Title (en)

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

Title (de)

Wirkmasse für ein beim Abbrand im Wesentlichen spektral strahlendes Infrarotscheinziel mit Raumwirkung

Title (fr)

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

Publication

EP 2602239 A2 20130612 (DE)

Application

EP 12007978 A 20121128

Priority

DE 102011120454 A 20111207

Abstract (en)

Active mass (10) for a pyrotechnic infrared decoy, which exhibits spatial effect and spectrally radiates during combustion, comprises a first active mass component (12) spectrally radiating during combustion and a second active mass component (14) spectrally radiating during combustion. The first- and second active mass components comprise at least one fuel and an oxidizing agent. The active mass is nonhomogeneous such the first active mass component forms a matrix, in which particles formed from the second active mass component are embedded. Active mass (10) for a pyrotechnic infrared decoy, which exhibits spatial effect and spectrally radiates during combustion, comprises a first active mass component (12) spectrally radiating during combustion and a second active mass component (14) spectrally radiating during combustion. The first- and second active mass components comprise at least one fuel and an oxidizing agent. The active mass is nonhomogeneous such the first active mass component forms a matrix, in which particles formed from the second active mass component are embedded. The first- and second active mass components are selected such that the ratio of the combustion rate of the first active mass component to the combustion rate of the second active mass component is 2:1, and the ratio between the specific output of the emitted radiation in the wavelength region of 3.5-4.6 mm to specific output of the emitted radiation in the wavelength region of 1.8-2.6 mm, is 5:1, when combustion of the first- and the second active mass components take place separately in air. An independent claim is also included for use of active mass for producing pyrotechnic infrared decoy moving at a speed of at least 150 m/second, during combustion.

Abstract (de)

Die Erfindung betrifft eine Wirkmasse für ein beim Abbrand im Wesentlichen spektral strahlendes pyrotechnisches Infrarotscheinziel mit Raumwirkung, umfassend eine erste beim Abbrand spektral strahlende Wirkmassenkomponente und eine zweite beim Abbrand spektral strahlende Wirkmassenkomponente, wobei die erste und die zweite Wirkmassenkomponente jeweils mindestens einen Brennstoff und ein Oxidationsmittel umfassen, wobei die Wirkmasse dadurch inhomogen ist, dass die erste Wirkmassenkomponente eine Matrix bildet, in der aus der zweiten Wirkmassenkomponente gebildete Partikel eingebettet sind.

IPC 8 full level

C06C 15/00 (2006.01); **F41J 2/02** (2006.01)

CPC (source: EP)

C06B 45/04 (2013.01); **C06C 15/00** (2013.01); **F41J 2/02** (2013.01)

Citation (applicant)

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