

MOTOR DRIVE DEVICE AND REFRIGERATOR EMPLOYING SAME

ABSTRACT

5 Motor drive device (30) includes brushless DC motor (5) that drives a
load and speed controller (8) that decides a PWM ON ratio for performing
PWM control on brushless DC motor (5). The motor drive device further
includes PWM ON ratio increasing-reducing unit (9) that increases/reduces the
PWM ON ratio in accordance with a driving speed of brushless DC motor (5)
10 and drive unit (10) that performs PWM control for driving brushless DC motor
(5) in accordance with the PWM ON ratio decided by PWM ON ratio
increasing-reducing unit (9). PWM ON ratio increasing-reducing unit (9) sets
the PWM ON ratio to a ratio equal to or lower than the PWM ON ratio decided
by speed controller (8) in an interval in which the driving speed of brushless
15 DC motor (5) is lower than a predetermined speed, and sets the PWM ON ratio
to a ratio equal to or higher than the PWM ON ratio decided by speed
controller (8) in an interval in which the driving speed is higher than the
predetermined speed.

20 [FIG. 1]