Title: THE SHIP WHICH INCLUDES THE FUNERAL SERVICE EQUIPMENT AND CREMATOR IN THE HULL

Abstract: The present invention relates to a ship which has facilities for a funeral ceremony and cremation in a hull, so that a funeral ceremony, cremation and ash scattering can be conducted on the sea, wherein a ship having a capacity of 1,500-2,000 tons is used, so that the funeral procedure can be safely conducted on the sea, the ship having in a first floor a parking space for boarding funeral vehicles (including a hearse and passenger cars), in a second floor a funeral space including cremators, incense burning rooms, refrigeration rooms, crushing rooms, bereaved family waiting rooms, and an ash scattering platform, and in a third floor a rest space including dining rooms, rest rooms, kitchens, stores, warehouses, and conveniences.
Description

THE SHIP WHICH INCLUDES THE FUNERAL SERVICE EQUIPMENT AND CREMATOR IN THE HULL

Technical Field

[1] The present invention relates to a ship which has facilities for a funeral ceremony and cremation in a hull, so that a funeral ceremony, cremation and ash scattering can be conducted on the sea, wherein a ship having a capacity of 1,500-2,000 tons is used, so that the funeral procedure can be safely conducted on the sea, the ship having in a first floor a parking space for boarding funeral vehicles (including a hearse and passenger cars), in a second floor a funeral space including cremators, incense burning rooms, refrigeration rooms, crushing rooms, bereaved family waiting rooms, and an ash scattering platform, and in a third floor a rest space including dining rooms, rest rooms, kitchens, stores, warehouses, and conveniences.

Background Art

[2] As is generally known in the art, funeral culture is based on the burial culture following Confucian tradition. Due to this, the occupation of graveyards has increased to half of the area of Cheju Island in Korea, causing a serious social problem.

[3] Due to a government policy for stimulating cremation as funeral culture, recently, the rate of cremation has increased up to about 50%. However, due to the NIMBY syndrome opposing the erection of crematories, substantial difficulties are encountered when newly erecting crematories. In the case of cremation, since a facility such as a charnel house, a crypt or a charnel tower is still needed, disruption of natural circumstances is still caused, and the absolute number of such facilities is not enough. Therefore, an ash scattering policy is being encouraged. Also, the cost incurred for the erection of a crematory approaches about 300-500 billion won, excluding auxiliary basic facilities such as roads and entrance passages.

[4] In the conventional crematories existing on the ground, 24 cremators were installed in the case of Kyunggi Province (Suwon and Sungnam) of Korea, and can handle 32,120 corpses a year. In this regard, when considering the fact that 42,871 corpses were cremated in 2004 in the same region, the normal capacity of the cremators does not satisfy even 75% of the demand for cremation, and therefore, the extra work must be performed in crematories.

[5] In order to solve the problems caused due to the erection of crematories on the ground and to meet the increasing demand for cremation, a ship installed with a crematory was disclosed in Korean Unexamined Patent Publication No. 2003-004951 1. In this ship, a crematory is installed at the stern on a first floor and
includes a combustion chamber, a partition wall, a room for confirmation of the deceased, windows and doors. A funeral room is defined toward a stem, adjacent to or separate from the crematory. The crematory is formed using fire bricks such that a coffin can be moved through the door of the combustion chamber using a bogie placed on rails. In the combustion chamber, a discharge space and a chimney are defined and formed, and a gas space and a gas supply pipe are defined and installed. A mesh net is placed on the distal end of an exhaust pipe, and tug boats are provided on a deck on both sides of the crematory using lifting devices.

The conventional ship installed with the crematory serves as an alternative crematory for solving the problems caused in the crematories existing on the ground and for allowing cremation and a funeral ceremony to be implemented on the sea. A coffin is loaded on the tug boat in a quay and is moved to the ship. The coffin is then lifted using the lifting device, and is conveyed to a cremator (the combustion chamber) to carry out cremation. However, because the ship is small in size, the ship cannot set out to sea in inclement weather conditions, even under wind and waves below a predetermined level, whereby problems may be caused in the management of the ship. Further, since a separate tug boat must be employed in order to move the coffin and the bereaved family to the ship, the conveyance procedure is complicated and cumbersome. Moreover, due to the fact that the exhaust pipe extends into the sea with the meshed net placed on the distal end of the exhaust pipe, combustion cannot be properly implemented in the combustion chamber. Also, the combustion chamber and the funeral service room have limited sizes, and economy attained through the operation of the funeral service ship is likely to be poor.

Disclosure of Invention

Technical Problem

Accordingly, the present invention has been made in an effort to solve the problems occurring in the related art, and an object of the present invention is to provide a ship having facilities for a funeral ceremony and cremation in a hull, wherein the ship is designed and fabricated to have a capacity of 1,500-2,000 tons, so that the ship can set out even under inclement weather conditions on the sea, including a storm advisory, when wind and waves are below a predetermined level, and a funeral procedure including a funeral ceremony, cremation and ash scattering can be safely conducted on the sea, wherein the ship has a parking space so that funeral vehicles (including hearses and funeral cars for bereaved families) can be directly driven from dry land onto the docked ship and parked in the parking space, wherein conveying devices (hoists and elevators) are installed so that coffins having corpses laid therein can be easily conveyed to cremators, wherein a plurality of cremators, refrigeration rooms, incense
burning rooms, crushing rooms and bereaved family waiting rooms, which are necessary for cremation and funeral ceremonies, are defined, so that a number of funeral procedures can be simultaneously conducted and thereby added value can be created through the operation of the funeral service ship, wherein the structures of cremators are modified so that smokeless and odorless combustion gas can be discharged, and wherein an ash scattering platform is placed, so that an ash scattering procedure can be directly conducted from a ship, so that an environment-friendly offshore crematory can be realized.

Technical Solution

In order to achieve the above object, according to one aspect of the present invention, there is provided a ship (S) having facilities for a funeral ceremony and cremation in a hull, the ship (S) possessing a basement space (100) in a basement, in which a machine room and an engine room are located, a parking space (200) in a first floor, on which vehicles are parked, a funeral space (300) on a second floor, in which crematories and funeral service rooms are located, a rest space (400) on a third floor, in which conveniences are located, and a navigating and steering space (500) on a fourth floor, in which a steering room and various machine rooms are located, the ship (S) comprising the parking space (200) defined in the first floor, wherein a foldable ramp (21) is installed at a stem portion of the first floor of the ship (S), a parking lot (22) for parking cars is formed, holes (24)(24′) for the installation of securing devices (23)(23′) for securing the cars parked in the parking lot (22) are defined, a hoist (H) is installed on the ceiling of the first floor, and a chimney (1) and an elevator (2) and a stairway (3), which are placed outside the chimney (1), are installed in a stern portion; the funeral space (300) defined in the second floor, wherein the chimney (1) and the elevator (2) and a stairway (3), which are placed on one side of the chimney (1), are installed in a stern portion of the second floor of the ship (S), a crushing room (31) and a left article burning room (32) are located on the other side of the chimney (1), cremators (33)(33′), refrigeration rooms (34)(34′) and crushing rooms (31′)(31′″) are located on the left and right of the chimney (1), a working room (35) is located at a rear end, a plurality of bereaved family waiting rooms (36)(36′) is located on a stern portion, an ash introduction opening (37) having a wide upper end and a narrow lower end and a discharge passage (38) are defined in a deck of a stern portion, and a hoist (H′) is installed on a ceiling above the cremators (33)(33′); and the rest space (400) defined in the third floor, wherein the chimney (1) and the elevator (2) and a stairway (3), which are placed on one side of the chimney (1), are installed on a stern portion of the third floor of the ship (S), a plurality of rooms and warehouses (41) is located on the left and right of the chimney (1), and conveniences including a kitchen (42), a store
(43), a dining room (44) and a rest room (45) are located in a stem portion.

According to another aspect of the present invention, in the funeral space (300) defined in the second floor, the chimney (1) and the elevator (2) and a stairway (3), which are placed on one side of the chimney (1), are installed on the stern portion, a warehouse (39) is located on the other side of the chimney (1), and crushing rooms (31)(3T), a plurality of cremators (33)(33’), refrigeration rooms (34)(34’) and incense burning rooms (30)(30’) are located in the front and back of the chimney (1).

According to another aspect of the present invention, the hoist (H) is installed on the ceiling in the parking space (200) and can be moved forward, rearward, leftward and rightward, and is configured to raise and lower a hook mounted thereto so that a coffin having a corpse laid therein can be conveyed from a funeral vehicle to the elevator (2).

According to another aspect of the present invention, each of the cremators (33)(33’) is composed of a remains receiving table (301), a cooling room (302) and a combustion chamber (303).

According to another aspect of the present invention, the remains receiving table (301) is configured to be foldable.

According to another aspect of the present invention, the hoist (H’) installed on the ceiling above the cremators (33)(33’) is configured to be moved forward, rearward, leftward and rightward and to raise and lower a hook mounted thereto so that a coffin can be conveyed from the elevator (2) to the cremators (33)(33’).

According to still another aspect of the present invention, the cremators (33)(33’) are moved to the cooling room (302) and then to the combustion chamber (303) through forward movement of a conveyor (C), are cooled in the cooling room (302) through rearward movement of the conveyor (C) after cremation, and are seated on the remains receiving table (301) by the hoist (H’).

According to a still further aspect of the present invention, the combustion chamber (303) of each of the cremators (33)(33’) is compartmented into a main combustion chamber (303”) and a re-combustion chamber (303'”), the coffin is burnt by burners (304)(304’) respectively disposed therein, and combustion gas is discharged through an air mixing cooler (305), a gas cooler (306) and a filter (307) to the chimney (1).

Thanks to the above-described features, the present invention provides a ship which allows a funeral ceremony, cremation and ash scattering to be conducted on the sea to render an environment-friendly crematory and to solve the problems caused by the fact that crematories on the ground cannot satisfy the excessive demands for cremation and it is difficult to erect additional crematories due to the NIMBY syndrome and the substantial cost of erection.
Advantageous Effects

Therefore, the present invention provides the advantages described below. The excessive demands for cremation on land and the NIMBY syndrome opposing the erection of a crematory are solved. The ship can set out even under inclement weather conditions on the sea, having wind and waves below a predetermined level, so that a funeral procedure can be safely conducted on the sea. The ship has a parking space so that funeral vehicles can be directly driven from the ground onto the ship and parked in the parking space. Conveying devices are installed so that coffins having corpses laid therein can be easily conveyed to cremators. A plurality of conveniences which are necessary for cremation and funeral ceremonies are provided, so that a number of funeral procedures can be simultaneously implemented and thereby added value can be created through the operation of the funeral service ship. The structures of cremators are modified so that smokeless and odorless combustion gas can be discharged. An ash scattering procedure can be directly conducted on a ship. As a result, an environment-friendly funeral culture can be realized.

Brief Description of the Drawings

FIG. 1 is a side view illustrating the entire structure of a ship having facilities for a funeral ceremony and cremation in a hull in accordance with an embodiment of the present invention;

FIG. 2 is a plan view illustrating a parking space defined in a first floor of the ship according to the present invention;

FIG. 3 is a plan view illustrating a funeral space defined in a second floor of the ship according to the present invention;

FIG. 4 is a plan view illustrating a funeral space defined in a second floor of the ship according to a variation of the present invention;

FIG. 5 is a plan view illustrating a rest space defined in a third floor of the ship, according to the present invention; and

FIG. 6 is a systematic view illustrating the combustion system of cremators according to the present invention.

Best Mode for Carrying Out the Invention

Reference will now be made in greater detail to a preferred embodiment of the invention, an example of which is illustrated in the accompanying drawings.

FIG. 1 is a side view illustrating the entire structure of a ship having facilities for a funeral ceremony and cremation in a hull in accordance with an embodiment of the present invention, wherein a machine room and an engine room are defined in a basement, a foldable ramp for boarding vehicles into a parking space is installed on the stem portion of a first floor, a funeral space is defined in a second floor, an ash
scattering platform is placed on the stern of the second floor, a rest space is defined in a third floor, and a steering room is defined in a fourth floor. FIG. 2 is a plan view illustrating the parking space defined in the first floor of the ship according to the present invention, wherein a parking lot for accommodating hearses, portrait cars and cars for bereaved families is defined, holes for the installation of securing devices are defined, and a hoist for moving coffins having corpses laid therein is installed. FIGs. 3 and 4 are plan views illustrating the funeral space defined in the second floor of the ship according to the present invention, wherein a chimney extends through a stern portion, an elevator, stairs and warehouses are placed on opposite sides of the chimney, cremators, refrigeration rooms, crushing rooms and incense burning rooms are located in the front and back of the chimney or on the left and right of the chimney, a hoist is installed on the upper end of the funeral space, and bereaved family waiting rooms and administration rooms are placed on a stern portion. FIG. 5 is a plan view illustrating the rest space defined in the third floor of the ship according to the present invention, wherein the chimney extends through a stern portion, the elevator and stairs are placed on a side of the chimney, warehouses, rooms and toilets are located on the left and right of the chimney, and conveniences such as dining rooms, rest rooms, kitchens, stores, etc. are placed on a stern portion. FIG. 6 is a systematic view illustrating the combustion system of cremators according to the present invention, wherein the structure of the combustion system of cremators is composed of a remains receiving table, a refrigerating room, primary and secondary combustion chambers, an air cooler, a gas cooler, a filter and the chimney.

In the drawings, reference numeral 4 designates a crane, 5 and 5' toilets, 6 and 6' reception rooms, 7 a combustion office, 8 a transformer room, 9 the stem deck of a second floor, 10 a fire brick bogie, 308 and 308' suction blowers, 309 a gas cooling blower, 310 an air compressor, 311 an oil tank, 312 a cooling fan, and 313 and 313' automatic doors.

Referring to FIG. 1, according to the present invention, a ship S having a capacity of 1,500-2,000 tons is designed and fabricated so that a funeral procedure can be implemented on the sea using the ship S. The basement space 100 defined in the basement of the ship S and the navigating and steering space 500 defined in the fourth floor of the ship S are fabricated to have a machine room, an engine room, a steering room and various machine operating rooms, as in the case of a conventional ship, so that the ship S can set out even under inclement weather conditions on the sea, including during a storm advisory, and the funeral procedure can be safely conducted on the sea.

A foldable ramp 21 is installed on the stern portion of the first floor of the ship S so that vehicles for a coffin having a corpse laid therein, a bereaved family and a portrait
can be directly driven from the ground onto the ship S with the ramp 21 unfolded onto a quay alongside which the ship S is docked. A parking lot 22 is defined on the first floor so that the vehicles can be parked in the parking lot 22.

As can be readily understood from FIG. 2, about sixty vehicles, including twenty hearses, can be parked in the parking lot 22. In order to deal with rolling which occurs while the ship S moves, holes 24 and 24' are defined through a deck such that the chains of securing devices 23 and 23' are installed through the holes 24 and 24'. Therefore, with the wheels of the vehicles loaded on the hull of the ship S secured to the hull of the ship S using the securing devices 23 and 23', the ship S can set out to the sea to implement the funeral procedure.

In order to put out a coffin from a hearse, parked as described above, and convey the coffin to cremators 33 or 33', which will be described later, a hoist H, which is mounted to the upper end of the parking space 200 defined in the first floor, is moved forward, rearward, leftward and rightward as desired to reach the hearse, and a hook is lowered to lift the coffin. The coffin is then conveyed to an elevator 2, is loaded on the elevator 2, and is moved to the funeral space 300 defined in the second floor.

The coffin moved to the funeral space 300 defined in the second floor is transferred from the elevator 2 to a refrigeration room 34 or 34' by a hoist H'. After being temporarily kept in the refrigeration room 34 or 34', when the ship S reaches the open sea, the coffin, kept in the refrigeration room 34 or 34', is conveyed to a fire brick bogie 10, which is placed on a conveyor C installed at the front ends of the cremators 33 and 33', using the hoist H'. Then, by operating the conveyor C, the coffin placed on the fire brick bogie 10 is introduced into a cooling room 302 through an automatic door 313 of the cremators 33 or 33' and then into a combustion chamber 303 through an automatic door 313'.

In the combustion chamber 303, as shown in FIG. 6, double combustion is effected in a main combustion chamber 303' and a re-combustion chamber 303" by burners 304 and 304' which are provided with fuel from an oil tank 311. Combustion gas is primarily cooled by an air mixing cooler 305, which is supplied with air from a suction blower 308 and is secondarily cooled by a gas cooler 306 using a gas cooling blower 309. Then, dust is removed from the combustion gas by an air compressor 310 in a filter 307. In this way, smokeless and odorless exhaust gas can be discharged through the chimney 1 by a suction blower 308'.

When cremation is completed through the above-described processes, the fire brick bogie 10 is conveyed to the cooling room 302 through the operation of the conveyor C in the opposite direction. Then, remains, which are conveyed, are cooled by a cooling fan 312 while the suction blower 308 sucks air, and are discharged out of the cremators 33 or 33' by the conveyor C.
At this time, due to the fact that the fire brick bogie 10 is lifted by the hoist H' and a remains receiving table 301, which is foldably installed on the distal end of the conveyor C, is unfolded to be increased in height, the bereaved family or a worker can easily receive the remains. Then, the hoist H' can lower the fire brick bogie 10 onto the remains receiving table 301.

After the reception of the remains is completed, the remains are crushed through crushing work in a crushing room 31, 31' or 31". Thereafter, in a subsequent procedure, the ashes can be placed in a charnel house, a crypt, or a charnel tower. In the case of ash scattering, by pouring ashes into an ash introduction opening 37, which is defined on the rear end of the deck of a stern portion and has a wide upper end and a narrow lower end, the ashes are guided into the sea through a discharge passage 38 which opens into the sea. Thereupon, as a propeller, which is installed on a rudder at the lower end of the stern portion, is rotated, the ashes are scattered in the sea. In this way, environment friendly ash scattering can be conducted.

As for the funeral space 300 defined on the second floor, in the embodiment shown in FIG. 3, the chimney 1 and the elevator 2 and a stairway 3, which are placed on one side of the chimney 1, are installed on the stern portion of the second floor of the ship S to extend from the basement space 100 defined in the basement. The crushing room 31 and a left article burning room 32 are located on the other side of the chimney 1. The cremators 33 and 33', the refrigeration rooms 34 and 34' and the crushing rooms 31' and 31" are located on the left and right of the chimney 1. A working room 35 is located at a rear end, and a plurality of bereaved family waiting rooms 36 and 36' is located on a stern portion. The ash introduction opening 37, having a wide upper end and a narrow lower end, and the discharge passage 38 are defined on the deck of the stern portion, and the hoist H' is installed on a ceiling above the cremators 33 and 33'. In the embodiment shown in FIG. 4, the structure of a stern portion is similar to that shown in FIG. 3. In FIG. 4, the chimney 1 and the elevator 2 and a stairway 3, which are placed on one side of the chimney 1, are installed on the stern portion and extend from the basement space 100 defined in the basement. A warehouse 39 is located on the other side of the chimney 1, and the crushing rooms 31 and 31', the plurality of cremators 33 and 33', the refrigeration rooms 34 and 34' and the incense burning rooms 30 and 30' are located in the front and back of the chimney 1.

In the bereaved family waiting rooms 36 and 36' of the funeral space 300, CCTVs (not shown) are installed, so that the work being conducted in the cremators 33 and 33' can be viewed.

FIG. 5 illustrates the structure of the rest space 400 defined in the third floor of the ship S. The chimney 1 and the elevator 2 and a stairway 3, which are placed on one side of the chimney 1, are installed on the stern portion of the third floor of the ship S.
to extend from the basement space 100 defined in the basement. A plurality of rooms and warehouses 41 is located on the left and right of the chimney 1, and conveniences, including a kitchen 42, a store 43, a dining room 44 and a rest room 45, are located on a stem portion to provide convenience to the bereaved families and consolers.

[39] In the drawings and specification, there have been disclosed typical preferred embodiments of the invention and, although specific terms are employed, they are used in a generic and descriptive sense only, and not for purposes of limitation, the scope of the invention being set forth in the following claims.
Claims

[1] A ship (S) having facilities for a funeral ceremony and cremation in a hull, the ship (S) possessing a basement space (100) in a basement, in which a machine room and an engine room are located, a parking space (200) on a first floor, in which vehicles are parked, a funeral space (300) on a second floor, in which crematories and funeral service rooms are located, a rest space (400) on a third floor, in which conveniences are located, and a navigating and steering space (500) on a fourth floor, in which a steering room and various machine rooms are located, the ship (S) comprising:

the parking space (200) defined on the first floor, wherein a foldable ramp (21) is installed at a stern portion of the first floor of the ship (S), a parking lot (22) for parking cars is formed, holes (24)(24′) for installation of securing devices (23)(23′) for securing the cars parked in the parking lot (22) are defined, a hoist (H) is installed on a ceiling of the first floor, and a chimney (1) and an elevator (2) and a stairway (3), which are placed outside the chimney (1), are installed on a stern portion;

the funeral space (300) defined in the second floor, wherein the chimney (1) and the elevator (2) and a stairway (3), which are placed on one side of the chimney (1), are installed on a stern portion of the second floor of the ship (S), a crushing room (31) and a left article burning room (32) are located on the other side of the chimney (1), cremators (33)(33′), refrigeration rooms (34)(34′) and crushing rooms (31′)(31″) are located on the left and right of the chimney (1), a working room (35) is located at a rear end, a plurality of bereaved family waiting rooms (36)(36′) is located on a stern portion, an ash introduction opening (37) having a wide upper end and a narrow lower end and a discharge passage (38) are defined on a deck of a stern portion, and a hoist (H′) is installed on a ceiling above the cremators (33)(33′); and

the rest space (400) defined in the third floor, wherein the chimney (1) and the elevator (2) and a stairway (3), which are placed on one side of the chimney (1), are installed on a stern portion of the third floor of the ship (S), a plurality of rooms and warehouses (41) is located on the left and right of the chimney (1), and conveniences including a kitchen (42), a store (43), a dining room (44) and a rest room (45) are located on a stern portion.

[2] The ship according to claim 1, wherein, in the funeral space (300) defined in the second floor, the chimney (1) and the elevator (2) and a stairway (3), which are placed on one side of the chimney (1), are installed on the stern portion, a warehouse (39) is located on the other side of the chimney (1), and crushing
rooms (31)(31'), a plurality of cremators (33)(33'), refrigeration rooms (34)(34') and incense burning rooms (30)(30') are located in the front and back of the chimney (1).

[3] The ship according to claim 1, wherein the hoist (H) is installed on the ceiling in the parking space (200) to be moved forward, rearward, leftward and rightward, and is configured to raise and lower a hook mounted thereto, so that a coffin having a corpse laid therein can be conveyed from a funeral vehicle to the elevator (2).

[4] The ship according to claim 1 or 2, wherein each of the cremators (33)(33') is composed of a remains receiving table (301), a cooling room (302) and a combustion chamber (303).

[5] The ship according to claim 1, 2 or 4, wherein the remains receiving table (301) is configured to be foldable.

[6] The ship according to claim 1 or 2, wherein the hoist (H') installed on the ceiling above the cremators (33)(33') is configured to be moved forward, rearward, leftward and rightward and to raise and lower a hook mounted thereto so that a coffin can be conveyed from the elevator (2) to the cremators (33)(33').

[7] The ship according to claim 1 or 2, wherein the cremators (33)(33') are moved to the cooling room (302) and then to the combustion chamber (303) through forward movement of a conveyor (C), are cooled in the cooling room (302) through rearward movement of the conveyor (C) after cremation, and are seated on the remains receiving table (301) by the hoist (H').

[8] The ship according to claim 1 or 2, wherein the combustion chamber (303) of each of the cremators (33)(33') is compartmented into a main combustion chamber (303') and a re-combustion chamber (303''), the coffin is burnt by burners (304)(304') respectively disposed therein, and combustion gas is discharged through an air mixing cooler (305), a gas cooler (306), and a filter (307) to the chimney (1).
A. CLASSIFICATION OF SUBJECT MATTER

B63B 29/00(2006.01)

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 8 B63B 29/00, B63B 35/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

- Korean Patents and applications for inventions since 1975
- Korean Utility models and applications for Utility models since 1975
- Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKIPASS (KIPO internal) & keywords "ship", "boat", "vessel", "cremat" & "funeral"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

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<td>KR 102003004951 1 A (IM, TAE JTN) 25 June 2003 See claims 1,4 and figs Ib, 2b</td>
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  - "A" document defining the general state of the art which is not considered to be of particular relevance
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Date of the actual completion of the international search | Date of mailing of the international search report
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