

TITLE: "Vehicle provided with revolving turret".

The present invention relates to a vehicle, for instance a tracked vehicle or a rotated vehicle of military type, provided with revolving turret with artillery means.

To the state of the art are known armored vehicles movable by means of a system of tracks and provided with a central revolving turret upon which it is mounted the main armament of the truck which is usually constituted by a cannon. This cannon is provided with thermal sensors and usually has a system for the gas recovery and fire damping and is also hydraulically and/or electrically stabilized.

The turret is also usually provided with one or more machine guns and with various pointing and vision means or systems, such as a stabilized night/day periscopic viewer for the commander, a stabilized viewer with thermal view and laser telemeter for the gunner, apart from a fire controlling computer. This last one receives data from the various sensors of the vehicle and is able to process all the data for determining the best firing conditions.

Normally, in these types of vehicles, classified as tanks, or combat vehicles or troops transport vehicles, the interior where there is the position of the pilot and

the interior of the turret are separated between them, for safety reasons united with strength reasons of the turret in general.

The Applicant has realized a vehicle provided with revolving turret with armament which communicates with the interior of the vehicle through an emergency hatch, preferably armor-plated, which opens at the bottom or the basis of the turret toward the interior of the armor-plated vehicle.

An aspect of the present invention relates to a vehicle provided with revolving turret having the characteristics of the attached claim 1.

The characteristics and the advantages of the vehicle according to the present invention will be clearer and evident from the following description, exemplificative and non-limiting, of a form of embodiment of the invention with reference to the attached figures wherein:

- Figure 1 shows a schematic view of the vehicle provided with revolving turret according to the present invention;
- Figure 2a shows a schematic view from the bottom of the turret according to the present invention;
- Figure 2b shows a lateral schematic view of the turret according to the present invention;

- Figure 2c shows a schematic view from the top of the turret according to the present invention;
- Figure 3a shows a perspective schematic view of the turret according to the present invention;
- Figure 3b shows a front schematic view of the turret according to the present invention;
- Figure 3c shows a magnified particular of the turret in its lower part according to the present invention.

With reference to the above mentioned figures the vehicle according to the present invention comprises an armor-plated cockpit 2 and preferably a track motion system 3 or alternatively rotated and is provided with a central revolving turret 4 upon which is mounted main armament 5 which is usually constituted by a cannon or by another weapon or actuator.

This cannon can be provided with thermal sensors and usually has a system for the gas recovery and fire damping and is also hydraulically stabilized.

The turret is also usually provided with one or more machine guns 6 and with various pointing and vision means or systems, such as a stabilized night/day periscopic viewer 7 for the commander, a stabilized viewer with thermal view and laser telemeter for the gunner, apart from a fire controlling computer. The latter receives data from the various sensors of the vehicle and is able

to process all the data for determining the best firing conditions.

The turret is connected to the armor-plated cockpit of the vehicle by means of a circumferential fifth-wheel 8 which allows the complete revolving (by 360°) of the turret with respect to a vertical axis passing through the centre of this fifth-wheel.

According to the present invention, basis 9 of this turret presents a hatch 10 for the communication between the interior of the turret where there are the controls for the main and auxiliary armaments, and the interior of cockpit 2 of the vehicle.

This hatch permits the access to the turret not only from outside and from the top of the vehicle, as traditionally happens, but also by the personnel who is inside the cockpit itself of the vehicle, for the purpose of, for instance, looking over through episcopes, refilling the ammunition chest, carrying out emergency shots, having another escape way from the cockpit of the vehicle itself and carrying out maintenance operations.

Preferably, this hatch opens at the bottom or basis of the turret toward the interior of the cockpit of the vehicle by means of a couple of opposed hinges 11.

Preferably, this hatch has a quadrangular or rectangular shape.

The hatch is also provided with closure means 12 and grasping means 13 which are accessible from the interior of the cockpit of the vehicle.

The turret according to a peculiar characteristic of the present invention does not have parts which enter the hull or the cockpit of the vehicle. The only communication or connection element is hatch 10.

CLAIMS

1) A vehicle provided with a central revolving turret;

said vehicle comprises:

- an armor-plated cockpit (2), comprising an interior areas;
- an armor-plated overhead turret having an interior area, the turret being with no parts which enter the cockpit (2), the turret being configured for mounting a main armament (5);
- a system for moving the central revolving overhead turret (4), the system moving the central revolving overhead turret comprising a circumferential fifth-wheel (8),

said overhead turret comprises a base (9) and being connected to the armor-plated cockpit by said circumferential fifth-wheel (8) that allows the revolving of the overhead turret around a substantially vertical axis that passes through a center of said fifth-wheel,—characterized in that said base (9), of said overhead turret, presents a armor-plated hatch (10), that opens at the base of the overhead turret toward the interior of the cockpit of the vehicle by means of a pair of opposed hinges (11), for the communication between the interior of the turret and the cockpit of the vehicle.

2) A vehicle according to claim 1, wherein said hatch has a quadrangular or rectangular shape.

3) A vehicle according to claim 1, wherein said hatch is provided with closure means and grasping means that are accessible from the cockpit of the vehicle.