C06D

MEANS FOR GENERATING SMOKE OR MIST; GAS-ATTACK COMPOSITIONS; GENERATION OF GAS FOR BLASTING OR PROPULSION (CHEMICAL PART) (fuels C10)

Definition statement

This place covers:

Chemical aspects of generating smoke or mist.

Generation of pressure gas, e.g. for blasting cartridges, starting cartridges, rockets.

Compositions for gas-attacks ,e.g. toxic, irratating or debilitating gas-compositions..

Relationships with other classification places

This subclass does not cover chemical compounds or their preparations as such, which subject matter is covered by classes C01 (inorganic chemistry), C07 (organic chemistry) and C08 (organic macromolecular compounds).

References

Limiting references

This place does not cover:

Devices for generating heat, smoke, or fog in gardens, orchards, or forests, e.g. to prevent damage by frost	A01G 13/06
Compositions used as biocides, pest repellants or attractants, or plant growth regulators	A01N
E.g.	A01N 25/18

Informative references

Attention is drawn to the following places, which may be of interest for search:

Apparatus for generating gases	B01J 7/00
Inflatable occupant restraints or confinements characterized by the inflation source or means to control inflation fluid flow	B60R 21/26
Explosive compositions containing an oxidizer, fuels for rocket engines intended for reaction with an oxidant other than air	C06B
Fuels, e.g. natural or synthetic natural gas	C10
Rocket-engine plants, i.e. plants carrying both fuel and oxidant therefor; Control thereof	F02K 9/00
Non chemical aspects of generating combustion products of high pressure of high velocity	F23R
Smoke-pot projectors	F42B 5/155
Smoke-producing projectiles, missiles or mines	F42B 12/48

C06D 3/00

Generation of smoke or mist (chemical part) (compositions used as biocides, pest repellants or attractants, or plant growth regulators A01N 25/18)

Definition statement

This place covers:

Generation of smoke or mist, e.g.

- classic smokes are based on highly hygroscopic salts being acids and forming a water droplet fog with air humidity
- Demisting compositions.
- Weather modifying compositions such as making rain.
- with expanded graphite particles
- by combustion of pyrotechnic compositions comprising a chlorine donor (e.g. potassium chloride, sodium chloride, chlorinated rubber, condensed halogenated carbon compound) that will generate upon combustion abundants amounts of sublimable metal chlorides wich produce smoke
- by combustion of pyrothechnic composition with sublimation/vaporization of an organic dye
- by combustion of pyrotechnic composition comprising zinc oxide, ammonium cloride and polyvinyl chloride
- by combustion of pyrotechnic smoke generating composition comprising red phosphorous
- by incomplete combustion of aromatic compounds

References

Limiting references

This place does not cover:

Compositions used as biocides, pest repellants or attractants, or plant growth regulators	A01N 25/18

Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions containing particulate metal, alloy, boron, silicon, selenium or tellurium with at least one oxygen supplying material which is either a metal oxide or a salt, organic or inorganic, capable of yielding a metal oxide	C06B 33/00 - C06B 33/14
Compositions containing free phosphorus or a binary compound of phosphorus, except with oxygen	C06B 39/00 - C06B 39/06

Synonyms and Keywords

In patent documents, the following words/expressions are often used as synonyms:

- "repellent" and "repellant"

C06D 5/00

Generation of pressure gas, e.g. for blasting cartridges, starting cartridges, rockets (explosive compositions containing an oxidizer, fuels for rocket engines intended for reaction with an oxidant other than air C06B)

Definition statement

This place covers:

Generation of pressure gas

Relationships with other classification places

Explosive compositions containing an oxidizer, fuels for rocket engines intended for reaction with an oxidant other than air are classified in C06B.

The compositions in C06B are mainly classified according to their chemical composition. In C06B 47/00 monopropellants and bipropellants are classified according to their composition.

In C06D 5/08 and C06D 5/10, the compositions are classified according to their physical presence in the system like being a liquid or a solid and the compositions classified in those groups have to be suitable to produce a pressure gas.

C06D 5/02

by decompressing compressed, liquefied or solidified gases

Definition statement

This place covers:

CO2 - blasting.

C06D 5/04

by auto-decomposition of single substances

Definition statement

This place covers:

Catalysts for the auto-decomposition

For example decomposition of hydrogen peroxide, hydrazine.

References

Informative references

Attention is drawn to the following places, which may be of interest for search:

Compositions in which the components are separately stored until the moment of burning or explosion and one component contains hydrazine or a hydrazine derivative	C06B 47/08

C06D 5/06

by reaction of two or more solids

Definition statement

This place covers:

Pressure gas generation by reaction of two or more solids, e.g. compositions for inflatable vehicle safety bags (Airbags).

C06D 5/08

by reaction of two or more liquids

Definition statement

This place covers:

Pressure gas generation by reaction of two or more liquids, e.g.

diergols, bipropellant. Mixtures of oxygen and a CxHy compound.

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Diergols, bipropellant	compound composed of two liquid propellants

C06D 5/10

by reaction of solids with liquids

Definition statement

This place covers:

Pressure gas generation by reaction of solids with liquids, e.g.

Hybrid propellants (lithergols)

Glossary of terms

In this place, the following terms or expressions are used with the meaning indicated:

Lithergols	compound composed of one solid propellant and one liquid propellant

C06D 7/00

Compositions for gas-attacks

Definition statement

This place covers:

Gas-attacks compositions, e.g.

- non-lethal defense sprays comprising tear gas compositions
- nerve gas compositions
- pyrotechnic compositions for disseminating various compounds such as tear gas components