

Title (en)
PROJECTILE OR WARHEAD

Title (de)
GESCHOSS ODER GEFECHTSKOPF

Title (fr)
PROJECTILE OU OGIVE

Publication
EP 1516153 A1 20050323 (DE)

Application
EP 03730148 A 20030603

Priority
• EP 03730148 A 20030603
• EP 0305792 W 20030603
• EP 02014007 A 20020626

Abstract (en)
[origin: WO2004003460A1] The invention relates to a hybrid polyvalent projectile (multi-purpose projectile), a hybrid polyvalent warhead or flying body with a fragmentation, discoid, annular, hollow or penetrator charge head in combination with a module of an active laterally-effective penetrator (ALP). Active supports using the ALP and PELE (Penetrator with high Lateral Effect) principles including KE penetrators and projectiles with fragmentation heads or devices for acceleration of axial action bodies are optimally linked whereby the pyrotechnic unit serves both the ALP and the pyrotechnically active piece/fragmentation piece as a pressure generating/accelerating element. The reduced terminal ballistic power of ALP projectiles on low impact velocities is compensated by an additional device which either brings about the axial effect as a pyrotechnical unit (penetrator, hollow, disc or ring charge) or accelerates fragments in the desired directions. Projectiles or warheads are thus achieved with a capacity balance and effective scope not previously achievable and not to be exceeded in the multiplicity of combinations and total effect spectrum. Figures 1A to 1C show examples with external ballistic shells (5). In figure 1A a short construction (for example as spin-stabilised projectile) (1) with an element (7A) controlled by means of the signal line (10) with a fragment (11) accelerating and simultaneously pressure generating action for the ALP projectile piece with pressure transfer medium (6) and shell (4). Figure 1B a slimmer/longer layout (2) with a fragment accelerating element (7B) for the fragmentation charge (12) and a further pressure generating element (9) for the ALP projectile section. Figure 1C shows an aerodynamically stabilised projectile (3) with a hollow charge head (13), whereby the propellant for the HL-section with any configuration of trigger device (8) simultaneously provides the pressure for the connected ALP module.

IPC 1-7
F42B 12/20

IPC 8 full level
F42B 12/20 (2006.01)

CPC (source: EP US)
F42B 12/204 (2013.01 - EP US); **F42B 12/34** (2013.01 - EP US); **F42B 12/367** (2013.01 - EP US)

Citation (search report)
See references of WO 2004003460A1

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RU2486436C1; RU2486432C1; RU2486434C1; DE102012012409B4; WO2010099890A1; EP3034990B1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2004003460 A1 20040108; AT E538359 T1 20120115; AU 2003240740 A1 20040119; EP 1516153 A1 20050323; EP 1516153 B1 20111221; ES 2379546 T3 20120427; NO 20050278 L 20050118; NO 332833 B1 20130121; PT 1516153 E 20120330; US 2004069176 A1 20040415; US 2007006766 A1 20070111

DOCDB simple family (application)
EP 0305792 W 20030603; AT 03730148 T 20030603; AU 2003240740 A 20030603; EP 03730148 A 20030603; ES 03730148 T 20030603; NO 20050278 A 20050118; PT 03730148 T 20030603; US 19814405 A 20050805; US 60337003 A 20030625