

G21J

NUCLEAR EXPLOSIVES; APPLICATIONS THEREOF (electric or magnetic analogue computers, e.g. simulators, for nuclear physics [G06G 7/54](#))

Definition statement

This place covers:

Explosives generated by uncontrolled nuclear reactions, e.g. nuclear fission and fusion bombs, and applications thereof.

References

Informative references

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

Explosive chemical composition	C06B
Methods for stimulating production of oil, gas, water, soluble or meltable materials or a slurry of minerals from wells by use of explosives	E21B 43/263
Conventional explosive devices	F42B
So-called "dirty bombs" where conventional explosives are used to dispense radioactive substances	F42B 12/46
Individual measuring devices may be classified as the measuring device per se	G01
Analogue computers for simulating nuclear explosions	G06G 7/54
Nuclear fusion reactors (i.e. controlled nuclear fusion)	G21B
Nuclear fission reactors (i.e. controlled nuclear fission)	G21C
Nuclear power plant	G21D

Special rules of classification

Classification of both important (invention) information and additional information is obligatory.

Glossary of terms

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

Uncontrollable reaction	Any fission or fusion reaction where event initiators (e.g. neutrons in the fission process) are produced in a number greater than required to sustain a chain reaction and where there is no mechanism to selectively moderate the reaction, e.g. a fission reactor where the operator has simply opted not to moderate or has failed to moderate the reaction is not a nuclear explosive device in the context of this subclass
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Synonyms and Keywords

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

- "device" and "bomb"
- "thermonuclear bomb", "hydrogen bomb", "H-bomb" and "fusion bomb"
- "A-bomb", "atom bomb" and "fission bomb"

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Peaceful applications of nuclear explosive devices {(obtaining oil, gas, water, soluble or meltable material from deep wells by means of nuclear energy [E21B 43/2635](#), [E21B 43/2403](#))}

References***Limiting references***

This place does not cover:

Obtaining oil, gas, water, soluble or meltable material from deep wells by means of nuclear energy	E21B 43/2635 , E21B 43/2403
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Special rules of classification

This group is intended to cover future, yet unknown, inventions that fall under the definition of the group title. Examples for illustrative purposes include excavation processes through nuclear explosions, and systems for mining geothermal energy utilising the detonation of a deeply buried nuclear device to produce a chimney cavity and fractures in a rocky geothermal stratum.

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Detection arrangements for nuclear explosions (individual measuring devices [G01](#))

References***Informative references***

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

Measuring in general	G01
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