

Abstract

DRIVE UNIT FOR A ROTARY DECORATION

A ~~proposed~~ drive unit for a rotary decoration whose transmission gear train is configured to include a damper such as a coil spring, and which is capable of imparting a desired elegant swing motion to the rotary decoration.

The drive unit comprises
~~There is~~ a reciprocating stepping motor 9 ~~capable~~
rotatable ~~of rotating~~ in both the normal and reverse directions ~~for~~
driving ~~drive~~ a ~~rotary~~ decoration 5 in ~~such a manner that the~~
~~rotary decoration 5 causes~~ a reciprocative swing motion,
~~also,~~ a memory circuit 31 ~~is provided~~ for storing data for
determining the drive timing of ~~this~~ *the* stepping motor 9, ~~then,~~
~~there is further provided~~ a control circuit 32 for
controlling ~~this~~ *the* stepping motor 9 in accordance with the data
stored in the memory circuit 31.

The
~~Said~~ data numeralizes the pulse interval of the operation pulse for stepping motor 9 so as to transform the rotation speed of rotational decorating 5 as a sine curve, and

(1) the pulse intervals of operation pulses are set to uniform intervals having a small value in a predetermined section corresponding to an intermediate portion in one rotational direction of the rotary decoration 5, or

(2) ~~the pulse intervals of operation pulses are~~ set to close intervals in a predetermined section immediately after

the rotational direction of the rotary decoration 5 is reversed, or

(3) ~~the pulse intervals of operation pulses~~ being set in a predetermined section immediately before the rotational direction of the rotary decoration 5 is reversed.

Fig. 3