SECTION G — PHYSICS

G21 NUCLEAR PHYSICS; NUCLEAR ENGINEERING

G21D NUCLEAR POWER PLANT

1/00	Details of nuclear power plant (control G21D 3/00) [1, 2006.01]	5/02	 Reactor and engine structurally combined, e.g. portable [1, 2006.01]
1/02	• Arrangements of auxiliary equipment [1, 2006.01]	5/04	 Reactor and engine not structurally
1/04	 Pumping arrangements (by means within the reactor 		combined [1, 2006.01]
	pressure vessel G21C 15/24) [1, 2006.01]	5/06	 with engine working medium circulating through reactor core [1, 2006.01]
3/00	Control of nuclear power plant (control of nuclear reaction G21C 7/00) [1, 2006.01]	5/08	 with engine working medium heated in a heat exchanger by the reactor coolant [1, 2006.01]
3/02	 Manual control [1, 2006.01] 	5/10	Liquid working medium partially heated by
3/04	 Safety arrangements (emergency protection of reactor G21C 9/00) [1, 2006.01] 		reactor and vaporised by heat source external to the core, e.g. with oil heating [1, 2006.01]
3/06	• responsive to faults within the plant (in the reactor G21C 9/02) [1, 2006.01]	5/12	• • • Liquid working medium vaporised by reactor coolant [1, 2006.01]
3/08	 Regulation of any parameters in the plant [1, 2006.01] 	5/14	• • • and also superheated by reactor coolant [1, 2006.01]
3/10	 by a combination of a variable derived from neutron flux with other controlling variables, e.g. derived from temperature, cooling flow, 	5/16	• • • superheated by separate heat source [1, 2006.01]
	pressure [1, 2006.01]	7/00	Arrangements for direct production of electric
3/12	 by adjustment of the reactor in response only to changes in engine demand [1, 2006.01] 		energy from fusion or fission reactions (obtaining electric energy from radioactive sources
3/14	• • • Varying flow of coolant [1, 2006.01]		G21H 1/00) [1, 2006.01]
3/16	• • • Varying reactivity [1, 2006.01]	7/02	• using magneto-hydrodynamic generators [1, 2006.01]
3/18	• • by adjustment of plant external to the reactor only in response to change in reactivity [1, 2006.01]	7/04	 using thermoelectric elements (structural combination of fuel element with thermoelectric element G21C 3/40) [1, 2006.01]
5/00	Arrangements of reactor and engine in which reactor-produced heat is converted into mechanical energy [1, 2006.01]	9/00	Arrangements to provide heat for purposes other than conversion into power, e.g. for heating buildings [1, 2006.01]

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