



ABSTRACT / ZUSAMMENFASSUNG / ABREGE

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A musical tone synthesizing apparatus synthesizes musical tones by simulating the tone generation construction of a plucked-string or struck-string instrument. The apparatus has a loop circuit (8) which simulates a vibrating element of the instrument, an excitation circuit (14) creates an excitation signal corresponding to the excitation given to the vibrating element in response to the operation of operators such as a pick or a hammer or the state of the generation body and a memory which stores a non-linear relation between the operator and the vibration element. The excitation signal circulates around the loop circuit (8) and is delayed by means of a delay circuit (1,5) with a previously determined delay interval, and is fed back into the excitation circuit (14) as the state of the vibrating element. To realize a variety of sounds depending upon characteristics of the operator, such as the shape and hardness of the pick or the hardness of the hammer, a readout value of the memory, which is read out according to such characteristics, is supplied to the loop circuit.