

ECLA**EUROPEAN CLASSIFICATION****G21D**

NUCLEAR POWER PLANT (electric or magnetic analogue computers, e.g. simulators, for nuclear physics [G06G7/54](#))

G21D1/00

Details of nuclear power plant (control [G21D3/00](#))

G21D1/00B

- [N: Nuclear facilities decommissioning arrangements (decontamination arrangements, treating radioactively contaminated material [G21F9/00](#))]

G21D1/00C

- [N: primary side of steam generators (secondary side of steam generators F22B1, F22B35 or F22B37)] [N1010]

G21D1/02

- Arrangements of auxiliary equipment

G21D1/04

- Pumping arrangements (within the reactor pressure vessel [G21C15/24](#); electrodynamic pumps [H02K44/02](#))

G21D3/00

Control of nuclear power plant (control of nuclear reaction in general [G21C7/00](#))

G21D3/00C

- [N: Computer implemented control] [N1010]

G21D3/00M

- [N: Man-machine interface, e.g. control room layout] [N9512]

G21D3/02

- Manual control

G21D3/04

- Safety arrangements (emergency protection of reactor [G21C9/00](#))

G21D3/06

- responsive to faults within the plant (in the reactor [G21C9/00](#))

G21D3/08

- Regulation of any parameters in the plant

G21D3/10

- by a combination of a variable derived from neutron flux with other controlling variables, e.g. derived from temperature, cooling flow, pressure

G21D3/12

- by adjustment of the reactor in response only to changes in engine demand

G21D3/14

- Varying flow of coolant

G21D3/16

- Varying reactivity

G21D3/18

- by adjustment of plant external to the reactor only in response to change in reactivity

G21D5/00

Arrangements of reactor and engine in which reactor-produced heat is converted into mechanical energy

G21D5/02

- Reactor and engine structurally combined, e.g. portable

G21D5/04

- Reactor and engine not structurally combined

G21D5/06

- with engine working medium circulating through reactor core

G21D5/08

- with engine working medium heated in a heat exchanger by the reactor coolant

- G21D5/10
 - . . . Liquid working medium partially heated by reactor and vaporised by heat source external to the core, e.g. with oil heating
- G21D5/12
 - . . . Liquid working medium vaporised by reactor coolant
- G21D5/14
 - and also superheated by reactor coolant
- G21D5/16
 - superheated by separate heat source

- G21D7/00**
Arrangements for direct production of electric energy from fusion or fission reactions (obtaining electric energy from radioactive sources [G21H1/00](#))

- G21D7/02
 - . using magneto-hydrodynamic generators [N: (MHD-generators with thermodynamic cycles [F02C7/00](#); magneto-hydrodynamic generators [H02K44/08](#))]

- G21D7/04
 - . using thermoelectric elements [N: or thermoionic converters] (structural combination of fuel element with thermoelectric element [N: or with thermoionic converters] [G21C3/40](#) [N: [G21H1/10](#)]; thermoelectric elements per se [H01L35/00](#), [H01L37/00](#))

- G21D9/00**
Arrangements to provide heat for purposes other than conversion into power, e.g. for heating buildings