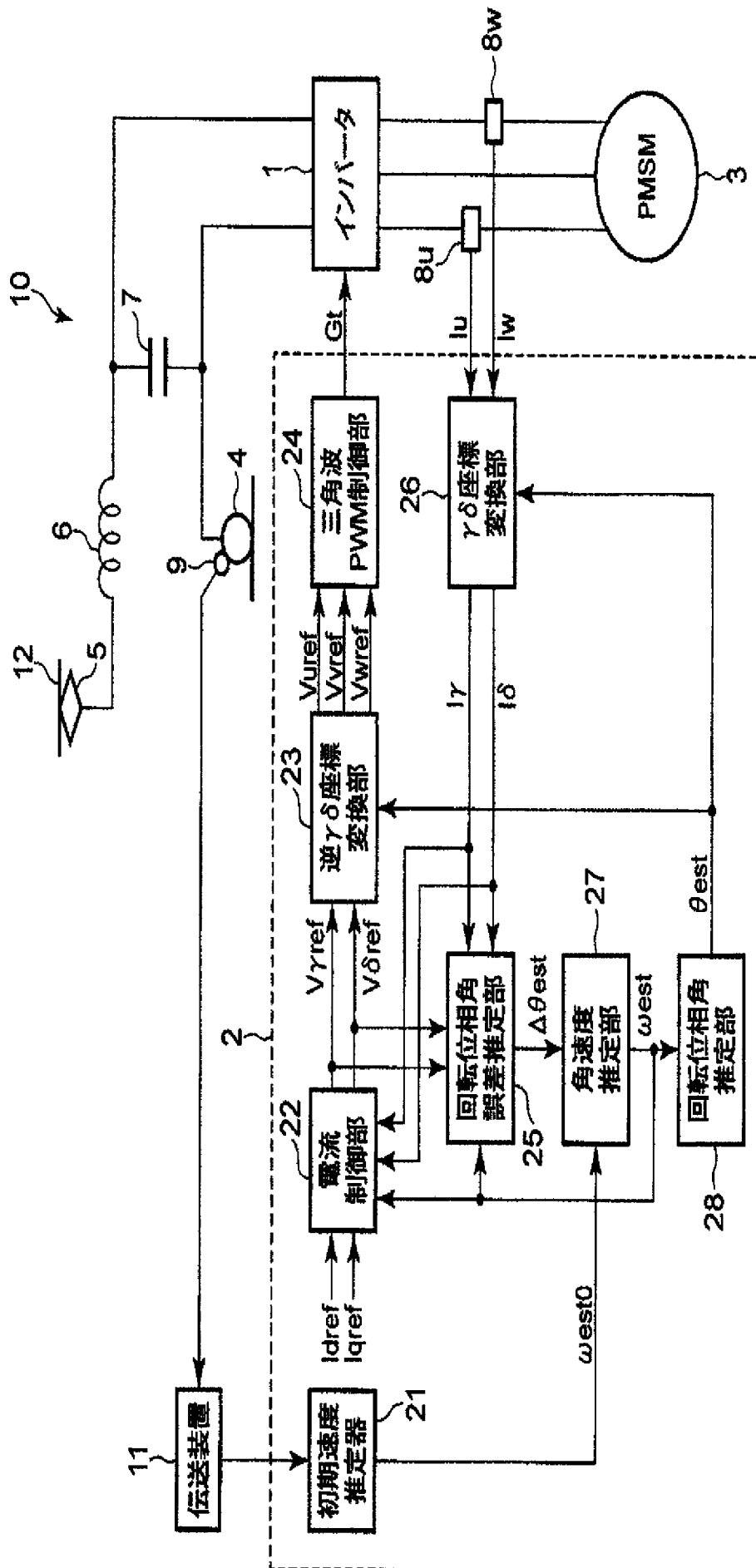
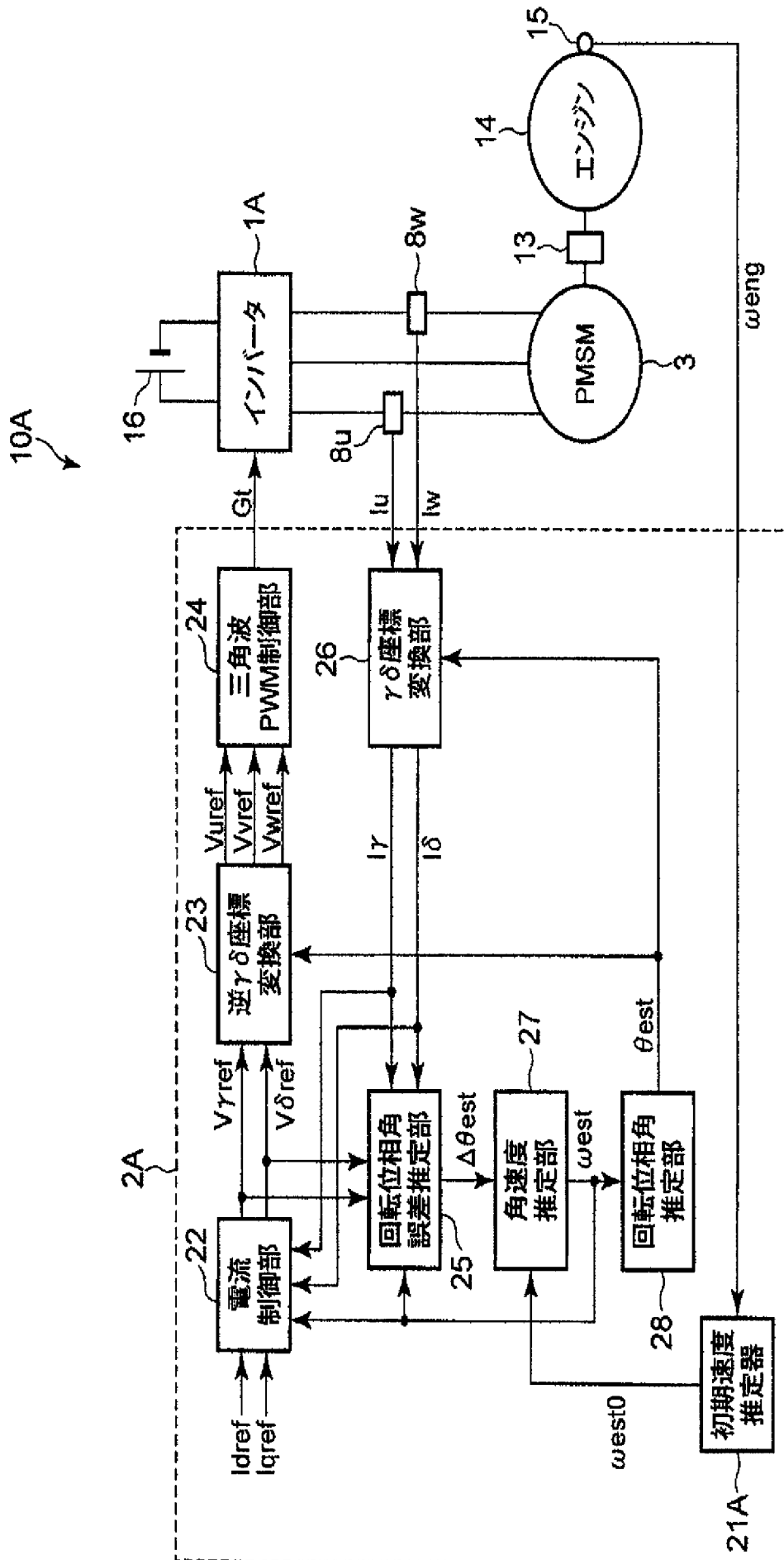


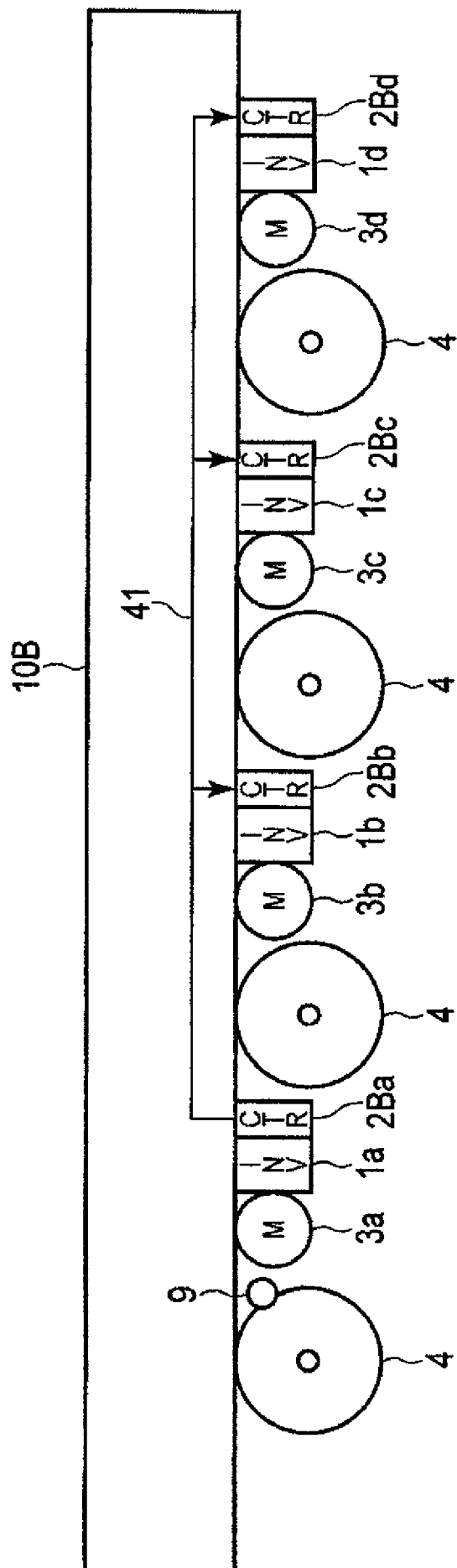
[図1]



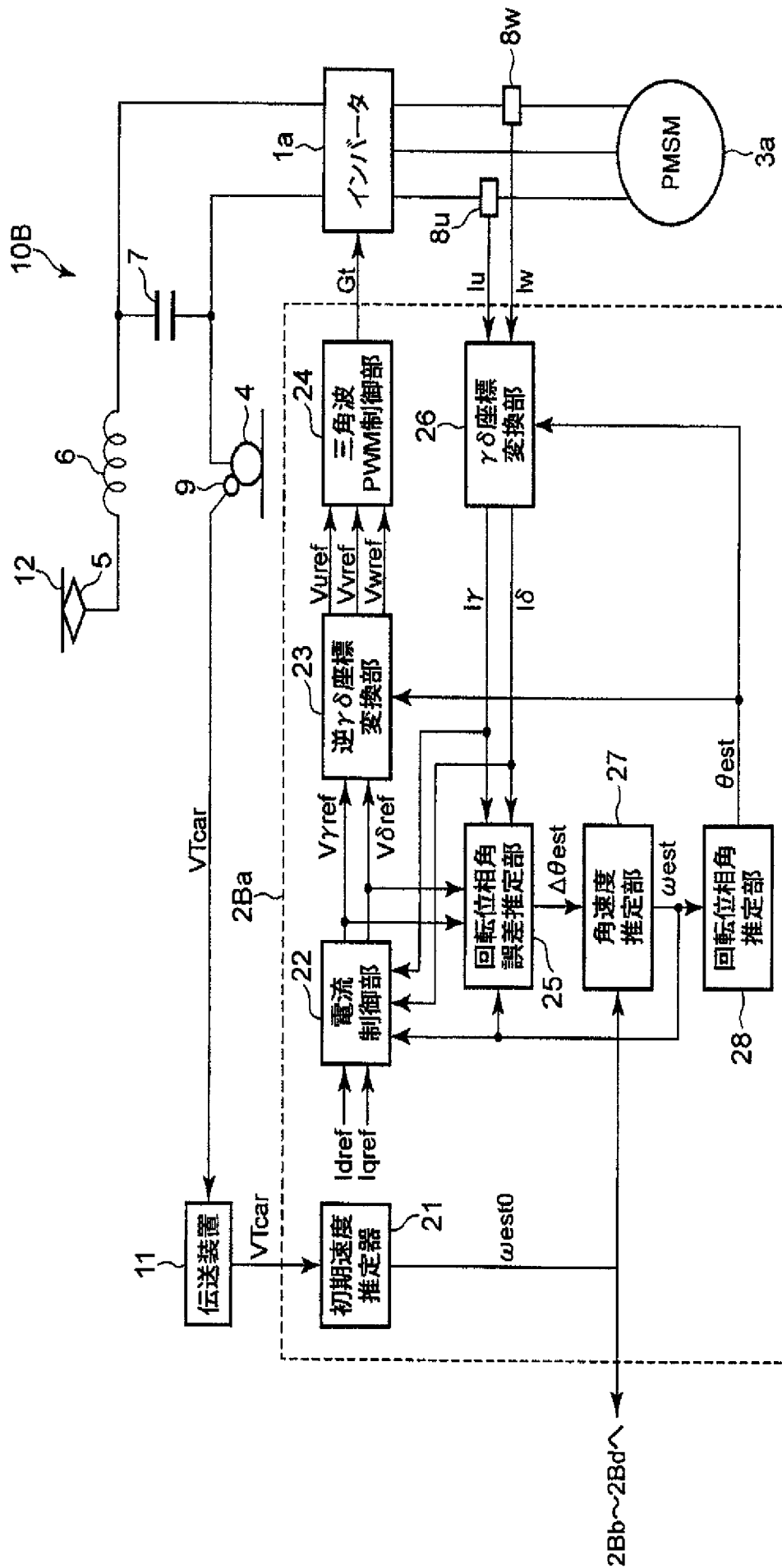
[図2]



[図3]



[図4]



2Bb

22 電流制御部

23 逆 $\gamma\delta$ 座標変換部

24 三角波PWM制御部

25 回転位相角誤差推定部

26 $\gamma\delta$ 座標変換部

27Bb 角速度推定部

28 回転位相角推定部

1b インバータ

3b PMSM

8u 8v 8w

1u 1v 1w

$\Delta\theta_{est}$

ω_{est}

θ_{est}

V_{uref} V_{vref} V_{wref}

$V_{\gamma ref}$ $V_{\delta ref}$

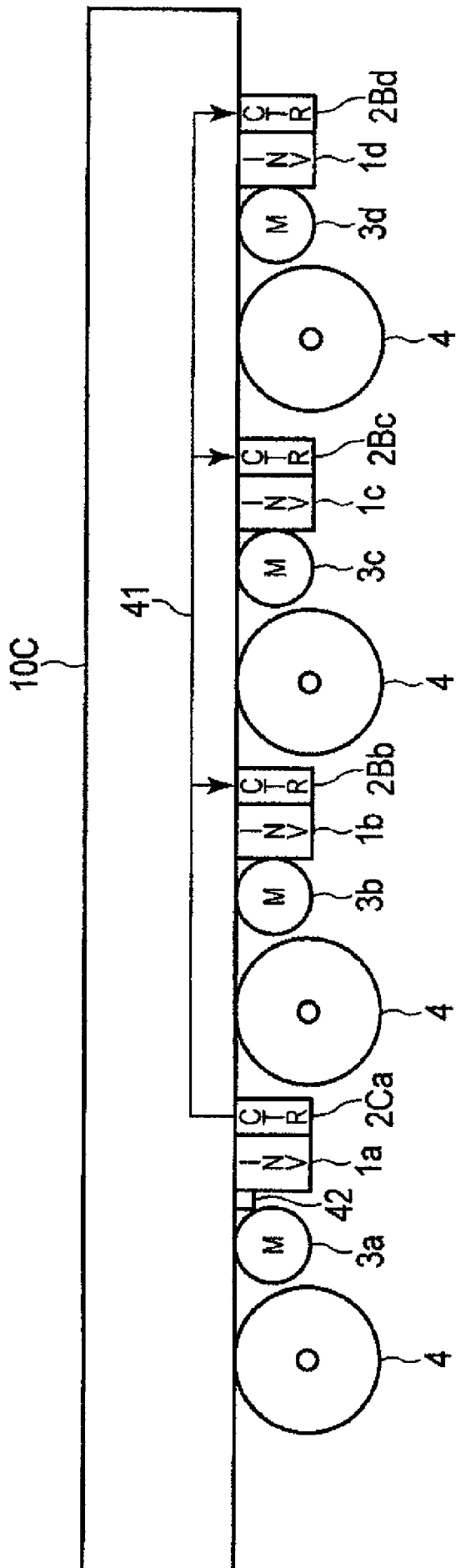
I_{γ} I_{δ}

G_t

ω_{est0}

2Baから

[図6]



[図7]

