

序号	标题	摘要	申请人	申请号	申请日
1	AIR COOLER OF SHIP	Is an air cooler of a ship. Air cooler A thermoelectric module for generating electricity by using a temperature difference between air and cooling water can include a thermoelectric module provided on the outside and a junction box mounted on the main body to be electrically connected to the thermoelectric element.	SAMSUNG HEAVY IND CO LTD; SAMSUNG HEAVY IND	KR102020003 1569	2020/3/13
2	LIQUEFIED GAS RE-GASIFICATION SYSTEM OF VESSEL	Disclosed is a liquefied gas regasification system of a vessel, which is used in a vessel for regasifying liquefied gas by using a mixed refrigerant. According to one embodiment of the present invention, the liquefied gas regasification system of a vessel comprises : a liquefied gas transfer line which gasifies the liquefied gas and transfers the gas to a consumer; a heat medium circulation line which transfers heat for gasifying the liquefied gas from a heat source, and circulates the mixed refrigerant therethrough made by mixing two or more substances of refrigerants with different boiling points; a pump installed on the heat medium circulation line to circulate the mixed refrigerant in the heat medium circulation line; an evaporator installed on the heat medium circulation line to gasify the mixed refrigerant by exchanging heat with the heat source; and a gasifier installed on the heat medium circulation line and gasifying the liquefied gas of the liquefied gas transfer line by exchanging heat with the mixed refrigerant by using the heat energy and latent heat of the gasified mixed refrigerant. The refrigerants of the mixed refrigerant have at least 20° C of differences in boiling points to allow the temperature of the mixed refrigerant to rise in the process of changing the phase where the mixed refrigerant is gasified by the heat source in the evaporator. In addition, the mixed refrigerant has a mixing ratio which is set to allow the difference between the dewing point of the mixed refrigerant and the boiling point of the mixed refrigerant to be at least 10° C in the whole sections with the pressure of 10-20 barg. The liquefied gas regasification system of the vessel is able to regasify the liquefied gas with a high efficiency. COPYRIGHT KIPO 2021	SAMSUNG HEAVY IND CO LTD	KR102019001 5161	2019/2/8

3	DUAL MODE LIQUEFIED GAS RE-GASIFICATION SYSTEM	<p>Disclosed is a dual mode liquefied gas re-gasification system, which can re-gasify liquefied gas by selecting a mixture refrigerant re-gasification mode or a singular refrigerant re-gasification mode. To this end, the dual mode liquefied gas re-gasification system according to an embodiment of the present invention comprises : a liquefied gas transport line which gasifies liquefied gas to discharge the same to a consumer; a heat medium circulation line in which a heat medium is circulated to gasify the liquefied gas; a pump which is installed at the heat medium circulation line and circulates the heat medium in the heat medium circulation line; an evaporator which is installed at the heat medium circulation line and gasifies the heat medium; a first heat exchanger which is installed at the heat medium circulation line and gasifies the liquefied gas by allowing the heat medium gasified by the evaporator and the liquefied gas to exchange heat; a heat medium branch line which is branched from one side of the heat medium circulation line, and in which part of the heat medium is selectively circulated; a heater which heats the heat medium flowing in the heat medium branch line; a second heat exchanger which is installed at the heat medium branch line and allows the heat medium heated by the heater and fuel gas gasified by the first heat exchanger to exchange heat; a bypass line which bypasses the second heat exchanger to transport the fuel gas gasified by the first heat exchanger to the consumer; and a control unit which determines one re-gasification mode between the mixture refrigerant re-gasification mode and the singular refrigerant re-gasification mode depending on a predetermined re-gasification process operating condition COPYRIGHT KIPO 2020</p>	SAMSUNG HEAVY IND CO LTD	KR102019001 5165	2019/2/8
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4	LIQUEFIED GAS REGASIFICATION SYSTEM	<p>Disclosed is a liquefied gas regasification system. According to an embodiment of the present invention, the liquefied gas regasification system includes : a condenser performing a condensation operation by using liquefied gas supplied from a storage tank; a high pressure pump pressurizing fluid condensed through the condenser to high pressure; a vaporizer vaporizing the pressurized fluid by using seawater; an ejector spouting the vaporized fluid to suck boil off gas of the liquefied gas stored in the storage tank and discharging the fluid mixed therewith; a thermoelectric module supplied with electricity from an electricity supply device to generate high temperature heat and cooling heat; a cooler cooling the discharged fluid by using the cooling heat; and a heater increasing temperature of the seawater to be supplied to the vaporizer by using the high temperature heat.COPYRIGHT KIPO 2020</p>	SAMSUNG HEAVY IND CO LTD	KR1020180112461	2018/9/19
5	Ventilating apparatus	<p>Provided is a ventilation apparatus. The ventilation apparatus includes : an air supply duct providing a moving path of air to be supplied to a ventilation space; a cooling device cooling the air by using cool air of boil off gas (BOG); and a path conversion device determining the moving path of the air introduced from the outside to allow the air to be directly transmitted to the air supply duct or to be transmitted to the air supply duct through the cooling device.COPYRIGHT KIPO 2020</p>	SAMSUNG HEAVY IND CO LTD	KR1020180105153	2018/9/4
6	OFFLOADING APPARATUS FOR PILE MOORING-TYPE FLOATING OFFSHORE STRUCTURE	<p>Disclosed is a liquid cargo unloading apparatus for a pile fixing type floating marine structure. According to one aspect of the present invention, the liquid cargo unloading apparatus for a pile fixing type floating marine structure includes : a dolphin unloading facility which is fixed onto the sea so that a pile fixing type floating marine structure can be berthed and in which a regasification facility is mounted on an upper portion; a flexible hose installed between the pile fixing type floating marine structure and the regasification facility and transferring liquid cargo stored in a cargo storage tank of the pile fixing type floating marine structure to the regasification facility; and a pipeline transferring the cargo phase-changed from a liquid phase to a gas phase onto the land via the regasification facility.COPYRIGHT KIPO 2020</p>	SAMSUNG HEAVY IND CO LTD	KR1020180075877	2018/6/29

7	THERMOELECTRIC GENERATION SYSTEM USED FOR SHIP	<p>Disclosed is a thermoelectric generation system for a ship. According to one embodiment of the present invention, the thermoelectric generation system for a ship includes : a turbo charger using exhaust gas discharged from a ship engine to generate high temperature compressed air; and an air cooler cooling the compressed air supplied from the turbo charger, wherein the air cooler includes : a plurality of plate type heat exchange plates forming a first flow path therein, through which cooling water flows, performing heat exchange between the compressed air and the cooling water, and provided in parallel with each other; and a flow direction regulator provided on an upper portion of the heat exchange plate so that the compressed air flows between the heat exchange plates in a homogeneous manner.COPYRIGHT KIPO 2019</p>	SAMSUNG HEAVY IND CO LTD	KR1020170171845	2017/12/14
8	OPERATING METHOD OF LIQUEFIED GAS CARRIER	<p>Disclosed is an operating method of a liquefied gas carrier. According to one embodiment of the present invention, the operating method of a liquefied gas carrier includes : a step of loading liquefied natural gas onto a storage tank installed on the liquefied gas carrier from a producing district of natural gas; a step of sailing the liquefied gas carrier to a demand source of the natural gas from the producing district; a step of unloading the liquefied natural gas received in the storage tank in the demand source; a step of loading liquid nitrogen onto the storage tank from the demand source; a step of sailing the liquefied gas carrier to the producing district from the demand source; and a step of unloading the liquid nitrogen received in the storage tank in the producing district.(S1) Load LNC onto a storage tank in a producing district of natural gas(S2) Sail the liquefied gas carrier to a demand source of LNG(S2-1) Increase an internal pressure of the storage tank(S3) Unload the LNG accommodated in the storage tank at the demand source for the LNG(S4) Load LN2 onto the storage tank at the demand source for the LNG(S5) Sail the liquefied gas carrier to the producing district of the natural gas(S6) Unload the LN2 accommodated in the storage tank in the producing district of the natural gasCOPYRIGHT KIPO 2019</p>	SAMSUNG HEAVY IND CO LTD	KR1020170163078	2017/11/30

9	Molten salt power generation device	<p>Provided is a molten salt power generation device capable of continuously generating electricity by absorbing and storing high temperature heat of waste heat generated from various heat sources as molten salt. The molten salt power generation device comprises : a storage container having an accommodation space therein; molten salt that is contained in a receiving space, maintains a solid state at room temperature, absorbs heat, melts, and stores heat; and a thermoelectric element that generates electricity by a temperature difference between a high temperature portion and a low temperature portion because the high temperature portion comes in contact with the storage container and the low temperature portion is exposed to the outside of the storage container.COPYRIGHT KIPO 2019</p>	SAMSUNG HEAVY IND CO LTD	KR1020170163506	2017/11/30
10	Fuel collection and supply system for ship	<p>Provided is a fuel collecting and supplying system for a ship. The fuel collecting and supplying system comprises : a crude oil storage tank; a liquefied natural gas (LNG) storage tank; a compressor for pressing oil mist generated from the crude oil storage tank; a condenser for cooling and condensing the oil mist passed through the compressor; a gas and liquid state conversion module including a first gas liquid separator for separating gas and liquid states of the oil mist passed through the condenser, and an LNG evaporator for gasifying LNG supplied from the LNG storage tank by having heat exchange with the gas state oil mist separated from the first gas liquid separator; a first fuel supply pipe for supplying the gas state of the oil mist generated in the gas and liquid state conversion module to a gas turbine; and a second fuel supply pipe for supplying LNG generated in the gas and liquid state conversion module to an engine, thereby capable of improving energy efficiency and easily collecting available fuel leaking as the oil mist or the like.COPYRIGHT KIPO 2018</p>	SAMSUNG HEAVY IND CO LTD	KR1020160141402	2016/10/27

11	SUPPORT STRUCTURE FOR LOADING AND UNLOADING DEVICE OF STORAGE TANK	<p>A support structure for a loading and unloading device of a storage tank is disclosed. According to an embodiment of the present invention, the support structure for a loading and unloading device of a storage tank comprises : a plurality of supporters having a support unit coupled to a side wall of a storage tank and protruding from the side wall of the storage tank; a holding rod penetrating each support unit of the supporters to be coupled to be slid in the support unit; a locking unit coupled to at least one support unit among the supporters to restrain horizontal movement of the holding rod; and a plurality of pipe holders inserted and coupled to the holding rod and supporting an outer surface of a pipe to be slid to allow vertical displacement of the pipe in accordance with thermal stress. The present invention can minimize the pipe support structure and increase constructability.COPYRIGHT KIPO 2017</p>	SAMSUNG HEAVY IND CO LTD	KR102016004 3284	2016/4/8
12	A Offshore Structure	<p>Provided is a marine structure including thermoelectric device generator. The marine structure comprises : a plurality of legs of which one end is fixed onto the ocean floor whereas the other end is exposed to the outside of the sea; a platform rising and falling along the plurality of legs and including at least some portions exposed to the outside of the sea; a first heat delivering line of which at least some portions are coupled to at least one of the plurality of legs, while one end is disposed in a first temperature region in the sea; a second heat delivering line of which at least some portions are coupled to at least one of the plurality of legs while one end is disposed in a second temperature region whose temperature is greater than that of the first temperature region in the sea; and the thermoelectric device generator generated by heat exchange between the first heat delivering line and the second heat delivering line.COPYRIGHT KIPO 2017</p>	SAMSUNG HEAVY IND CO LTD	KR102015008 5648	2015/6/17

13	FLOATING STRUCTURE	<p>The present invention relates to a floating structure and, more specifically, to a floating structure which has a storage tank to store high-temperature fluid therein. According to an embodiment of the present invention, the floating structure comprises : a storage tank which stores high-temperature fluid therein; a low-temperature heat source which has a lower temperature than the high-temperature fluid; and a generation part which is formed between the storage tank and the low-temperature heat source and generates electricity using a temperature difference between the storage tank and the low-temperature heat source.COPYRIGHT KIPO 2016</p>	SAMSUNG HEAVY IND CO LTD	KR102015003 8651	2015/3/20
14	MANUFACTURING METHOD OF LIQUEFIED GAS INSULATION STRUCTURE	<p>A repair method for a liquefied gas insulation structure is disclosed. According to an embodiment of the present invention, a liquefied gas insulation structure is manufactured by stacking a lower insulation board and an upper insulation board prepared in a liquefied gas tank. A secondary barrier is prepared in the top of the lower insulation board. The repair method for a liquefied gas insulation structure comprises a process of repairing the secondary barrier in the case that the secondary barrier is damaged by attaching a repair patch to the damaged part of the secondary barrier. Therefore, the present invention improves the efficiency and productivity of an insulation structure manufacturing process.COPYRIGHT KIPO 2016</p>	SAMSUNG HEAVY IND CO LTD	KR102014012 4271	2014/9/18
15	System for Recycling Waste Heat for offshore Structure	<p>A system for recovering waste heat in an offshore structure is disclosed. According to an embodiment of the present invention, the system comprises : a thermoelectric generation module generating power using heat of an engine and having a plurality of thermoelectric generation units connected to each other in parallel to each other; and a first transformer connected with the thermoelectric generation modules in parallel to each other.COPYRIGHT KIPO 2015</p>	SAMSUNG HEAVY IND CO LTD	KR102014003 3211	2014/3/21

16	AIR CONDITIONING APPARATUS FOR SHIP	An air conditioning apparatus for a ship is disclosed. The air conditioning apparatus for a ship comprises : a first temperature sensor to sense a temperature of air supplied to an inside of a ship; a second temperature sensor provided in an exhaust fan unit to discharge air inside the ship to the outside; a first cooling unit provided in an air conditioner to supply air inside the ship; a second cooling unit provided in the exhaust fan unit; a connection flow passage to connect the first and the second cooling units to allow a refrigerant to flow in; a circulation pump provided on the connection flow passage to provide a circulation force for the refrigerant; and a control part which receives temperature sensing signals from the first and the second temperature sensors to drive the circulation pump when a difference between the temperatures sensed by the first and the second temperature sensors exceeds a set value.COPYRIGHT KIPO 2015	SAMSUNG HEAVY IND CO LTD	KR102014002 7040	2014/3/7
17	APPARATUS FOR PREVENTION FALLING DOWN SHIP BLOCK	Disclosed is an apparatus for preventing a ship block from falling. The present invention is provided to improve convenience of usage as the length can be adjusted unlike a conventional apparatus, increasing overall work efficiency by supporting a plurality of ship blocks at once, and thereby preventing the ship blocks from falling. According to an embodiment of the present invention, the apparatus preventing the ship block from falling comprises : a length adjustment bar which can adjust the length corresponding to the distance between a first and a second ship block arranged separately from each other; a fine adjustment bar connected to an end of the length adjustment bar, finely adjusting an approach distance or a separation distance from the length adjustment bar; a first clamp unit combined with an exposed end section of the length adjustment bar, being clamped to a first bracket of the first ship block; and a second clamp unit combined with an exposed end section of the fine adjustment bar and clamped to a second bracket of the second block ship.	SAMSUNG HEAVY IND CO LTD	KR102013009 1458	2013/8/1

18	THERMOELECTRIC GENERATION SYSTEM FOR SHIP	<p>Disclosed is a thermoelectric power generation system for a ship. According to an embodiment of the present invention, the thermoelectric power generation system for a ship comprises : a ship engine; a turbocharger producing compressed air using exhaust gas from the ship engine; an intercooler cooling the compressed air from the turbocharger using a coolant, and supplying the cooled compressed air to the ship engine; and a thermoelectric power generation module formed in the intercooler, and generating power using a temperature difference between the coolant supplied from the intercooler and the compressed air flowing through the intercooler. According to the present invention, the thermoelectric power generation system for a ship has the thermoelectric power generating module generating the power using the temperature difference between the coolant and the compressed air in the intercooler cooling the compressed air supplied from the ship engine, thereby recovering waste heat without the reduction of back pressure, wherein the waste heat is dissipated to lower the temperature of the compressed air when the temperature of the compressed air is raised after the compressed air flows through the turbocharger.</p>	SAMSUNG HEAVY IND CO LTD	KR1020130109068	2013/9/11
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19	System for Maintenance Liquefied Natural Gas and Liquefied Petroleum Gas Storage Tank for ship	<p>Disclosed is a maintenance and repair system of LNG and LPG storage tanks for a ship. The maintenance and repair system of the LNG and LPG storage tanks for a ship according to one embodiment of the present invention comprises : the LNG and LPG storage tanks for storing LNG and LPG, respectively; a converter for converting the liquid-phase LNG or LPG received from one of the LNG and LPG storage tanks to gas phase by increasing the temperature of the LNG or LPG; a circulator for circulating the gas remaining in the LNG and LPG storage tanks, and receiving the gas-phase LNG or LPG from the converter; a heater for heating the gas-phase LNG or LPG received from the circulator; a pipe for moving the gas-phase LNG or LPG, passing through the converter, to the circulator and the gas-phase LNG or LPG, passing through the heater, to the LNG or LPG storage tank; a detection part for detecting whether or not of the LNG and LPG storage tanks are normal; and a control part for controlling at least one of the circulator, the heater, and the converter according to signals received from the detection part. [Reference numerals] (210) LNG compressor; (220) LPG compressor; (300) Heater; (400) Converter; (600) Detection part; (700) Control part; (710) Auxiliary controller; (800) Inert gas generator</p>	SAMSUNG HEAVY IND CO LTD	KR1020120058638	2012/5/31
20	OCEAN STRUCTURE FOR WASTE DISPOSAL	<p>PURPOSE : An offshore structure generated by incinerating wastes is provided to prevent air pollution due to harmful gas generated when wastes are incinerated, by discharging the harmful gas to the seabed. CONSTITUTION : An offshore structure(100) generated by incinerating wastes comprises a body(110), a waste transshipment part, a waste incineration part(130), a harmful gas storing part, and a harmful gas discharging part(150). The body is installed in the sea(S). The waste transshipment part is formed in the upper part of the body, and transships wastes. The waste incineration part incinerates the wastes moved from the waste transshipment part. The harmful gas storage part is installed in the body, and stores the harmful gas generated when the wastes are incinerated in the waste incineration part. The harmful gas discharging part discharges the harmful gas stored in the harmful gas storage part to the seabed.</p>	SAMSUNG HEAVY IND CO LTD	KR1020110086802	2011/8/30

21	Air conditon apparatus for ship	<p>PURPOSE : An air conditioning system for a ship is provided to raise energy usage efficiency by recycling energy by making the inside warm or cool using the waste heat radiated from an engine room. CONSTITUTION :</p> <p>An air conditioning system for a ship comprises a heating pump(20), a heat exchanger(30), a cooler(50) and an air conditioner(60). The heating pump produces hot water using the waste heat of an engine room(10). The heat exchanger raises the temperature of the hot water. The cooler absorbs heat through the phase change of a refrigerant using the hot water supplied from the heat exchanger. The air conditioner controls the indoor temperature through the heat exchange between the refrigerant of the cooler and the indoor air.</p>	SAMSUNG HEAVY IND CO LTD; SAMSUNG HEAVY IND COLTD	KR102008010 6449	2008/10/29
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