

## A62C

**FIRE-FIGHTING** (fire-extinguishing compositions, use of chemical substances in extinguishing fires [A62D 1/00](#); spraying, applying liquids or other fluent materials to surfaces in general [B05](#); alarm arrangements [G08B](#), e.g. fire alarms actuated by smoke or gases [G08B 17/10](#))

### Definition statement

*This place covers:*

Devices, apparatus and methods to prevent fires from happening, and to fight or contain active fires.

### References

#### Limiting references

*This place does not cover:*

Fire-extinguishing compositions	<a href="#">A62D 1/00</a>
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#### Informative references

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

Spraying, applying liquids or other fluent materials to surfaces in general	<a href="#">B05</a>
Fireproofing materials	<a href="#">C09K 21/00</a>
Fire alarms and detectors without automatic activation	<a href="#">G08B 17/00</a>

## A62C 2/00

**Fire prevention or containment** ([A62C 3/00](#) takes precedence; flame traps [A62C 4/00](#))

### Definition statement

*This place covers:*

Devices to prevent or contain fires.

### References

#### Limiting references

*This place does not cover:*

Devices for specific objects or places	<a href="#">A62C 3/00</a>
Flame traps allowing air to pass, but not flames	<a href="#">A62C 4/00</a>

#### Informative references

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

Methods to fight fires (e.g. by inerting)	<a href="#">A62C 99/00</a>
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## Glossary of terms

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

Intumescent	permanently changing properties under the influence of high temperatures, best known example is graphite, which expands when subjected to large amounts of heat, thus forming a layer which isolates one side from the heat on the other side
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## A62C 2/06

### Physical fire-barriers

#### Definition statement

*This place covers:*

Devices which physically prevent fire from passing the point where the device is installed.

#### References

##### Limiting references

*This place does not cover:*

Layered materials	<a href="#">B32B</a>
Fire proof paints or coatings	<a href="#">C09D 5/18</a>
Fireproofing materials	<a href="#">C09K 21/00</a>

##### Informative references

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

Emergency operation for doors and windows	<a href="#">E05F 1/002</a> , <a href="#">E05F 15/72</a>
Curtains	<a href="#">E06B</a>
Devices for use where pipes or similar pass through walls or partitions	<a href="#">F16L 5/00</a> , <a href="#">F16L 5/04</a>
Air-flow control members for ventilation, air-conditioning or similar	<a href="#">F24F 13/10</a>

## A62C 2/065

**{having as the main closure device materials, whose characteristics undergo an irreversible change under high temperatures, e.g. intumescent}**

#### References

##### Informative references

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

Laminated safety glass or glazing with intumescent layers for fire protection	<a href="#">B32B 17/10311</a>
Fireproof doors or similar closures, or adaptations of fixed constructions therefor, with sealing arrangements between the door or window and its frame, e.g. intumescent seals specially adapted therefor	<a href="#">E06B 5/164</a>

Flameproof or explosion-proof arrangements structurally associated with lighting devices using intumescent material, i.e. using materials which swells up as a result of heat exposure	<a href="#">F21V 25/125</a>
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## **A62C 3/00**

**Fire prevention, containment or extinguishing specially adapted for particular objects or places** ({in oil wells [E21B 29/08](#), [A62C 35/00](#); in mines or tunnels [E21F 5/00](#) } ; for nuclear reactors [G21C 9/04](#))

### **Definition statement**

*This place covers:*

Devices and Methods which are used for specific circumstances or in specific places.

### **References**

#### **Limiting references**

*This place does not cover:*

Fire fighting in oil wells	<a href="#">E21B 35/00</a>
Prevention of fires in mines or tunnels	<a href="#">E21F 5/00</a>
In turbines or jet engines	<a href="#">F02C 7/25</a>
For nuclear reactors	<a href="#">G21C 9/04</a>

#### **Informative references**

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

Extinguishing devices for cigarettes, pipes, ash-trays, etc...	<a href="#">A24F</a>
Christmas tree decorations including fire fighting/fire prevention means	<a href="#">A47G 33/0872</a>
Floating covers for liquids in large containers	<a href="#">B65D 88/34</a>
Prevention of fire due to dust build-up	<a href="#">E21F 5/00</a>
Forming a firebreak device for pipes, cables or similar passing through walls or partitions	<a href="#">F16L 5/04</a>
Extinguishing-devices, e.g. for blowing-out or snuffing candle flames	<a href="#">F23Q 25/00</a>
Heat or fire protective means for installations of cables or lines in buildings or vehicles	<a href="#">H02G 3/0412</a>

## **A62C 4/00**

**Flame traps allowing passage of gas but not of flame or explosion wave**

### **Definition statement**

*This place covers:*

Devices which stop the expansion of pressure waves or fires by their constructional features, e.g. by cooling down the passing gas, thus suffocating the flame.

## References

### Limiting references

*This place does not cover:*

Pressure relief valves/safety valves	<a href="#">F16K 17/00</a>
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## A62C 5/00

### Making of fire-extinguishing materials immediately before use (nozzles [A62C 31/02](#))

#### Definition statement

*This place covers:*

Devices and methods which allow the preparing of extinguishants directly before use, e.g. by mixing water and additives on their way to the fire-extinguishing nozzle.

## References

### Limiting references

*This place does not cover:*

Nozzles for fire-extinguishing	<a href="#">A62C 31/02</a>
Chemical composition of fire extinguishants	<a href="#">A62D 1/00</a>

### Informative references

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

Flow mixers for foam	<a href="#">B01F 25/3111</a>
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## A62C 13/00

### Portable extinguishers which are permanently pressurised or pressurised immediately before use ([A62C 11/00](#) takes precedence)

## References

### Limiting references

*This place does not cover:*

Portable fire extinguisher with manually-operated pumps	<a href="#">A62C 11/00</a>
Filling of pressurized vessels	<a href="#">F17C 13/00</a>

### Informative references

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

Pressurized containers/vessels	<a href="#">F17C 1/00</a>
Mounting devices for pressurized containers	<a href="#">F17C 13/08</a>

## A62C 15/00

Extinguishers essentially of the knapsack type (knapsacks, carrying-frames, pack-frames carried on the body [A45F 3/00](#))

### References

#### Limiting references

*This place does not cover:*

Supporting devices for portable extinguishers	<a href="#">A62C 13/78</a>
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#### Informative references

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

Knapsacks, carrying-frames, pack-frames carried on the body	<a href="#">A45F 3/00</a>
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## A62C 19/00

Hand fire-extinguishers in which the extinguishing substance is expelled by an explosion; Exploding containers thrown into the fire

### References

#### Informative references

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

Launchers for projectiles	<a href="#">F41F</a>
Explosive charges in projectiles	<a href="#">F42B 12/00</a>

## A62C 29/00

Fire-fighting vessels or like floating structures

### Definition statement

*This place covers:*

Vehicles or platforms floating in water adapted to fight fires (on other ships or platforms).

### References

#### Limiting references

*This place does not cover:*

Fire extinguishing in ships or other vessels floating in water	<a href="#">A62C 3/10</a>
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#### Informative references

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

Fire extinguishing in ships	<a href="#">A62C 3/10</a>
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## A62C 31/00

Delivery of fire-extinguishing material (pumps [F04](#); {suction or pressure} hoses, {joints or couplings therefor} [F16L](#))

### Definition statement

*This place covers:*

Devices which are used to deliver the fire-extinguishants to the point where they are needed.

### References

#### Limiting references

*This place does not cover:*

Pumps	<a href="#">F04</a>
Hoses and accessories therefore	<a href="#">F16L</a>

#### Informative references

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

Hose accessories specific to fire fighting	<a href="#">A62C 33/00</a>
Fire-extinguishing sprinklers with integrated fire sensor (e.g. glass bulb)	<a href="#">A62C 37/08</a>
Nozzles	<a href="#">B05B 1/00</a>
Hydrants in streets	<a href="#">E03B 9/02</a>
Water cannons	<a href="#">F41B 9/00</a>

## A62C 33/00

### Hose accessories

### References

#### Informative references

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

Making tubes of special shapes, e.g. T-splits, connecting pieces	<a href="#">B21C 37/15</a>
Reels for filamentary or thin materials	<a href="#">B65H 75/00</a>
Devices for coupling hoses	<a href="#">F16L</a>

### Special rules of classification

Since most devices for collecting fire hoses do this by ensuring that the fire hose is empty (thus dry), devices for collecting hoses are in [A62C 33/02](#).

## A62C 35/00

Permanently-installed equipment ([A62C 31/00](#), [A62C 33/00](#), [A62C 37/00](#) take precedence; for forming water curtains [A62C 2/08](#))

### References

#### Limiting references

*This place does not cover:*

Devices for forming water curtains	<a href="#">A62C 2/08</a>
Delivery of fire-extinguishing material	<a href="#">A62C 31/00</a>
Control of fire fighting equipment	<a href="#">A62C 37/00</a>

## A62C 37/00

Control of fire-fighting equipment (heat-sensitive devices [G01K](#))

### References

#### Informative references

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

Heat-sensitive devices in general	<a href="#">G01K</a>
Fire alarms without automatic activation	<a href="#">G08B 17/00</a>

## A62C 99/00

Subject matter not provided for in other groups of this subclass

### Definition statement

*This place covers:*

Special methods of fire fighting (e.g. inerting), training methods and equipment for training fire-fighting as well as any devices for fire-fighting which cannot be classified in other groups.

### References

#### Limiting references

*This place does not cover:*

Heat-resistant garments	<a href="#">A62B 17/00</a>
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### Special rules of classification

If devices use certain methods which are represented by a subgroup in [A62B 99/00](#), they will be classified in the respective device group and in the respective method group. For example, devices to inert luggage compartments of airplanes will be classified in [A62C 3/08](#) and [A62C 99/0018](#).