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(54) Title: A METHOD OF PROVIDING A CLOCK FREQUENCY FOR A PROCESSOR

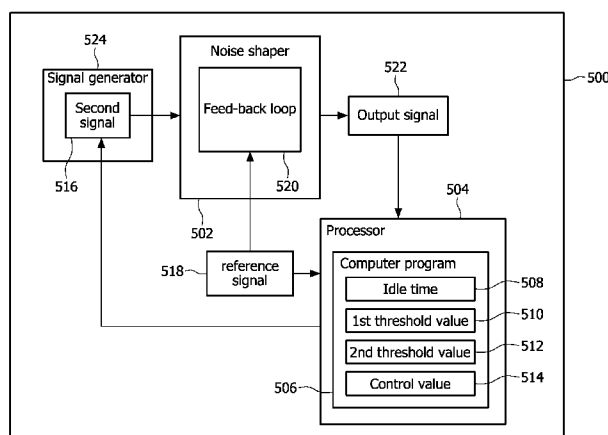


FIG. 5

(57) Abstract: A method of providing a clock frequency to a processor is described. The method in accordance with the invention comprises the step of providing at least one reference signal and the step of determining a control value which relates to a desired first frequency. A second signal that relates to the control value is then used in a subsequent step as an input signal for a noise shaper. Then, a first signal which has the first frequency is generated by combining the output of the noise shaper with one of the at least one reference signals. The first signal is used as a clock frequency of the processor. In a preferred embodiment, one reference signal with a fixed reference frequency is provided. The reference signal is gated or enabled and hold by the output signal provided by a 1-bit noise shaper, whereby the first frequency is generated which is then used as processor clock frequency. The method in accordance with the invention is particularly advantageous as it allows for the control of the processor's clock frequency via the second signal that is fed into the noise shaper.

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**B. FIELDS SEARCHED**

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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)

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**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/17050 A (TERADYNE INC [US]) 28 February 2002 (2002-02-28) page 1, line 3 - page 12, line 2 figures 1-4 -----	1-27

Further documents are listed in the continuation of Box C.

See patent family annex.

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# INTERNATIONAL SEARCH REPORT

Information on patent family members

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