Title (en)

MISSILE

Publication

EP 0238724 B1 19910515 (DE)

Application

EP 86117113 A 19861209

Priority

DE 3546269 A 19851228

Abstract (en)

[origin: US4712748A] The missile (10) comprises at its rear end in flying direction (A) tail fins (14, 16, 18) whose front edges (14F, 16F, 18F) are sharpened at both sides. Intermediate the tail fins, outflow openings (22) are arranged on the body (12) to eject therethrough fuel into the supersonic external flow forming about the body (12). Due to supersonic flow, there are generated shock wave fronts extending from the front edges (14F, 16F, 18F) and being reflected by adjacent tail fins, said shock waves of the shock wave fronts interfering with the supersonic flow passing along the body so that recirculation fields are formed between the tail fins. The said recirculation fields are formed within the range of corner flow and outlfow openings (22) so that fuel discharged from the latter is burnt down with the formation of a locally stable flame. As a result of the volume increase resulting from the combustion, a high-pressure area develops between the tail fins. The pressure produces a force directed transversely to the flying direction and causing a control of the missile (10).

IPC 1-7

F42B 10/66

IPC 8 full level

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IPC 8 main group level

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Cited by

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