

Infantry Combat Armored Vehicle with Armored Wheels

The Infantry Combat Armored Wheeled Vehicle - ICAWV - with the internal combustion engine switched off, is invisible to the heat locators and heat guiding missiles, etc. It is also elusive for noise-locators. It is also invisible to radars detecting planes because they do not catch terrestrial targets, even low-flying such as Cruise missiles, for example.

The bottom links are from the global patent database and are published for free access on the website of the European Patent Organization in Munich. These patents also apply to the ICAWV.

The original patents are available in Bulgarian, which can be downloaded from the links below - on the "original document" button

https://worldwide.espacenet.com/publicationDetails/biblio?DB=EP&ODOC&II=20&ND=3&adjacent=true&locale=en_EP&FT=D&date=20070330&CC=BG&NR=109304A&KC=A#

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The above technical solutions concern the ICAWV themselves.

It is well known that the most vulnerable place of the armored personnel carriers (regardless of their bumpers) is their tires, which are easily sprayed by gun bullets and even easier than anti-personnel mines. The patented armored wheel avoids these drawbacks.

We have equipped a small facility for manufacturing of our Patented armored wheels with respective engineers and workers.

The novel wheel coaxial structure includes wheel with outer solid fire resistant rubber tire fitted around inflatable tire with armored side disc. Newly invented cage is integrated over the inflatable wheel. It is a supported rim skeleton of outside wheel armor. Inside armor is fitted under solid tire protector. According to the invention, preparing for patent applications, under protector armor includes multiply interconnecting panels. Each of them is with a top and back, right and left side, and a top and opposed bottom. Every panel includes a rigid sheet of metal and a spall lining enveloping the rigid sheet of metal. The panel ballistic armor system includes a rigid sheet of metal, an adhesive sheet, and an (aramid) fiber lining, all enveloped by the spall lining.

An optional ballistic armor system, according to second developed invention, comprising at least one metal strike face plate, a laminate composite backing material secured to the at least one metal strike face plate and an optional air space provided between the metal strike face plate and the laminate composite backing material. The metal strike face plate or plates has a predetermined defined thickness and has a plurality of slotted holes set at an angle relative to the vertical orientation or axis of the metal strike face plate, or which are straight. The plurality of slotted holes is sufficiently small to prevent the passage of a projectile or fragment therethrough. The laminate composite backing material comprises at least one material selected from an aramid fiber material, S-glass, E-glass, polypropylene and is provided in combination with a polymer-based resin material.

See video at:

<https://www.youtube.com/channel/UCUmJ8xFQLnHQciPgYjUggeA>