cooperated with a ventilating device such as a ventilator or total heat exchanging ventilating device to perform the external ventilation. However, the pity is that, heretofore, when the aforementioned window type air conditioning device or split type air conditioning device is operated as a cooler, the airflow of a relatively lower temperature exhausted from the space of an air conditioning object such as inside of a room has not been used to facilitate the decreasing of the temperature of an external heat exchanger which is disposed outdoors as a condenser, and when the air conditioning device is operated as a heater, the exhausted airflow of a relatively higher temperature has not been used to facilitate the increasing of the temperature of the external heat exchanger which is disposed outdoors as an evaporator.

This invention relates to a cooling/heating air conditioning device for regulating temperature, which pumps the air conditioning object space exhausted fluid (105) in an air conditioning object such as the indoor or the internal of a vehicle, and/or pumps the external airflow (1051) through the external heat exchanger (1021) disposed at the external of the air conditioning object such as the outdoor or the outside of a vehicle, so as to perform heat exchange with the coolant fluid pipeline (103) passing through the internal of the external heat exchanger device by means of the temperature differentiation between the two fluids. When the air

conditioning device is operated as a cooler, the airflow of a relatively lower temperature exhausted from the space of the air conditioning object such as the inside of the room can be used to facilitate the decreasing of the temperature of the external heat exchanger which is disposed outdoors as a condenser, and when the air conditioning device is operated as a heat pump to supply hot air, the exhausted airflow of a relatively higher temperature can be used to facilitate the increasing of the temperature of the external heat exchanger which is disposed outdoors as an evaporator; the characteristic of energy saving of the present invention is applicable in the internal or external space of a gas-state cooling/warming air conditioning device or liquid-state temperature regulating device installed in a fixed member such as the internal of an architecture, factory, public building or camp; or applicable in the internal or external space of a gas-state cooling/warming air conditioning device or liquid-state temperature regulating device installed in a moveable member such as a road vehicle, rail vehicle or aircraft; or applicable in the internal or external space of a gas-state cooling/warming air conditioning device or liquid-state temperature regulating device installed in an equipment device.

Fig. 1 is a diagram of the operating principles of this invention illustrated by the integral air conditioning device.

As illustrated in Fig. 1, the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having exhaust amount regulating device (1061) and a fluid exhausting path (1060) for the air conditioning object space exhausted fluid (105) to flow

through, and further to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat
5 exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

a blowing pump (1041) or an external heat exchanger airflow exhausting fan unit (104) is installed at one or more than one of the three
10 locations including the fluid exhausting path (1060) or the inlet side or the outlet side of the external heat exchanger (1021), so as to pump the air conditioning object space exhausted fluid (105) to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

15 said external heat exchanger airflow exhausting fan unit (104) and said blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the
20 exhaust amount regulating device (1061) and the fluid exhausting path (1060), or for simultaneously pumping the air conditioning object space exhausted fluid (105) and the external airflow (1051), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021), enabling two airflows to exhaust to the external
25 temperature differentiation space (130) through the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

30 the exhaust amount regulating device (1061), formed by a fluid gate,

a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105);

This operating principles thereof are as follows:

--When operated as the function to supply cold air to the air conditioning object space (120), if the temperature of an external temperature differentiation space (130) where the external heat exchanger (1021) is located is higher, and the external airflow (1051) is pumped only by the external heat exchanger airflow exhausting fan unit (104), it is difficult to release heat from the coolant in the coolant fluid pipe (103) disposed in the external heat exchanger (1021), thereby by utilizing both or one of the external heat exchanger airflow exhausting fan unit (104) and/or the exhaust amount regulating device (1061) to pump the air conditioning object space exhausted fluid (105) at a relatively lower temperature in an indoor air conditioning object space (120), or simultaneously pump the air conditioning object space exhausted fluid (105) and the external airflow (1051) flowing through the external heat exchanger (1021), the effect of lowering the temperature of the external heat exchanger (1021) is enhanced, and thereby facilitating the enhancing of the cooling air conditioning efficiency;

--on the contrary, when operated as an heat pump function to supply hot air to the air conditioning object space (120), by pumping the air conditioning object space exhausted fluid (105) having relatively higher temperature to the external heat exchanger (1021) through the external heat exchanger (1021), the effect of raising the temperature of the external heat exchanger (1021) is enhanced, and thereby facilitating to enhance the heating air conditioning efficiency;

The air conditioning device utilizing temperature differentiation of

exhausted gas to even temperature of external heat exchanger of the present invention includes to pump the airflow passing through the external of the external heat exchanger (1021) by means of the external heat exchanger airflow exhausting fan unit (104), and /or the blowing
5 pump (1041);

According to the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, with a thermal insulation device (110) constructed in the object location, the air conditioning object space (120) and the external
10 temperature differentiation space (130) can be insulated, the thermal insulation structure (110) includes the wall of a building, the housing of a carrier or the enclosure of a mechanism made of a heat insulation material or a material having even better heat insulation properties;

According to the air conditioning device utilizing temperature
15 differentiation of exhausted gas to even temperature of external heat exchanger, the mentioned air conditioning object space (120) is often defined as the internal of a building or the internal of a vehicle or the internal of a boat or the internal of an aircraft or the internal of an equipment device, which allows the air conditioning device to perform
20 temperature-raising regulation or temperature-lowering regulation; the mentioned air conditioning object space exhausted fluid (105) is defined as the airflow exhausted from the internal of the air conditioning object space (120) and flowing through the external heat exchanger (1021);

According to the air conditioning device utilizing temperature
25 differentiation of exhausted gas to even temperature of external heat exchanger, the mentioned external temperature differentiation space (130) is defined as the external space insulated from the air conditioning object space (120) through the thermal insulation device (110);

According to the air conditioning device utilizing temperature
30 differentiation of exhausted gas to even temperature of external heat

exchanger, the mentioned external airflow (1051) is defined as the airflow surrounding the external temperature differentiation space (130);

In the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the temperature of the air conditioning object space exhausted fluid (105) includes higher than that of an heat exchanger to the external disposed externally of an temperature regulator;

In the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the temperature of the air conditioning object space exhausted fluid (105) includes lower than that of an heat exchanger to the external disposed externally of an temperature regulator;

In the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the exhausted air conditioning object space exhausted fluid (105) includes to heat exchange with the coolant fluid pipeline (103) disposed in the external heat exchanger (1021) in the external space or a surface of the external heat exchanger (1021);

The air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger of the present invention is formed by applying the aforementioned operating principles to various types of air conditioning devices including integral air conditioning devices, or split type air conditioning devices, or using the cooling tower to replace the cooling tower type air conditioning device of the external heat exchanger (1021).

Several embodiments of the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchangers of the present invention are described as follows:

Fig. 2 is a structural schematic view of an embodiment of present invention having an integral air conditioning device with an external heat

exchanger airflow exhausting fan unit (104) and a fluid exhausting path (106) so as to pump an air conditioning object space exhausted fluid (105) and an external airflow (1051) to flow together through an external heat exchanger (1021).

5 As illustrated in Fig. 2, the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021)
10 mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having an exhaust amount regulating device (1061), and a fluid exhausting path (106) formed by a housing for allowing air conditioning object space exhausted fluid (105) to flow to the external heat exchanger (1021);

15 the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

20 the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

an external heat exchanger airflow exhausting fan unit (104), comprising an air blowing or exhausting fan unit or an air pump driven by
25 an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid
30 exhausting path (106), enabling two airflows to exhaust to the external

temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (106), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105);

whereby an integral air conditioning device assembly (1000) is formed by the abovementioned structures.

Fig. 3 is a structural schematic view of an embodiment of present invention having an integral air conditioning device without a heat exchanger airflow exhausting fan unit (104) and a ventilating device (1041) commonly constructed with a fluid exhausting path (106) so as to pump an air conditioning object space exhausted fluid (105) to flow through an external heat exchanger (1021).

As illustrated in Fig. 3, the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (106) formed by a housing, and having an exhaust amount regulating device (1061) and the blowing pump (1041);

the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the air conditioning object space exhausted fluid (105) through the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device

for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

5 a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

10 the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (106), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid
15 (105);

whereby an integral air conditioning device assembly (1000) is formed by the abovementioned structures.

Fig. 4 is a structural schematic view of an embodiment of present invention having a fluid exhausting path (1060) and an external heat
20 exchanger airflow exhausting fan unit (104) so as to pump an air conditioning object space exhausted fluid (105) and an external airflow (1051) to flow together through an external heat exchanger (1021) in the air conditioning device assembly (1000).

As illustrated in Fig. 4, the main configurations are as follows:

25 an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a
30 circulating path by means of a coolant fluid pipeline (103); and having a

fluid exhausting path (1060) and an exhaust amount regulating device (1061);

the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

an external heat exchanger airflow exhausting fan unit (104), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

whereby an air conditioning device assembly (1000) is formed by the abovementioned structures;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

Fig. 5 is a structural schematic view of an embodiment of present invention having a separately mounted blowing pump (1041) and an

exhaust amount regulating device (1061) and having an air conditioning device assembly (1000) without the external heat exchanger airflow exhausting fan unit (104).

As illustrated in Fig. 5, the main configurations are as follows:

5 an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a
10 circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060), an exhaust amount regulating device (1061), a blowing pump (1041);

the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat
15 exchange with the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

20 whereby an air conditioning device assembly (1000) is formed by the abovementioned structures;

a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature
25 differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of
30

the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

5 Fig. 6 is a structural schematic view of an embodiment of present invention having an air conditioning device assembly (1000) mounted with an external heat exchanger airflow exhausting fan unit (104) and the fluid exhausting path (1060) and the blowing pump (1041).

As illustrated in Fig. 6, the main configurations are as follows:

10 an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a
15 circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060) and a blowing pump (1041);

the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the external airflow (1051) of the external temperature
20 differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

25 an external heat exchanger airflow exhausting fan unit (104), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature
30 differentiation which is pumped from the air conditioning object space

(120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) by the blowing pump (1041), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

5 whereby an air conditioning device assembly (1000) is formed by the abovementioned structures;

 a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature
10 differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021), enabling two airflows to exhaust to the external temperature differentiation space (130) through
15 the external heat exchanger (1021);

 the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

 the fluid exhausting path (1060), which is a fluid passage structure
20 for permitting the exhaust of the air conditioning object space exhausted fluid (105).

 Fig. 7 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) with an external heat exchanger airflow exhausting fan unit (104) and a
25 split type air conditioning device main unit (2001) mounted with the fluid exhausting path (1060).

 As illustrated in Fig. 7, the main configurations are as follows:

 a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a
30 compression device, pipelines, a control device (201), an air conditioning

airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in a split type air conditioning device outdoor unit (2002) in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and
5 having a fluid exhausting path (1060) and an exhaust amount regulating device (1061);

the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for
10 allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105), and having an external heat exchanger airflow exhausting fan unit
15 (104), wherein the external heat exchanger airflow exhausting fan unit (104) comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature
20 differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), and enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device
25 for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

30 the fluid exhausting path (1060), which is a fluid passage structure

for permitting the exhaust of the air conditioning object space exhausted fluid (105).

Fig. 8 is a structural schematic view of an embodiment of present invention having the split type air conditioning device main unit (2001) commonly constructed with the blowing pump (1041) and having a split type air conditioning device outdoor unit (2002) without the external heat exchanger airflow exhausting fan unit (104).

As illustrated in Fig. 8, the main configurations are as follows:

a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in a split type air conditioning device outdoor unit (2002) in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060), an exhaust amount regulating device (1061) and a blowing pump (1041);

the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the air conditioning object space exhausted fluid (105) by means of the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space

(120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate,
5 a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

10 Fig. 9 is a structural schematic view of an embodiment of present invention having the separately mounted fluid exhausting path (1060), the split type air conditioning device main unit (2001) and the split type air conditioning device outdoor unit (2002) with the external heat exchanger airflow exhausting fan unit (104).

15 As illustrated in Fig. 9, the main configurations are as follows:

a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external
20 heat exchanger (1021) mounted in a split type air conditioning device outdoor unit (2002) in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060) and an exhaust amount regulating device (1061);

25 the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the external airflow (1051) of the
30 external temperature differentiation space (130) of the external heat

exchanger (1021) and the air conditioning object space exhausted fluid (105), and having an external heat exchanger airflow exhausting fan unit (104), wherein the external heat exchanger airflow exhausting fan unit (104) comprising an air blowing or exhausting fan unit or an air pump
5 driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path
10 (1060), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the split type air conditioning device main unit (2001) and the external heat exchanger (1021), in which a gas or liquid coolant is
15 circulated;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure
20 for permitting the exhaust of the air conditioning object space exhausted fluid (105).

Fig. 10 is a structural schematic view of an embodiment of present invention having the separately mounted blowing pump (1041), the split type air conditioning device main unit (2001) and the split type air
25 conditioning device outdoor unit (2002) without the external heat exchanger airflow exhausting fan unit (104).

As illustrated in Fig. 10, the main configurations are as follows:

a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a
30 compression device, pipelines, a control device (201), an air conditioning

airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060), an exhaust amount
5 regulating device (1061) and a blowing pump (1041);

the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device
10 main unit (2001) to heat exchange with the air conditioning object space exhausted fluid (105) by means of the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling split type air conditioning device main unit (2001) and the external heat exchanger (1021), in which a gas or liquid coolant is
15 circulated;

a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space
20 (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of
25 the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105);

Fig. 11 is a structural schematic view of an embodiment of present
30 invention having the split type air conditioning device main unit (2001),

the split type air conditioning device outdoor unit (2002) with the external heat exchanger airflow exhausting fan unit (104) and the separately mounted blowing pump (1041).

As illustrated in Fig. 11, the main configurations are as follows:

5 a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation
10 space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060), the exhaust amount regulating device (1061) and the blowing pump (1041);

the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat
15 exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid
20 (105), and having an external heat exchanger airflow exhausting fan unit (104), wherein the external heat exchanger airflow exhausting fan unit (104) comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air
25 conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

30 the coolant fluid pipeline (103), which is a circulation pipeline device

for coupling the split type air conditioning device main unit (2001) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

the exhaust amount regulating device (1061), formed by a fluid gate,
5 a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

10 Fig. 12 is a structural schematic view of an embodiment of present invention having a water-cooled air conditioning device main unit (2005), a powered fan provided cooling tower (2003) and the separately mounted blowing pump (1041).

As illustrated in Fig. 12, the main configurations are as follows:

15 a water-cooled air conditioning device main unit (2005), which is an air conditioning device main unit essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower water-cooled cooling device and a housing, and a water pipe (107) of the water-cooled
20 condensing device disposed in the water-cooled air conditioning device main unit (2005) being coupled to a water in and out pipe (109) of a water inlet and water exhaust pipeline of the powered fan provided cooling tower (2003) disposed in the external temperature differentiation space (130) so as to form a path of water circulation; and having the fluid
25 exhausting path (1060), the exhaust amount regulating device (1061) and the blowing pump (1041), and by means of the blowing pump (1041) to pump the air conditioning object space exhausted fluid (105) through the fluid exhausting path (1060) and the exhaust amount regulating device (1061) to an air inlet of the powered fan provided cooling tower (2003);

30 the powered fan provided cooling tower (2003), comprising a

cooling tower equipped with the cooling tower fan unit (108), for example, a counterflow mechanical draft cooling tower, an induced counterflow mechanical draft cooling tower, a counterflow cooling tower, a crossflow mechanical draft cooling tower, or an evaporative cooling tower, and the
5 powered fan provided cooling tower (2003) having an air inlet, so that the air conditioning object space exhausted fluid (105) pumped from the air conditioning object space (120) through the blowing pump (1041) is directed through the fluid exhausting path (1060) into the air inlet of the
10 powered fan provided cooling tower (2003), and passing through the powered fan provided cooling tower (2003) so as to cool the waterflow and then is exhausted to the surrounding through the cooling tower fan unit (108), and having a water in and out pipe (109) for connecting the water pipe (107) so as to allow the cooling water to circulate between the
15 powered fan provided cooling tower (2003) and the water-cooled air conditioning device main unit (2005);

the water pipe (107), disposed between a water-cooled condensing device of the water-cooled air conditioning device main unit (2005) and the water in and out pipe (109) of the powered fan provided cooling tower (2003);

20 the cooling tower fan unit (108), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, and having one or more following operation functions, including: 1) pumping the external airflow (1051) of the external temperature differentiation space (130) to the external temperature differentiation space (130) through the
25 inside of the powered fan provided cooling tower (2003); 2) pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060) to the external temperature differentiation
30 space (130) through the powered fan provided cooling tower (2003); 3)

enabling the external airflow (1051) and the air conditioning object space exhausted fluid (105) to exhaust commonly to the external temperature differentiation space (130) through the powered fan provided cooling tower (2003);

5 a water pump (111), for pumping a cooling water between the water-cooled air conditioning device main unit (2005) and the powered fan provided cooling tower (2003) through the water pipe (107) and the water in and out pipe (109) for cooling circulation;

10 the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

 the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

15 Fig. 13 is a structural schematic view of an embodiment of present invention having a water-cooled air conditioning device main unit (2005) and a powered fan provided cooling tower (2003).

 As illustrated in Fig. 13, the main configurations are as follows:

20 a water-cooled air conditioning device main unit (2005), which is an air conditioning device main unit essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower water-cooled cooling device and a housing, and a water pipe (107) of the water-cooled condensing device disposed in the water-cooled air conditioning device
25 main unit (2005) being coupled to a water in and out pipe (109) of a water inlet and water exhaust pipeline of the powered fan provided cooling tower (2003) disposed in the external temperature differentiation space (130) so as to form a path of water circulation; and having a fluid exhausting path (1060) and an exhaust amount regulating device (1061)
30 for delivering the air conditioning object space exhausted fluid(105) to an

air inlet of the powered fan provided cooling tower (2003);

the powered fan provided cooling tower (2003), comprising a cooling tower equipped with the cooling tower fan unit (108), for example, a counterflow mechanical draft cooling tower, an induced counterflow
5 mechanical draft cooling tower, a counterflow cooling tower, a crossflow mechanical draft cooling tower, or an evaporative cooling tower, and the powered fan provided cooling tower (2003) having an air inlet, so that the air conditioning object space exhausted fluid (105) pumped from the air conditioning object space (120) is directed through the fluid exhausting
10 path (1060) into the air inlet of the powered fan provided cooling tower (2003), and is passing through the powered fan provided cooling tower (2003) so as to cool the waterflow, and then is exhausted to the surrounding through the cooling tower fan unit (108), and having a water in and out pipe (109) for connecting the water pipe (107) so as to allow
15 the cooling water to circulate between the powered fan provided cooling tower (2003) and the water-cooled air conditioning device main unit (2005);

the water pipe (107), disposed between a water-cooled condensing device of the water-cooled air conditioning device main unit (2005) and
20 the water in and out pipe (109) of the powered fan provided cooling tower (2003);

the cooling tower fan unit (108), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, and having one or more following operation functions, including: 1) pumping the
25 external airflow (1051) of the external temperature differentiation space (130) to the external temperature differentiation space (130) through the inside of the powered fan provided cooling tower (2003); 2) pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the
30 exhaust amount regulating device (1061) and the fluid exhausting path

(1060) to the external temperature differentiation space (130) through the powered fan provided cooling tower (2003); 3) enabling the external airflow (1051) and the air conditioning object space exhausted fluid (105) to exhaust commonly to the external temperature differentiation space
5 (130) through the powered fan provided cooling tower (2003);

a water pump (111), for pumping a cooling water between the water-cooled air conditioning device main unit (2005) and the powered fan provided cooling tower (2003) through the water pipe (107) and the water in and out pipe (109) for cooling circulation;

10 the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted
15 fluid (105).

Fig. 14 is a structural schematic view of an embodiment of present invention having a water-cooled air conditioning device main unit (2005), a natural draft cooling tower (2003) and the separately mounted blowing pump (1041).

20 As illustrated in Fig. 14, the main configurations are as follows:

a water-cooled air conditioning device main unit (2005), which is an air conditioning device main unit essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower water-cooled
25 cooling device and a housing, and a water pipe (107) of the water-cooled condensing device disposed in the water-cooled air conditioning device main unit (2005) being coupled to a water in and out pipe (109) of a water inlet and water exhaust pipeline of a natural draft cooling tower (2004) disposed in the external temperature differentiation space (130) so as to
30 form a path of water circulation; and having the fluid exhausting path

(1060), the exhaust amount regulating device (1061) and the blowing pump (1041), and by means of the blowing pump (1041) to pump the air conditioning object space exhausted fluid (105) to an air inlet of the natural draft cooling tower (2004) through the fluid exhausting path (1060)

5 and the exhaust amount regulating device (1061);

a natural draft cooling tower (2004), comprising a natural draft cooling tower, for example, a crossflow natural draft cooling tower, and the natural draft cooling tower (2004) having an air inlet, and having one or more following operating functions, including: 1) directing the external
10 airflow (1051) from the external temperature differentiation space (130) into the air inlet of the natural draft cooling tower (2004), and passing through the natural draft cooling tower (2004) so as to cool the waterflow, and then exhausting the same to the surrounding through the cooling tower; 2) directing the air conditioning object space exhausted fluid (105)
15 pumped from the air conditioning object space (120) by means of the blowing pump (1041) through the fluid exhausting path (1060) into the air inlet of the natural draft cooling tower (2004), and passing through the natural draft cooling tower (2004) so as to cool the waterflow, and then exhausting the same to the surrounding through the cooling tower; 3)
20 directing the air conditioning object space exhausted fluid (105) and the external airflow (1051) into the air inlet of the natural draft cooling tower (2004), and passing through the natural draft cooling tower (2004) so as to cool the waterflow, and then exhausting the same to the surrounding through the cooling tower; and having a water in and out pipe (109) for
25 coupling the water pipe (107) so as to allow the cooling water to circulate between the natural draft cooling tower (2004) and the water-cooled air conditioning device main unit (2005);

the water pipe (107), disposed between a water-cooled condensing device of the water-cooled air conditioning device main unit (2005) and
30 the water in and out pipe (109) of the natural draft cooling tower (2004);

a water pump (111), for pumping a cooling water between the water-cooled air conditioning device main unit (2005) and the powered fan provided cooling tower (2003) through the water pipe (107) and the water in and out pipe (109) for cooling circulation;

5 the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted
10 fluid (105).

The air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger is further applied to a split type air conditioning device, which mainly includes a split type air conditioning device outdoor unit (2002) therein having a
15 split type air conditioning device outdoor main station (2007) and an external heat exchanger (1021) and an airflow exhausting fan unit (104), and a split type air conditioning device indoor unit (2006) therein having an internal heat exchanger (203), a flow regulating device (202), a conditioned airflow blowing fan (204) and a control device (201), and a
20 coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) being installed therebetween, and a fluid exhausting path (1060) being installed from the air conditioning object space (120) to the external heat exchanger (1021) for facilitating the applications in various separated space, illustrated as followings:

25 Fig. 15 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006)
30 composed of an internal heat exchanger (203), an flow regulating device

(202), a control device (201), a conditioned airflow blowing fan (204) and an exhaust amount regulating device (1061), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021);

As shown FIG. 15, the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204) and an exhaust amount regulating device (1061), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021); and wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the external heat exchanger (1021), the coolant fluid pipeline (103) and the airflow exhausting fan unit (104), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device; the split type air conditioning device indoor unit (2006) is further installed with the exhaust amount regulating device (1061) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air

conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

5 exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

10 the coolant fluid pipeline (103) and fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

Fig. 16 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204), a blowing pump (1041) and an exhaust amount regulating device (1061), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

25 As shown FIG. 16, the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and a split type air conditioning device outdoor main station (2007), and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow
30

blowing fan (204), a blowing pump (1041) and an exhaust amount regulating device (1061), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and installing a fluid exhausting path (1060) ~~and~~
5 in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021); and wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the
10 external heat exchanger (1021) and the coolant fluid pipeline (103), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat
15 exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202),
20 the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device; the split type air conditioning device indoor unit (2006) is further installed with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path
25 (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the air conditioning object space exhausted fluid (105);

30 coolant fluid pipeline (103), constituted by a pipeline device for

connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation,
5 wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

10 fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

15 Fig. 17 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006)
20 composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a exhaust amount regulating device (1061) in the
25 thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021).

As shown in FIG. 17, the main configuration is installing a split type
30 air conditioning device outdoor unit (2002) composed of an external heat

exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the external heat exchanger (1021), the coolant fluid pipeline (103) and the airflow exhausting fan unit (104), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure

for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

5 Fig. 18 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006) composed of an internal heat
10 exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204)), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the
15 thermal insulation device (110), and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

As shown in FIG. 18, the main configuration is installing a split type
20 air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and a split type air conditioning device outdoor main station (2007), and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow
25 blowing fan (204), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) in the air conditioning object
30 space (120) between the exhaust amount regulating device (1061), the

blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the external heat exchanger (1021) and the coolant fluid pipeline (103),
5 wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air
10 conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control
15 device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

The thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

20 the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the air conditioning object space exhausted fluid (105);

coolant fluid pipeline (103), constituted by a pipeline device for
25 connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant
30 to flow through;

blowing pump (1041), constituted by an air blowing or air exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a relative temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) and exchanging heat while flowing through the external heat exchanger (1021) then being exhausted to the external temperature differentiation space (130);

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

Fig. 19 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the

external heat exchanger (1021).

As shown in FIG. 19, the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type
5 air conditioning device outdoor main station (2007), installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline
10 (103) installed between the above two, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061),
15 the blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the external heat exchanger (1021), the coolant fluid pipeline (103) and the airflow exhausting fan unit (104), wherein the split type air conditioning
20 device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed
25 in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and
30 driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate,

a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

Fig. 20 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204) and an exhaust amount regulating device (1061), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021).

As shown in FIG. 20, the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), installing a split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204) and an exhaust amount regulating device (1061), and forming a coolant compressing and circulating loop constructed by a

coolant fluid pipeline (103) installed between the above three, and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021);

5 wherein

split type air conditioning device outdoor unit (2002), installed with the external heat exchanger (1021), the coolant fluid pipeline (103), the airflow exhausting fan unit (104) and the individually installed split type air conditioning device outdoor main station (2007), wherein the split type
10 air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device
15 indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and
20 driving the air conditioning device; the split type air conditioning device indoor unit (2006) is further installed with the exhaust amount regulating device (1061) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103)
25 allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104)
30 installed on the split type air conditioning device outdoor unit (2002) is

constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) which is individually installed and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

Fig. 21 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021), having a split type air conditioning device outdoor main station (2007) which is individually

installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204), a blowing pump (1041) and an exhaust amount regulating device (1061),
5 having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

10 As shown in FIG. 21, the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021), installing a split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal
15 heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204), a blowing pump (1041) and an exhaust amount regulating device (1061), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and installing a fluid exhausting
20 path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the external heat exchanger (1021), the coolant fluid pipeline (103) and
25 the individually installed split type air conditioning device outdoor main station (2007), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal
30 heat exchanger (203) and the flow regulating device (202) in the split type

air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202),
5 the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device; the split type air conditioning device indoor unit (2006) is further installed with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path
10 (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the air conditioning object space exhausted fluid (105);

15 coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) which is individually installed and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006)
20 for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

blowing pump (1041), constituted by an air blowing or air exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a relative
25 temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) and flowing through the external heat exchanger (1021) then being exhausted to the external temperature differentiation space (130);

30 exhaust amount regulating device (1061), constituted by a fluid gate,

a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

Fig. 22 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021).

As shown in FIG. 22, the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) installing a split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), and forming a coolant compressing and circulating

loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting an exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the external heat exchanger (1021), the coolant fluid pipeline (103), the airflow exhausting fan unit (104) and the individually installed split type air conditioning device outdoor main station (2007), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) which is individually installed and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

Fig. 23 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002)

composed of an external heat exchanger (1021), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204),
5 having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and
10 installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

As shown in FIG. 23, the main configuration is installing a split type
15 air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021), installing a split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device
20 (201) and a conditioned airflow blowing fan (204), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path
25 (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the a blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the external heat exchanger (1021), the coolant fluid pipeline (103) and
30 the individually installed split type air conditioning device outdoor main

station (2007), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the air conditioning object space exhausted fluid (105);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

blowing pump (1041), constituted by an air blowing or air exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a relative temperature differentiation from the air conditioning object space (120)

through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) and flowing through the external heat exchanger (1021) then being exhausted to the external temperature differentiation space (130);

5 exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

10 the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

Fig. 24 is a structural schematic view of an embodiment of present invention having a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), having a split type air conditioning device outdoor main station (2007) which is individually installed, having a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), having a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110) and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021).

As shown in FIG. 24, the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), installing a

split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the external heat exchanger (1021), the coolant fluid pipeline (103), the airflow exhausting fan unit (104) and the individually installed split type air conditioning device outdoor main station (2007), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) which is individually installed and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure

for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

5 In summary, the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger relates to a cooling/heating air conditioning device for regulating temperature, which pumps an airflow exhausted from a space
10 in an air conditioning object such as inside of a room or vehicle to the external through the external heat exchanger disposed at the external of the air conditioning object such as outside of the room or vehicle so as to equalize the temperature of the fluid flowing through the internal of the external heat exchanger by means of the temperature difference between the internal and external of the air conditioning object for achieving an
15 energy saving effect.

CLAIMS

1. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, which relates to a cooling/heating air conditioning device for regulating temperature, which pumps the air conditioning object space exhausted fluid (105) in an air conditioning object such as the indoor or the internal of a vehicle, and/or pumps the external airflow (1051) through the external heat exchanger (1021) disposed at the external of the air conditioning object such as the outdoor or the outside of a vehicle, so as to perform heat exchange with the coolant fluid pipeline (103) passing through the internal of the external heat exchanger device by means of the temperature differentiation between the two fluids; when the air conditioning device is operated as a cooler, the airflow of a relatively lower temperature exhausted from the space of the air conditioning object such as the inside of the room can be used to facilitate the decreasing of the temperature of the external heat exchanger which is disposed outdoors as a condenser, and when the air conditioning device is operated as a heat pump to supply hot air, the exhausted airflow of a relatively higher temperature can be used to facilitate the increasing of the temperature of the external heat exchanger which is disposed outdoors as an evaporator, and the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having exhaust amount regulating device (1061) and a fluid exhausting path (1060) for the air conditioning object space

exhausted fluid (105) to flow through, and further to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

5 the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

10 a blowing pump (1041) or an external heat exchanger airflow exhausting fan unit (104) is installed at one or more than one of the three locations including the fluid exhausting path (1060) or the inlet side or the outlet side of the external heat exchanger (1021), so as to pump the air conditioning object space exhausted fluid (105) to exhaust to the external temperature differentiation space (130) through
15 the external heat exchanger (1021);

said external heat exchanger airflow exhausting fan unit (104) and said blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature
20 differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), or for simultaneously pumping the air conditioning object space exhausted fluid (105) and the external airflow (1051), so as to exhaust to the external temperature differentiation space (130) through
25 the external heat exchanger (1021), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the
30 external heat exchanger (1021), in which a gas or liquid coolant is

circulated;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

5 the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105);

the operating principles thereof are as follows:

10 --When operated as the function to supply cold air to the air conditioning object space (120), by utilizing both or one of the external heat exchanger airflow exhausting fan unit (104) and/or the exhaust amount regulating device (1061) to pump the air conditioning object space exhausted fluid (105) at a relatively lower temperature in an indoor air conditioning object space (120), or simultaneously pump the
15 air conditioning object space exhausted fluid (105) and the external airflow (1051) flowing through the external heat exchanger (1021), the effect of lowering the temperature of the external heat exchanger (1021) is enhanced, and thereby facilitating the enhancing of the cooling air conditioning efficiency;

20 --when operated as an heat pump function to supply hot air to the air conditioning object space (120), by pumping the air conditioning object space exhausted fluid (105) having relatively higher temperature to the external heat exchanger (1021) through the external heat exchanger (1021), the effect of raising the temperature of the external
25 heat exchanger (1021) is enhanced, and thereby facilitating to enhance the heating air conditioning efficiency;

the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger of the present invention includes to pump the airflow passing through the
30 external of the external heat exchanger (1021) by means of the external

heat exchanger airflow exhausting fan unit (104), and /or the blowing pump (1041);

5 according to the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, with a thermal insulation device (110) constructed in the object location, the air conditioning object space (120) and the external temperature differentiation space (130) can be insulated, the thermal insulation structure (110) includes the wall of a building, the housing of a carrier or the enclosure of a mechanism made of a heat insulation material or a material having even better heat insulation properties;

10 according to the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the mentioned air conditioning object space (120) is often defined as the internal of a building or the internal of a vehicle or the internal of a boat or the internal of an aircraft or the internal of an equipment device, which allows the air conditioning device to perform temperature-raising regulation or temperature-lowering regulation; the mentioned air conditioning object space exhausted fluid (105) is defined as the airflow exhausted from the internal of the air conditioning object space (120) and flowing through the external heat exchanger (1021);

20 according to the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the mentioned external temperature differentiation space (130) is defined as the external space insulated from the air conditioning object space (120) through the thermal insulation device (110);

30 according to the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the mentioned external airflow (1051) is defined as the

airflow surrounding the external temperature differentiation space (130);

in the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the temperature of the air conditioning object space exhausted fluid (105) includes higher than that of an heat exchanger to the external disposed externally of an temperature regulator;

in the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the temperature of the air conditioning object space exhausted fluid (105) includes lower than that of an heat exchanger to the external disposed externally of an temperature regulator;

in the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger, the exhausted air conditioning object space exhausted fluid (105) includes to heat exchange with the coolant fluid pipeline (103) disposed in the external heat exchanger (1021) in the external space or a surface of the external heat exchanger (1021);

the air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger of the present invention is formed by applying the aforementioned operating principles to various types of air conditioning devices including integral air conditioning devices, or split type air conditioning devices, or using the cooling tower to replace the cooling tower type air conditioning device of the external heat exchanger (1021).

2. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to an integral air conditioning device with an external heat exchanger airflow exhausting fan unit (104) and a fluid exhausting path (106) so as to

pump an air conditioning object space exhausted fluid (105) and an external airflow (1051) to flow together through an external heat exchanger (1021), and the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted
5 of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid
10 pipeline (103); and having an exhaust amount regulating device (1061), and a fluid exhausting path (106) formed by a housing for allowing air conditioning object space exhausted fluid (105) to flow to the external heat exchanger (1021);

the external heat exchanger (1021), provided with the coolant
15 fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the coolant fluid pipeline (103), which is a circulation pipeline
20 device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

an external heat exchanger airflow exhausting fan unit (104),
comprising an air blowing or exhausting fan unit or an air pump driven
25 by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the
30 fluid exhausting path (106), enabling two airflows to exhaust to the

external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (106), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105);

whereby an integral air conditioning device assembly (1000) is formed by the abovementioned structures.

3. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to an integral air conditioning device without a heat exchanger airflow exhausting fan unit (104) and a ventilating device (1041) commonly constructed with a fluid exhausting path (106) so as to pump an air conditioning object space exhausted fluid (105) to flow through an external heat exchanger (1021), and the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (106) formed by a housing, and having an exhaust amount regulating device (1061) and the blowing pump (1041);

the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the air conditioning object space exhausted fluid

(105) through the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (106), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105);

whereby an integral air conditioning device assembly (1000) is formed by the abovementioned structures.

4. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to a fluid exhausting path (1060) and an external heat exchanger airflow exhausting fan unit (104) so as to pump an air conditioning object space exhausted fluid (105) and an external airflow (1051) to flow together through an external heat exchanger (1021) in the air conditioning device assembly (1000), and the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted

of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060) and an exhaust amount regulating device (1061);

the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

an external heat exchanger airflow exhausting fan unit (104), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

whereby an air conditioning device assembly (1000) is formed by the abovementioned structures;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust

amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

- 5 5. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to a separately mounted blowing pump (1041) and an exhaust amount regulating device (1061) and having an air conditioning device assembly (1000)
- 10 without the external heat exchanger airflow exhausting fan unit (104), and the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow

15 blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060), an exhaust amount regulating device (1061), a blowing pump (1041);

20 the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the

25 external heat exchanger (1021), in which a gas or liquid coolant is circulated;

whereby an air conditioning device assembly (1000) is formed by the abovementioned structures;

30 a blowing pump (1041), comprising an air blowing or exhausting

fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

6. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to an air conditioning device assembly (1000) mounted with an external heat exchanger airflow exhausting fan unit (104) and the fluid exhausting path (1060) and the blowing pump (1041), and the main configurations are as follows:

an air conditioning device main unit (101), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060) and a blowing pump (1041);

the external heat exchanger (1021), provided with the coolant fluid pipeline (103) for allowing the coolant passed from the main unit to heat exchange with the external airflow (1051) of the external

temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

an external heat exchanger airflow exhausting fan unit (104), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) by the blowing pump (1041), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

whereby an air conditioning device assembly (1000) is formed by the abovementioned structures;

a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

7. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to a split type air conditioning device outdoor unit (2002) with an external heat exchanger airflow exhausting fan unit (104) and a split type air conditioning device main unit (2001) mounted with the fluid exhausting path (1060), and the main configurations are as follows:

a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in a split type air conditioning device outdoor unit (2002) in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060) and an exhaust amount regulating device (1061);

the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105), and having an external heat exchanger airflow exhausting fan unit (104), wherein the external heat exchanger airflow exhausting fan unit (104) comprising an air blowing or exhausting fan unit or an air pump driven by an

electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), and enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

8. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to the split type air conditioning device main unit (2001) commonly constructed with the blowing pump (1041) and having a split type air conditioning device outdoor unit (2002) without the external heat exchanger airflow exhausting fan unit (104), and the main configurations are as follows:

a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in a split type air

conditioning device outdoor unit (2002) in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060), an exhaust amount regulating device (1061) and a blowing pump (1041);

the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the air conditioning object space exhausted fluid (105) by means of the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the air conditioning device main unit (101) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

9. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to the separately mounted fluid exhausting path (1060), the split type air conditioning device main unit (2001) and the split type air conditioning device outdoor unit (2002) with the external heat exchanger airflow exhausting fan unit (104), and the main configurations are as follows:

5 a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in a split type air conditioning device outdoor unit (2002) in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060) and an exhaust amount regulating device (1061);

10 the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105), and having an external heat exchanger airflow exhausting fan unit (104), wherein the external heat exchanger airflow exhausting fan unit (104) comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature

15 20 25 30

differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

5 the coolant fluid pipeline (103), which is a circulation pipeline device for coupling the split type air conditioning device main unit (2001) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

10 the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

 the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

15 10. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to the separately mounted blowing pump (1041), the split type air conditioning device main unit (2001) and the split type air conditioning device outdoor unit

20 (2002) without the external heat exchanger airflow exhausting fan unit (104), and the main configurations are as follows:

 a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air

25 conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060), an exhaust amount regulating device (1061) and a

30 blowing pump (1041);

the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the air conditioning object space exhausted fluid (105) by means of the external heat exchanger (1021);

the coolant fluid pipeline (103), which is a circulation pipeline device for coupling split type air conditioning device main unit (2001) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

a blowing pump (1041), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation which is pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), so as to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

11. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to the split type air conditioning device main unit (2001), the split type air conditioning device outdoor unit (2002) with the external heat exchanger airflow

exhausting fan unit (104) and the separately mounted blowing pump (1041), and the main configurations are as follows:

5 a split type air conditioning device main unit (2001), essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower and a housing, and coupled to a pipeline of the external heat exchanger (1021) mounted in an external temperature differentiation space (130) to form a circulating path by means of a coolant fluid pipeline (103); and having a fluid exhausting path (1060), the exhaust amount regulating device (1061) and the blowing pump (1041);

the split type air conditioning device outdoor unit (2002), having a housing and the external heat exchanger (1021), wherein the external heat exchanger (1021) being provided with the coolant fluid pipeline (103) for allowing the coolant passed from the split type air conditioning device main unit (2001) to heat exchange with the external airflow (1051) of the external temperature differentiation space (130) of the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105), and having an external heat exchanger airflow exhausting fan unit (104), wherein the external heat exchanger airflow exhausting fan unit (104) comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, for pumping the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060), enabling two airflows to exhaust to the external temperature differentiation space (130) through the external heat exchanger (1021);

30 the coolant fluid pipeline (103), which is a circulation pipeline

device for coupling the split type air conditioning device main unit (2001) and the external heat exchanger (1021), in which a gas or liquid coolant is circulated;

5 the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

10 12. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to a water-cooled air conditioning device main unit (2005), a powered fan provided cooling tower (2003) and the separately mounted blowing pump (1041), and the main configurations are as follows:

a water-cooled air conditioning device main unit (2005), which is an air conditioning device main unit essentially consisted of a throttle device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower
20 water-cooled cooling device and a housing, and a water pipe (107) of the water-cooled condensing device disposed in the water-cooled air conditioning device main unit (2005) being coupled to a water in and out pipe (109) of a water inlet and water exhaust pipeline of the powered fan provided cooling tower (2003) disposed in the external
25 temperature differentiation space (130) so as to form a path of water circulation; and having the fluid exhausting path (1060), the exhaust amount regulating device (1061) and the blowing pump (1041), and by means of the blowing pump (1041) to pump the air conditioning object space exhausted fluid (105) through the fluid exhausting path (1060)
30 and the exhaust amount regulating device (1061) to an air inlet of the

powered fan provided cooling tower (2003);

the powered fan provided cooling tower (2003), comprising a cooling tower equipped with the cooling tower fan unit (108), for example, a counterflow mechanical draft cooling tower, an induced
5 counterflow mechanical draft cooling tower, a counterflow cooling tower, a crossflow mechanical draft cooling tower, or an evaporative cooling tower, and the powered fan provided cooling tower (2003) having an air inlet, so that the air conditioning object space exhausted fluid (105) pumped from the air conditioning object space (120)
10 through the blowing pump (1041) is directed through the fluid exhausting path (1060) into the air inlet of the powered fan provided cooling tower (2003), and passing through the powered fan provided cooling tower (2003) so as to cool the waterflow and then is exhausted to the surrounding through the cooling tower fan unit (108), and
15 having a water in and out pipe (109) for connecting the water pipe (107) so as to allow the cooling water to circulate between the powered fan provided cooling tower (2003) and the water-cooled air conditioning device main unit (2005);

the water pipe (107), disposed between a water-cooled
20 condensing device of the water-cooled air conditioning device main unit (2005) and the water in and out pipe (109) of the powered fan provided cooling tower (2003);

the cooling tower fan unit (108), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, and
25 having one or more following operation functions, including: 1) pumping the external airflow (1051) of the external temperature differentiation space (130) to the external temperature differentiation space (130) through the inside of the powered fan provided cooling tower (2003); 2) pumping the air conditioning object space exhausted
30 fluid (105) with a temperature differentiation from the air conditioning

object space (120) through the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060) to the external temperature differentiation space (130) through the powered fan provided cooling tower (2003); 3) enabling the external
5 airflow (1051) and the air conditioning object space exhausted fluid (105) to exhaust commonly to the external temperature differentiation space (130) through the powered fan provided cooling tower (2003);

a water pump (111), for pumping a cooling water between the water-cooled air conditioning device main unit (2005) and the powered
10 fan provided cooling tower (2003) through the water pipe (107) and the water in and out pipe (109) for cooling circulation;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

15 the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

13. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as
20 claimed in claim 1, wherein it includes to be applied to a water-cooled air conditioning device main unit (2005) and a powered fan provided cooling tower (2003), and the main configurations are as follows:

a water-cooled air conditioning device main unit (2005), which is an air conditioning device main unit essentially consisted of a throttle
25 device, an internal heat exchanger (203), a compression device, pipelines, a control device (201), an air conditioning airflow blower water-cooled cooling device and a housing, and a water pipe (107) of the water-cooled condensing device disposed in the water-cooled air conditioning device main unit (2005) being coupled to a water in and
30 out pipe (109) of a water inlet and water exhaust pipeline of the

powered fan provided cooling tower (2003) disposed in the external temperature differentiation space (130) so as to form a path of water circulation; and having a fluid exhausting path (1060) and an exhaust amount regulating device (1061) for delivering the air conditioning object space exhausted fluid(105) to an air inlet of the powered fan provided cooling tower (2003);

the powered fan provided cooling tower (2003), comprising a cooling tower equipped with the cooling tower fan unit (108), for example, a counterflow mechanical draft cooling tower, an induced counterflow mechanical draft cooling tower, a counterflow cooling tower, a crossflow mechanical draft cooling tower, or an evaporative cooling tower, and the powered fan provided cooling tower (2003) having an air inlet, so that the air conditioning object space exhausted fluid (105) pumped from the air conditioning object space (120) is directed through the fluid exhausting path (1060) into the air inlet of the powered fan provided cooling tower (2003), and is passing through the powered fan provided cooling tower (2003) so as to cool the waterflow, and then is exhausted to the surrounding through the cooling tower fan unit (108), and having a water in and out pipe (109) for connecting the water pipe (107) so as to allow the cooling water to circulate between the powered fan provided cooling tower (2003) and the water-cooled air conditioning device main unit (2005);

the water pipe (107), disposed between a water-cooled condensing device of the water-cooled air conditioning device main unit (2005) and the water in and out pipe (109) of the powered fan provided cooling tower (2003);

the cooling tower fan unit (108), comprising an air blowing or exhausting fan unit or an air pump driven by an electric motor, and having one or more following operation functions, including: 1) pumping the external airflow (1051) of the external temperature

differentiation space (130) to the external temperature differentiation space (130) through the inside of the powered fan provided cooling tower (2003); 2) pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) to the external temperature differentiation space (130) through the powered fan provided cooling tower (2003); 3) enabling the external airflow (1051) and the air conditioning object space exhausted fluid (105) to exhaust commonly to the external temperature differentiation space (130) through the powered fan provided cooling tower (2003);

a water pump (111), for pumping a cooling water between the water-cooled air conditioning device main unit (2005) and the powered fan provided cooling tower (2003) through the water pipe (107) and the water in and out pipe (109) for cooling circulation;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

14. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it includes to be applied to a water-cooled air conditioning device main unit (2005), a natural draft cooling tower (2003) and the separately mounted blowing pump (1041), and the main configurations are as follows:

a water-cooled air conditioning device main unit (2005), which is an air conditioning device main unit essentially consisted of a throttle device, an internal heat exchanger (203), a compression device,

pipelines, a control device (201), an air conditioning airflow blower
water-cooled cooling device and a housing, and a water pipe (107) of
the water-cooled condensing device disposed in the water-cooled air
conditioning device main unit (2005) being coupled to a water in and
5 out pipe (109) of a water inlet and water exhaust pipeline of a natural
draft cooling tower (2004) disposed in the external temperature
differentiation space (130) so as to form a path of water circulation;
and having the fluid exhausting path (1060), the exhaust amount
regulating device (1061) and the blowing pump (1041), and by means
10 of the blowing pump (1041) to pump the air conditioning object space
exhausted fluid (105) to an air inlet of the natural draft cooling tower
(2004) through the fluid exhausting path (1060) and the exhaust
amount regulating device (1061);

a natural draft cooling tower (2004), comprising a natural draft
15 cooling tower, for example, a crossflow natural draft cooling tower,
and the natural draft cooling tower (2004) having an air inlet, and
having one or more following operating functions, including: 1)
directing the external airflow (1051) from the external temperature
differentiation space (130) into the air inlet of the natural draft cooling
20 tower (2004), and passing through the natural draft cooling tower
(2004) so as to cool the waterflow, and then exhausting the same to the
surrounding through the cooling tower; 2) directing the air
conditioning object space exhausted fluid (105) pumped from the air
conditioning object space (120) by means of the blowing pump (1041)
25 through the fluid exhausting path (1060) into the air inlet of the natural
draft cooling tower (2004), and passing through the natural draft
cooling tower (2004) so as to cool the waterflow, and then exhausting
the same to the surrounding through the cooling tower; 3) directing the
air conditioning object space exhausted fluid (105) and the external
30 airflow (1051) into the air inlet of the natural draft cooling tower

(2004), and passing through the natural draft cooling tower (2004) so as to cool the waterflow, and then exhausting the same to the surrounding through the cooling tower; and having a water in and out pipe (109) for coupling the water pipe (107) so as to allow the cooling water to circulate between the natural draft cooling tower (2004) and the water-cooled air conditioning device main unit (2005);

the water pipe (107), disposed between a water-cooled condensing device of the water-cooled air conditioning device main unit (2005) and the water in and out pipe (109) of the natural draft cooling tower (2004);

a water pump (111), for pumping a cooling water between the water-cooled air conditioning device main unit (2005) and the powered fan provided cooling tower (2003) through the water pipe (107) and the water in and out pipe (109) for cooling circulation;

the exhaust amount regulating device (1061), formed by a fluid gate, a shutoff gate or valve for operating and adjusting the exhaust amount of the air conditioning object space exhausted fluid (105);

the fluid exhausting path (1060), which is a fluid passage structure for permitting the exhaust of the air conditioning object space exhausted fluid (105).

15. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 1, wherein it further applied to a split type air conditioning device, which mainly includes a split type air conditioning device outdoor unit (2002) therein having a split type air conditioning device outdoor main station (2007) and an external heat exchanger (1021) and an airflow exhausting fan unit (104), and a split type air conditioning device indoor unit (2006) therein having an internal heat exchanger (203), a flow regulating device (202), a conditioned airflow blowing fan (204) and a control device (201), and a

coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) being installed therebetween, and a fluid exhausting path (1060) being installed from the air conditioning object space (120) to the external heat exchanger (1021) for facilitating the applications in various separated space.

16. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204) and an exhaust amount regulating device (1061), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021); and wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the external heat exchanger (1021), the coolant fluid pipeline (103) and the airflow exhausting fan unit (104), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning

device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device; the split type air conditioning device indoor unit (2006) is further installed with the exhaust amount regulating device (1061) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for

connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

17. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and a split type air conditioning device outdoor main station (2007), and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204), a blowing pump (1041) and an exhaust amount regulating device (1061), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing

pump (1041) and the external heat exchanger (1021); and wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the external heat exchanger (1021) and the coolant fluid pipeline (103),

5 wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split

10 type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided

15 with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device; the split type air conditioning device indoor unit (2006) is further installed with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

20 the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the air conditioning object space exhausted fluid (105);

25 coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation,

30 wherein the internal of pipeline allows the gas-state or liquid-state

coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

5 fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path
10 (1060) can be individually installed or jointly constituted as a pipeline structure.

18. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split
15 type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating
20 device (202), a control device (201) and a conditioned airflow blowing fan (204), forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a
25 fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed
30 with the split type air conditioning device outdoor main station (2007),

the external heat exchanger (1021), the coolant fluid pipeline (103) and the airflow exhausting fan unit (104), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded
5 through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

10 the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

15 the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant
20 fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104)
25 installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow
30 (1051) of the external temperature differentiation space (130) and for

pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

19. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and a split type air conditioning device outdoor main station (2007), and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger

(203), a flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a blowing pump (1041) and an exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the external heat exchanger (1021) and the coolant fluid pipeline (103), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to

exchange heat with the air conditioning object space exhausted fluid (105);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

blowing pump (1041), constituted by an air blowing or air exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a relative temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) and exchanging heat while flowing through the external heat exchanger (1021) then being exhausted to the external temperature differentiation space (130);

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

20. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split

type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) and a split type air conditioning device outdoor main station (2007), installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), an flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above two, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the split type air conditioning device outdoor main station (2007), the external heat exchanger (1021), the coolant fluid pipeline (103) and the airflow exhausting fan unit (104), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

5 the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

10 the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the
15 external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to
20 exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station
25 (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

30 exhaust amount regulating device (1061), constituted by a fluid

gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

21. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), installing a split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204) and an exhaust amount regulating device (1061), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the external heat exchanger (1021), the coolant fluid pipeline (103), the airflow exhausting fan unit (104) and the individually installed split type air conditioning device outdoor main station (2007), wherein the split type air conditioning device outdoor main station

(2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device; the split type air conditioning device indoor unit (2006) is further installed with the exhaust amount regulating device (1061) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061)

and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) which is individually installed and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

22. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021), installing a split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201), a conditioned airflow blowing fan (204), a blowing pump (1041) and an exhaust amount regulating device

(1061), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the external heat exchanger (1021), the coolant fluid pipeline (103) and the individually installed split type air conditioning device outdoor main station (2007), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device; the split type air conditioning device indoor unit (2006) is further installed with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the air conditioning object space exhausted fluid (105);

coolant fluid pipeline (103), constituted by a pipeline device for

connecting the split type air conditioning device outdoor main station (2007) which is individually installed and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

blowing pump (1041), constituted by an air blowing or air exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a relative temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) and flowing through the external heat exchanger (1021) then being exhausted to the external temperature differentiation space (130);

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

23. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104) installing a split type air conditioning device outdoor main station

(2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), and forming a coolant
5 compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object
10 space (120) between the exhaust amount regulating device (1061) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with, the external heat exchanger (1021), the coolant fluid pipeline (103), the airflow exhausting fan unit (104) and the individually
15 installed split type air conditioning device outdoor main station (2007), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal
20 heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating
25 device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061) and the fluid exhausting path
30 (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow (1051) of the external temperature differentiation space (130) and for pumping the air conditioning object space exhausted fluid (105) with a temperature differentiation and pumped from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (106), thereby enabling two airflows to exchange heat then being exhausted to the external temperature differentiation space (130) through the external heat exchanger (1021);

coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) which is individually installed and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

fluid exhausting path (1060), constituted by a fluid passage

structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path (1060) can be individually installed or jointly constituted as a pipeline structure.

24. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021), installing a split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal heat exchanger (203), a flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a blowing pump (1041) and a exhaust amount regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the a blowing pump (1041) and the external heat exchanger (1021); wherein

split type air conditioning device outdoor unit (2002), installed with the external heat exchanger (1021), the coolant fluid pipeline (103) and the individually installed split type air conditioning device outdoor main station (2007), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and

towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

5 the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

10 the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

15 the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the air conditioning object space exhausted fluid (105);

20 coolant fluid pipeline (103), constituted by a pipeline device for connecting the split type air conditioning device outdoor main station (2007) and the external heat exchanger (1021) and the flow regulating device (202) and the internal heat exchanger (203) of the split type air conditioning device indoor unit (2006) for the purpose of circulation, wherein the internal of pipeline allows the gas-state or liquid-state coolant to flow through;

25 blowing pump (1041), constituted by an air blowing or air exhausting fan unit or an air pump driven by an electric motor, for pumping the air conditioning object space exhausted fluid (105) with a relative temperature differentiation from the air conditioning object space (120) through the exhaust amount regulating device (1061) and the fluid exhausting path (1060) and flowing through the external heat exchanger (1021) then being exhausted to the external temperature

30

differentiation space (130);

exhaust amount regulating device (1061), constituted by a fluid gate, a shutoff gate or valve for operating and regulating the exhaust amount of the air conditioning object space exhausted fluid (105);

5 fluid exhausting path (1060), constituted by a fluid passage structure for exhausting the exhaust amount of the air conditioning object space exhausted fluid (105) from the air conditioning object space (120);

the coolant fluid pipeline (103) and the fluid exhausting path
10 (1060) can be individually installed or jointly constituted as a pipeline structure.

25. An air conditioning device utilizing temperature differentiation of exhausted gas to even temperature of external heat exchanger as claimed in claim 15, wherein the main configuration is installing a split
15 type air conditioning device outdoor unit (2002) composed of an external heat exchanger (1021) and an airflow exhausting fan unit (104), installing a split type air conditioning device outdoor main station (2007) which is individually installed, and installing a split type air conditioning device indoor unit (2006) composed of an internal
20 heat exchanger (203), a flow regulating device (202), a control device (201) and a conditioned airflow blowing fan (204), and forming a coolant compressing and circulating loop constructed by a coolant fluid pipeline (103) installed between the above three, and separately mounting a blowing pump (1041) and a exhaust amount
25 regulating device (1061) in the thermal insulation device (110), and installing a fluid exhausting path (1060) and introducing external airflow (1051) in the air conditioning object space (120) between the exhaust amount regulating device (1061), the blowing pump (1041) and the external heat exchanger (1021); wherein

30 split type air conditioning device outdoor unit (2002), installed

with the external heat exchanger (1021), the coolant fluid pipeline (103), the airflow exhausting fan unit (104) and the individually installed split type air conditioning device outdoor main station (2007), wherein the split type air conditioning device outdoor main station (2007) mainly includes a compress device and forms a compressing and circulating loop leaded through the coolant fluid pipeline (103) towards the external heat exchanger (1021) and towards the internal heat exchanger (203) and the flow regulating device (202) in the split type air conditioning device indoor unit (2006) installed in the air conditioning object space (120);

the split type air conditioning device indoor unit (2006) is installed with the internal heat exchanger (203), the flow regulating device (202), the conditioned airflow blowing fan (204) and provided with a control device (201) for controlling operations of inputting electric energy and driving the air conditioning device;

the thermal insulation device (110) is separately mounted with the exhaust amount regulating device (1061), the blowing pump (1041) and the fluid exhausting path (1060);

the external heat exchanger (1021) of the split type air conditioning device outdoor unit (2002) is installed with the coolant fluid pipeline (103) allowing the coolant to flow through so as to exchange heat with the external airflow (1051) of the external temperature differentiation space (130) in the external heat exchanger (1021) and the air conditioning object space exhausted fluid (105);

the external heat exchanger airflow exhausting fan unit (104) installed on the split type air conditioning device outdoor unit (2002) is constituted by an airflow blowing or airflow exhausting fan unit or an air pump driven by an electric motor, wherein an airflow introducing interval is defined between the fluid exhausting path (1060) and the external heat exchanger (1021) for pumping in the external airflow

(1051) of the external temperature differentiation space (130) and for
pumping the air conditioning object space exhausted fluid (105) with a
temperature differentiation and pumped from the air conditioning
object space (120) through the exhaust amount regulating device (1061)
5 and the fluid exhausting path (106), thereby enabling two airflows to
exchange heat then being exhausted to the external temperature
differentiation space (130) through the external heat exchanger (1021);
coolant fluid pipeline (103), constituted by a pipeline device for
connecting the split type air conditioning device outdoor main station
10 (2007) which is individually installed and the external heat exchanger
(1021) and the flow regulating device (202) and the internal heat
exchanger (203) of the split type air conditioning device indoor unit
(2006) for the purpose of circulation, wherein the internal of pipeline
allows the gas-state or liquid-state coolant to flow through;
15 exhaust amount regulating device (1061), constituted by a fluid
gate, a shutoff gate or valve for operating and regulating the exhaust
amount of the air conditioning object space exhausted fluid (105);
fluid exhausting path (1060), constituted by a fluid passage
structure for exhausting the exhaust amount of the air conditioning
20 object space exhausted fluid (105) from the air conditioning object
space (120);
the coolant fluid pipeline (103) and the fluid exhausting path
(1060) can be individually installed or jointly constituted as a pipeline
structure.

25