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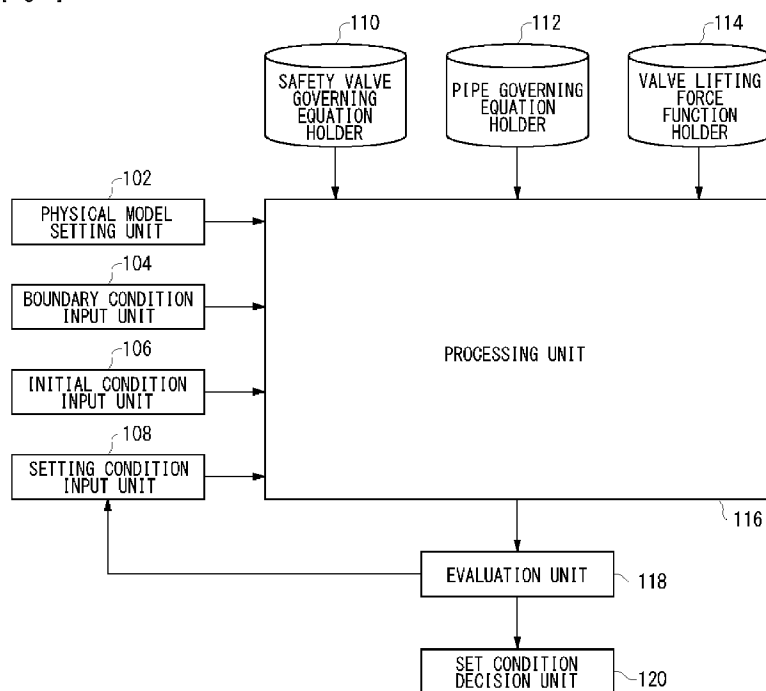
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[Continued on next page]

(54) Title: SAFETY VALVE VIBRATION ANALYZER

[Fig. 1]



(57) Abstract: The safety valve vibration analyzer (100) includes: a set condition input unit (108) in which set conditions of a physical model including a safety valve and an upstream pipe connected to the safety valve are inputted; a safety valve governing equation holder (110) that holds a safety valve governing equations; a pipe governing equation holder (112) that holds a pipe governing equation; a processing unit (116) that derives a time variation of a valve lift by using the set conditions inputted, the safety valve governing equations, and the pipe governing equations; and a valve lifting force function holder (114) that holds a valve lifting force function. The processing unit (116) derives the time variation of the valve lift by applying the valve lifting force function to the equation of motion of the valve disc.



NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F16K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 489 597 A (B & W NUCLEAR SERVICE [US]) 10 June 1992 (1992-06-10) abstract	1
A	EP 0 410 317 A (LIBERTY TECH CENTER [US] LIBERTY TECHNOLOGIES INC [US]) 30 January 1991 (1991-01-30) abstract	1
A	DE 102 09 545 A1 (ABB PATENT GMBH [DE]) 30 October 2003 (2003-10-30) abstract	1
A	US 4 949 288 A (BOOKOUT PHILIP J [US]) 14 August 1990 (1990-08-14) abstract	1



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INTERNATIONAL SEARCH REPORT

Information on patent family members

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