Title (en)
INTERCEPTOR MISSILE AND METHOD FOR STEERING SAME

Title (de)
ABFANGFLUGKÖRPER UND VERFAHREN ZU DESSEN LENKUNG

Title (fr)
MISSILE D'INTERCEPTION ET SON PROCÉDÉ DE GUIDAGE

Publication
EP 4232771 A1 20230830 (DE)

Application
EP 21791293 A 20211008

Priority
• DE 102020006465 A 20201021
• EP 2021077884 W 20211008

Abstract (en)
[origin: WO2022084068A1] In a method for steering a steerable interceptor missile (2) for intercepting a moving target (8), during a midcourse phase (PM) of the interception, which interceptor missile is driven by an engine (10), the interceptor missile (2) is steered with the aid of real steering commands, which are produced at respective steering times on the basis of free control parameters (SP), which free control parameters are in the form of a current parameter vector (10), the free control parameters (SP) are continually and repeatedly optimized during the midcourse phase (PM) with the aid of an optimization method (14) for optimizing the control parameters (SP), the optimization method (14) is carried out in parallel with the actual steering, newly learned information about the movement of the target (8) and/or information about the flight of the interceptor missile (2) is used in the optimization method (14) as soon as said information is available, and optimized control parameters (SP) are accepted into the current parameter vector (10) after said optimized control parameters are provided by the optimization method (14). An interceptor missile (2) contains the current parameter vector (10) and a control and evaluation unit (50) for carrying out the method according to the invention.

IPC 8 full level
F41G 7/22 (2006.01); **G05D 1/12** (2006.01)

CPC (source: EP IL KR US)
F41G 7/224 (2013.01 - EP IL KR); **F41H 11/02** (2013.01 - EP IL KR US); **F42B 10/60** (2013.01 - EP IL KR US)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
WO 2022084068 A1 20220428; AU 2021366148 A1 20230622; AU 2021366148 A9 20240502; AU 2021366148 B2 20240718; DE 102020006465 A1 20220421; DE 102020006465 B4 20220630; EP 4232771 A1 20230830; EP 4232771 B1 20240911; EP 4232771 C0 20240911; IL 301348 A 20230501; IL 301348 B1 20240101; IL 301348 B2 20240501; KR 20230100722 A 20230705; US 2023251070 A1 20230810

DOCDB simple family (application)
EP 2021077884 W 20211008; AU 2021366148 A 20211008; DE 102020006465 A 20201021; EP 21791293 A 20211008; IL 30134823 A 20230313; KR 20237014024 A 20211008; US 202318301381 A 20230417