Title (en)

Active material for an infra-red decoy with area effect which emits spectral radiation upon combustion

Title (de)

Wirkmasse für ein beim Abbrand spektral strahlendes Infrarotscheinziel mit Raumwirkung

Title (fr)

Masse active pour une cible à rayonnement infrarouge à émission spectrale lors d'une combustion avec effet spatial

Publication

EP 2530064 B1 20190828 (DE)

Application

EP 12004096 A 20120526

Priority

DE 102011103483 A 20110603

Abstract (en)

[origin: EP2530064A2] Effective mass for burning spectrally radiating pyrotechnic infrared decoy with spatial effect, comprises a fuel, an oxidizing agent, a binder, and a carbon-containing substance, where the fuel and the oxidizing agent are selected such that the oxidizing agent oxidizes the fuel after its ignition in an exothermic primary reaction with the formation of a temperature of at least 1000 K, and the carbon-containing substance is selected such that the substance is pyrolyzed in endothermal manner by the heat released during the primary reaction, and releases gas that is combustible in air. Effective mass for burning spectrally radiating pyrotechnic infrared decoy with spatial effect, comprises a fuel, an oxidizing agent, a binder, and a carbon-containing substance, where the fuel and the oxidizing agent are selected such that the oxidizing agent oxidizes the fuel after its ignition in an exothermic primary reaction with the formation of a temperature of at least 1000 K, and the carbon-containing substance is selected such that the substance is pyrolyzed in endothermal manner by the heat released during the primary reaction, and releases gas that is combustible in air. Effective primary reaction with the formation of a temperature of at least 1000 K, and the carbon-containing substance is selected such that the substance is pyrolyzed in endothermal manner by the heat released during the primary reaction, and releases gas that is combustible in air. The redox potential of the fuel is at least higher than the redox potential of carbon. The substance and its quantitative proportion of the effective mass are selected such that the temperature of the effective mass after its ignition does not exceed 2000 K due to heat removal by endothermic pyrolysis. The effective mass is composed such that it releases solid particles during its combustion.

IPC 8 full level

C06C 15/00 (2006.01)

CPC (source: EP) C06C 15/00 (2013.01)

Cited by

AU2013257394B2

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

DOCDB simple family (publication)

EP 2530064 A2 20121205; EP 2530064 A3 20170913; EP 2530064 B1 20190828; DE 102011103483 A1 20121206

DOCDB simple family (application)

EP 12004096 A 20120526; DE 102011103483 A 20110603