

ABSTRACT

An unsteady signal analyzer for detecting a defect in a monitored object through the analysis of an unsteady signal generated by the monitored object has a wavelet transform calculating means for producing a wavelet spectrum data through a wavelet transform of the unsteady signal, a state variation function setting means for setting a state variation function representing a variation of a specific state variable of the monitored object with time, and a time coordinate nonlinear transformation means for transforming a time coordinate of the wavelet spectrum data nonlinearly into a coordinate of the specific state variable by using an inverse function of the state variation function.