

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 63-014522

(43)Date of publication of application : 21.01.1988

(51)Int.Cl.

H03L 7/06  
H03B 28/00  
H03K 5/26

(21)Application number : 61-159273

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(22)Date of filing : 07.07.1986

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## (54) PHASE SYNCHRONIZING CIRCUIT

### (57)Abstract:

**PURPOSE:** To attain the phase control with high accuracy by varying the amplitude of a pulse signal with a prescribed period in response to a control signal and comparing the phase between an input signal and an output signal being the conversion of the varied signal into a continuous signal.

**CONSTITUTION:** The pulse signal of a prescribed period generated from a pulse generating circuit 5 is inputted to an amplitude control circuit 19, where the amplitude of the pulse signal is varied in response to the control signal from a loop filter 3. The output of the circuit 19 is inputted to an interpolation circuit 21, which converts the input signal into a timewise continuous signal and the result is outputted to a terminal 17.

Simultaneously, the phase of the output signal of the circuit 21 and the phase of the input signal from the terminal 15 are compared by a phase comparator 23. The output of the circuit 23 is averaged by the loop filter 3, a minute variation is eliminated, the result is outputted to the circuit 19 from the filter 3 as a control signal to vary the amplitude of the pulse signal from the circuit 5. Thus, the phase control with high accuracy is attained without increasing the output frequency of the circuit 5.

