

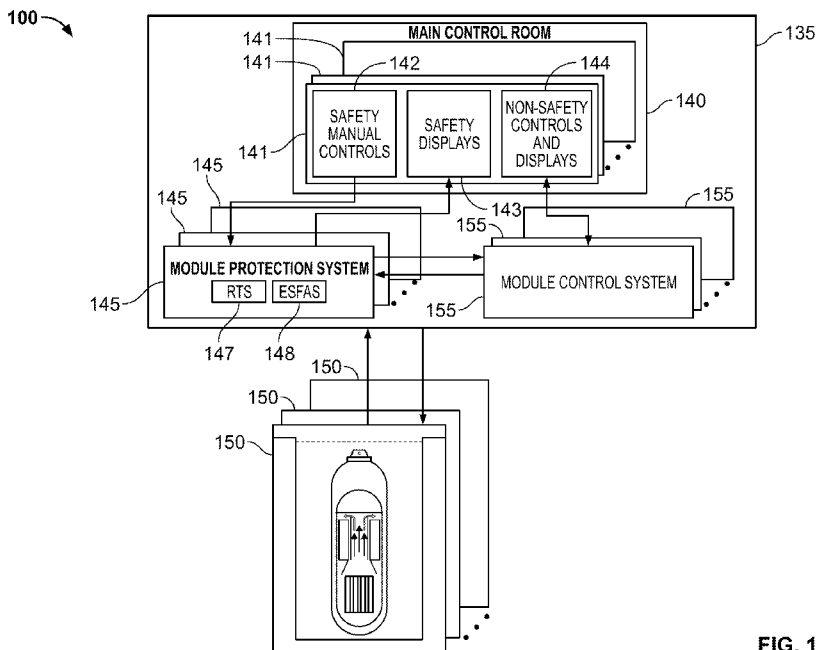


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[Continued on next page]

(54) Title: NUCLEAR REACTOR PROTECTION SYSTEMS AND METHODS



(57) Abstract: A nuclear reactor protection system includes a plurality of functionally independent modules, each of the modules configured to receive a plurality of inputs from a nuclear reactor safety system, and logically determine a safety action based at least in part on the plurality of inputs; and one or more nuclear reactor safety actuators communicably coupled to the plurality of functionally independent modules to receive the safety action determination based at least in part on the plurality of inputs.

FIG. 1

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A. CLASSIFICATION OF SUBJECT MATTER**G21C 9/00(2006.01)i, G21D 3/06(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
G21C 9/00; G06F 1/28; G21C 17/00; G21D 3/04; G05B 9/02; H02H 3/05; G21D 3/06Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility modelsElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & keywords: protection, reactor, actuator, safety, input, failure, trip, redundant, voting**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6532550 B1 (ALBERT W. CREW et al.) 11 March 2003 See abstract, column 2, lines 40-52, column 3, line 36 - column 4, line 39, column 6, lines 14-20, claims 1-5, and figure 1.	1-9,11-13,15-17 ,25-27,29-31,33 ,41-50,52-54,56-58
Y		10,14,18-24,28,32 ,34-40,51,55,59-65
Y	US 2011-0313580 A1 (LEVGENII BAKHMACH) 22 December 2011 See paragraphs 3, 65-66, and claim 21.	10,14,18-24,28,32 ,34-40,51,55,59-65
A	KR 10-2009-0054837 A (KOREA ATOMIC ENERGY RESEARCH INSTITUTE et al.) 01 June 2009 See paragraphs 19-23, claims 1-2, and figure 1.	1-65
A	JP 2010-249559 A (TOSHIBA CORP.) 04 November 2010 See paragraphs 13-43, claim 1, and figure 1.	1-65
A	EP 0781451 B1 (GENERAL ELECTRIC COMPANY) 19 December 2001 See paragraphs 12-25, claim 1, and figure 1.	1-65

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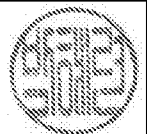
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INTERNATIONAL SEARCH REPORT

Information on patent family members

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