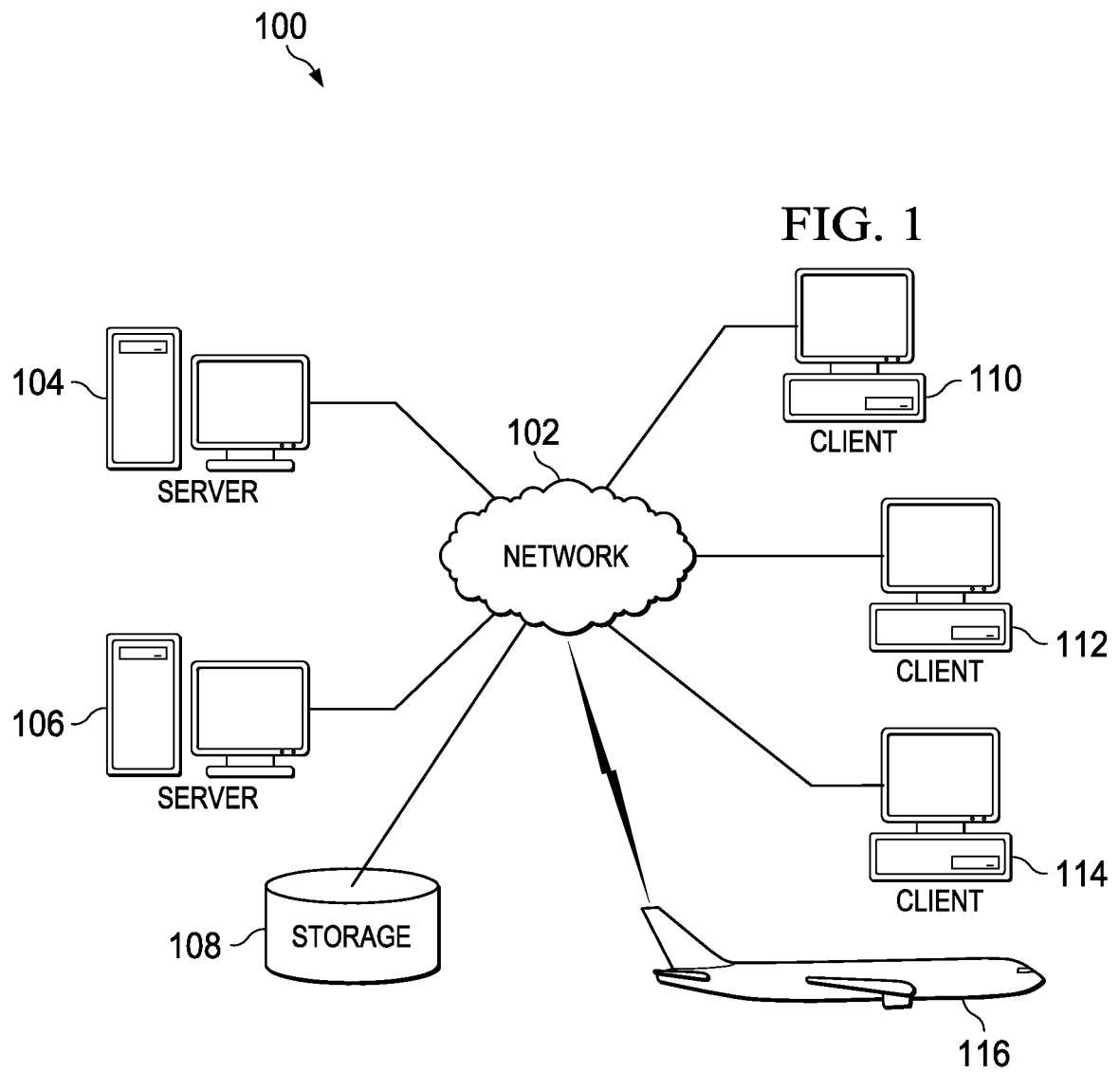
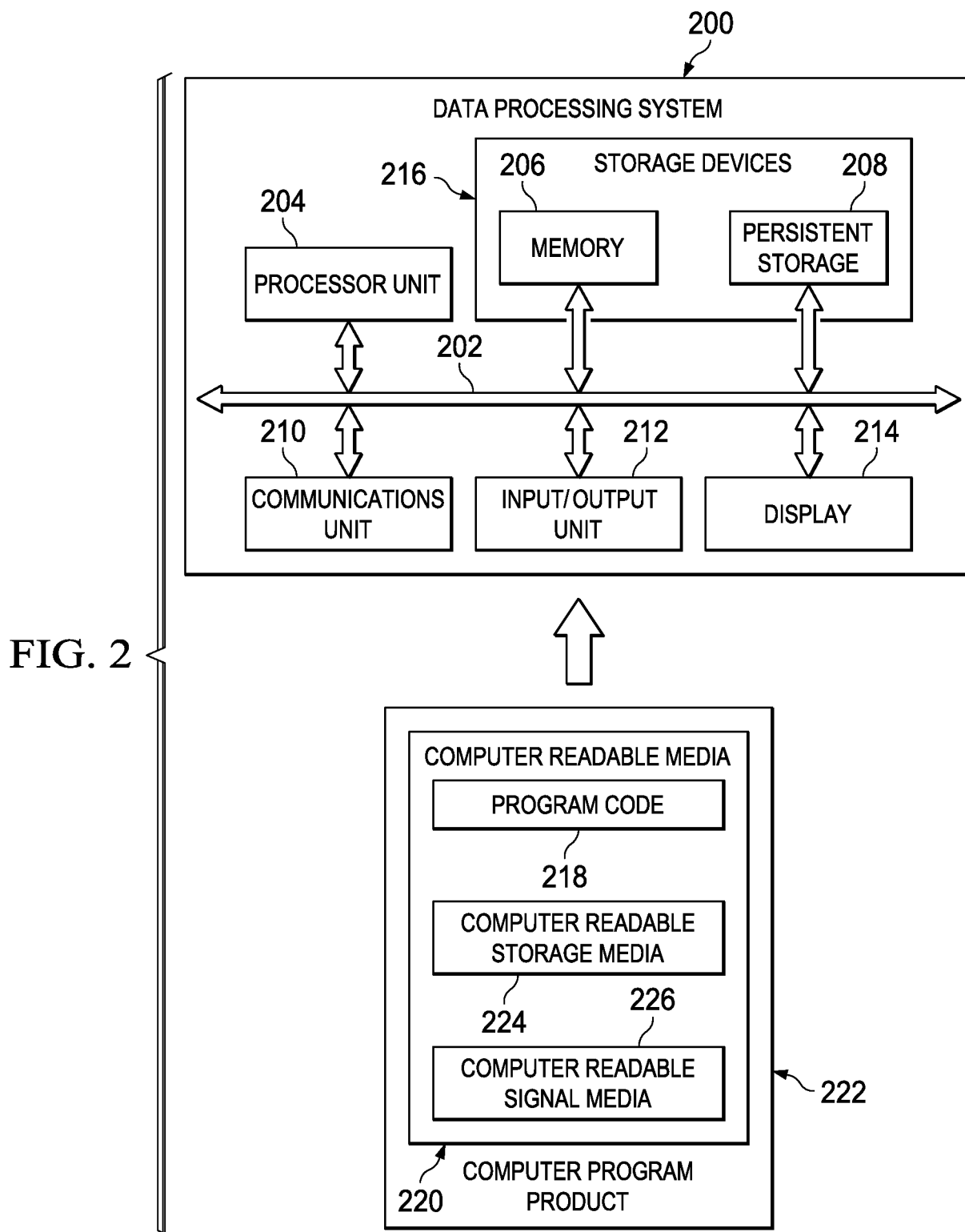


1/10

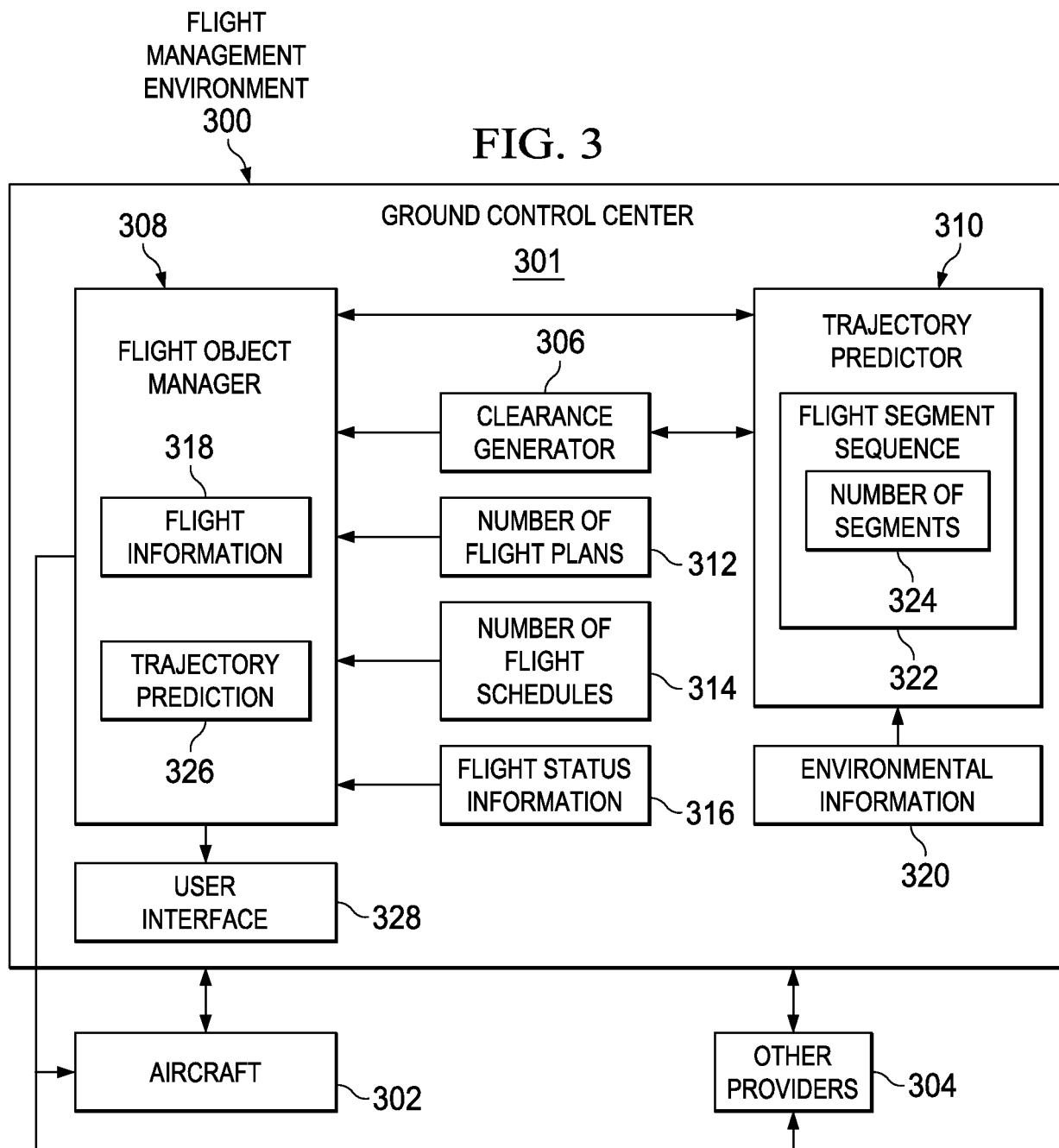


2/10



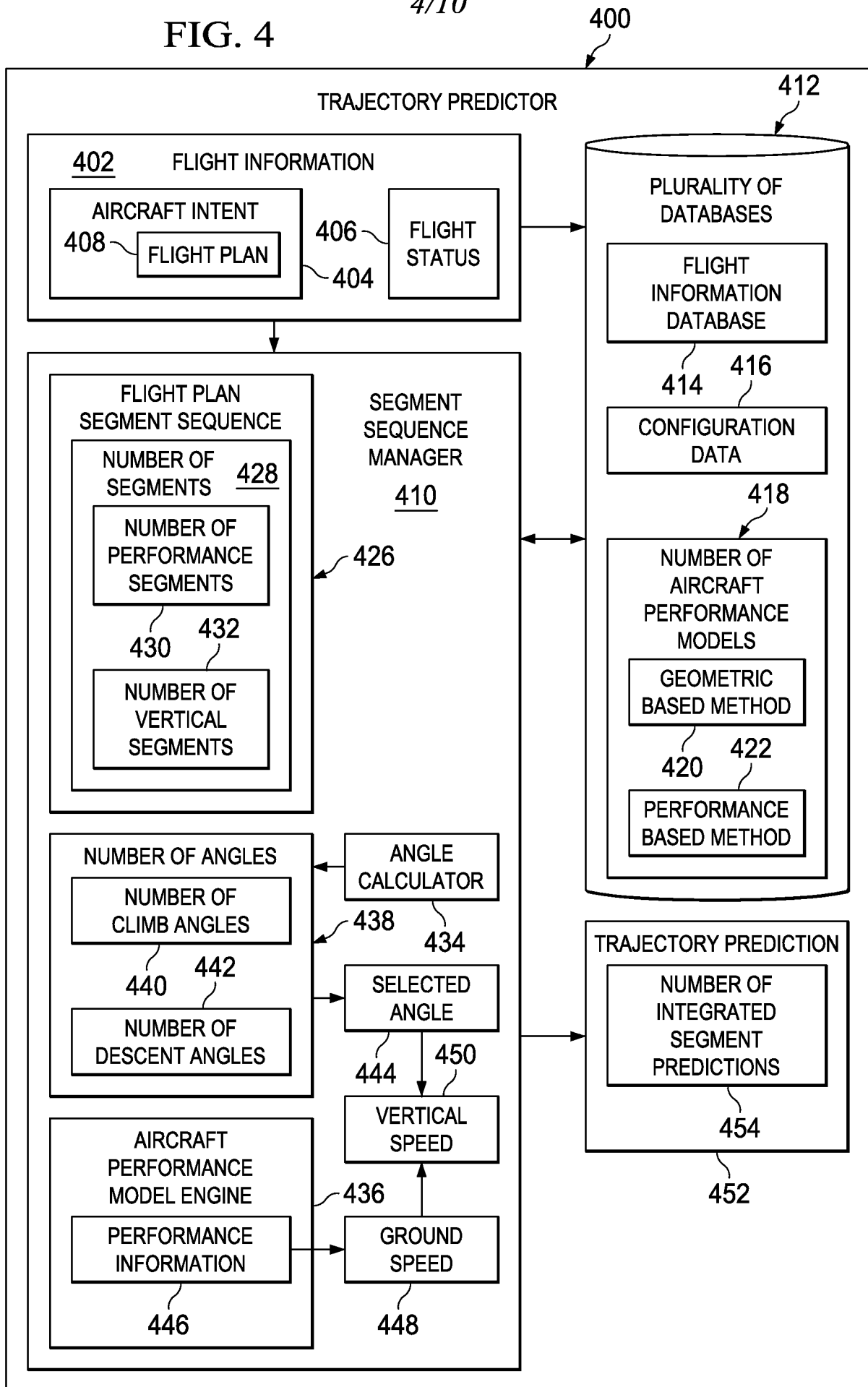
3/10

FIG. 3



4/10

FIG. 4



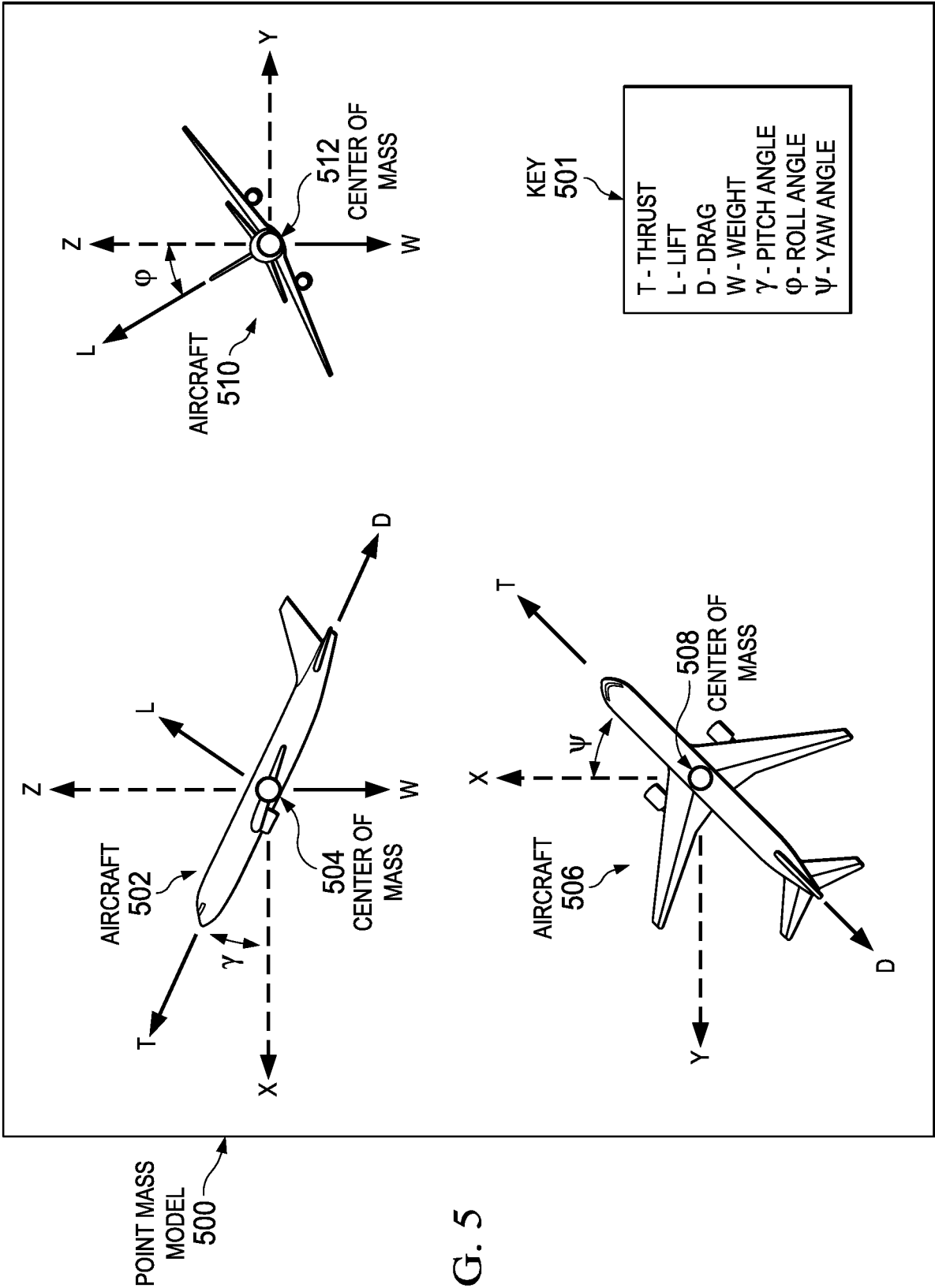


FIG. 5

6/10

KINEMATIC SYSTEM OF
EQUATIONS
(IN VECTOR FORM)

FIG. 6

600

TIME DERIVATIVE OF THE STATE VECTOR 602

$$\begin{bmatrix} \dot{x} \\ \dot{y} \\ \dot{h} \\ \dot{V} \\ \dot{\psi} \\ \dot{m} \end{bmatrix} = \begin{bmatrix} V \cos(\gamma) \sin(\psi) \\ V \cos(\gamma) \cos(\psi) \\ V \sin(\gamma) \\ \frac{T-D}{m} V - g \sin(\gamma) \\ L \frac{\sin(\phi)}{mV \cos(\gamma)} \\ Q \end{bmatrix} + \begin{bmatrix} W_x \\ W_y \\ W_z \\ 0 \\ 0 \\ 0 \end{bmatrix}$$

604 CONTROLLED INPUTS

UNCONTROLLED INPUTS 606

$$L = mg \frac{\cos(\gamma)}{\cos(\phi)}$$

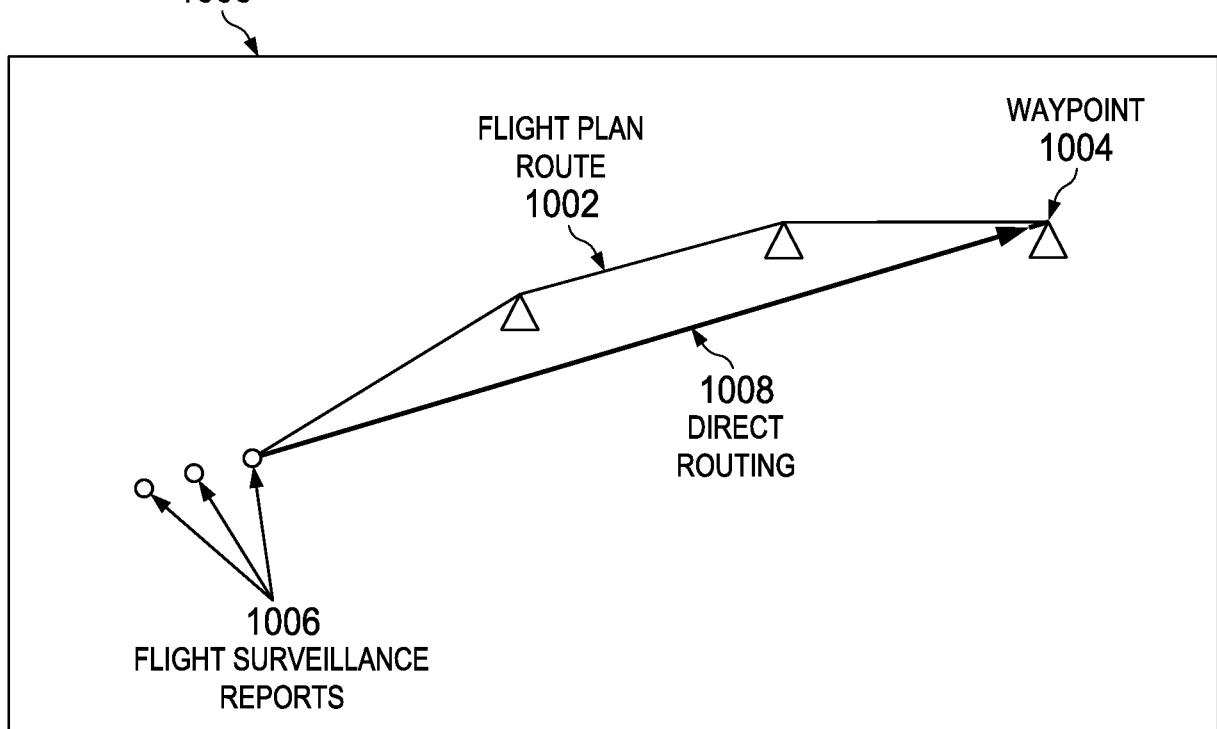
with, $C_L = \frac{2L}{\rho V^2 S}$

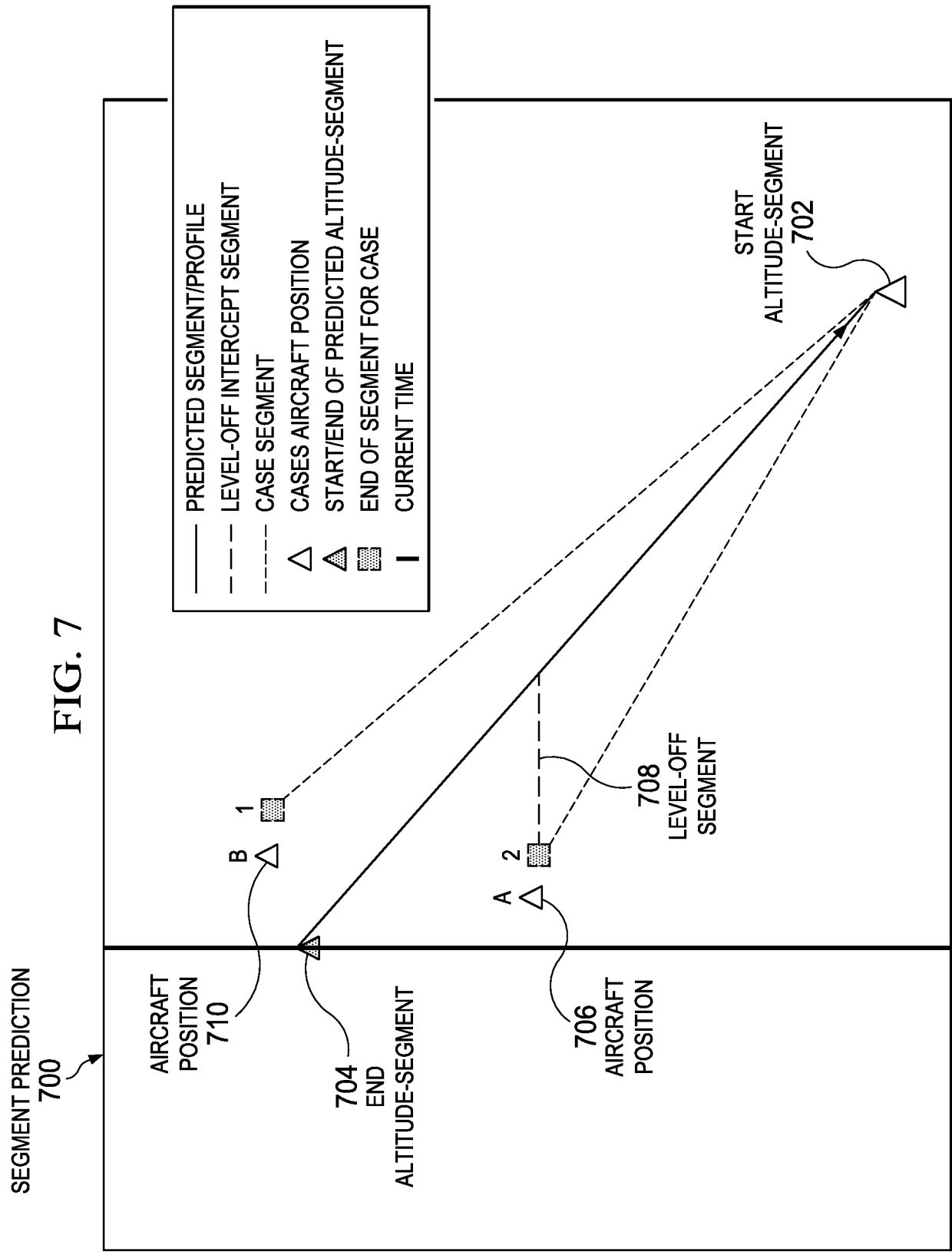
$$C_D = C_{D0} + K C_L^2$$

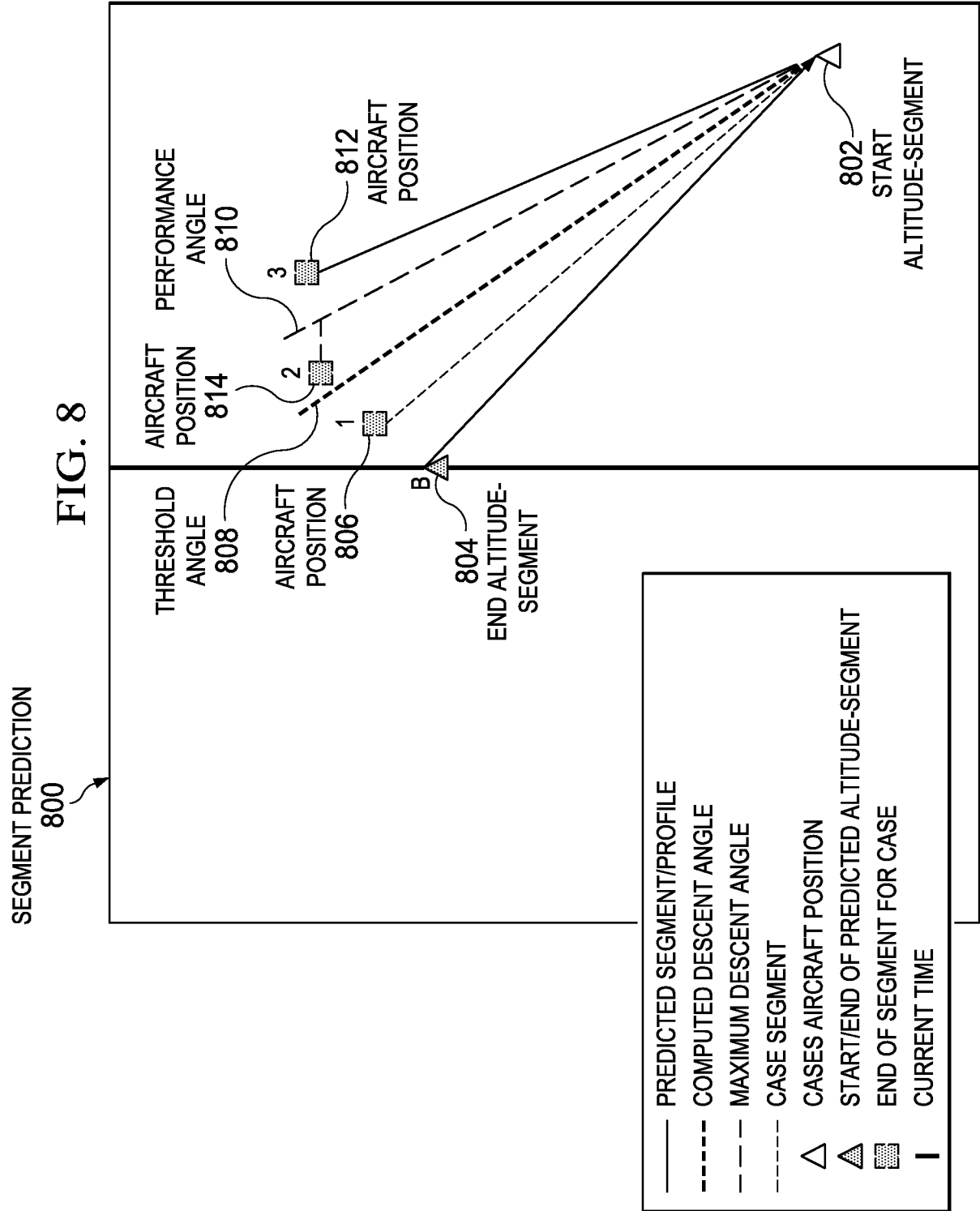
$$D = \frac{1}{2} C_D \rho V^2 S$$

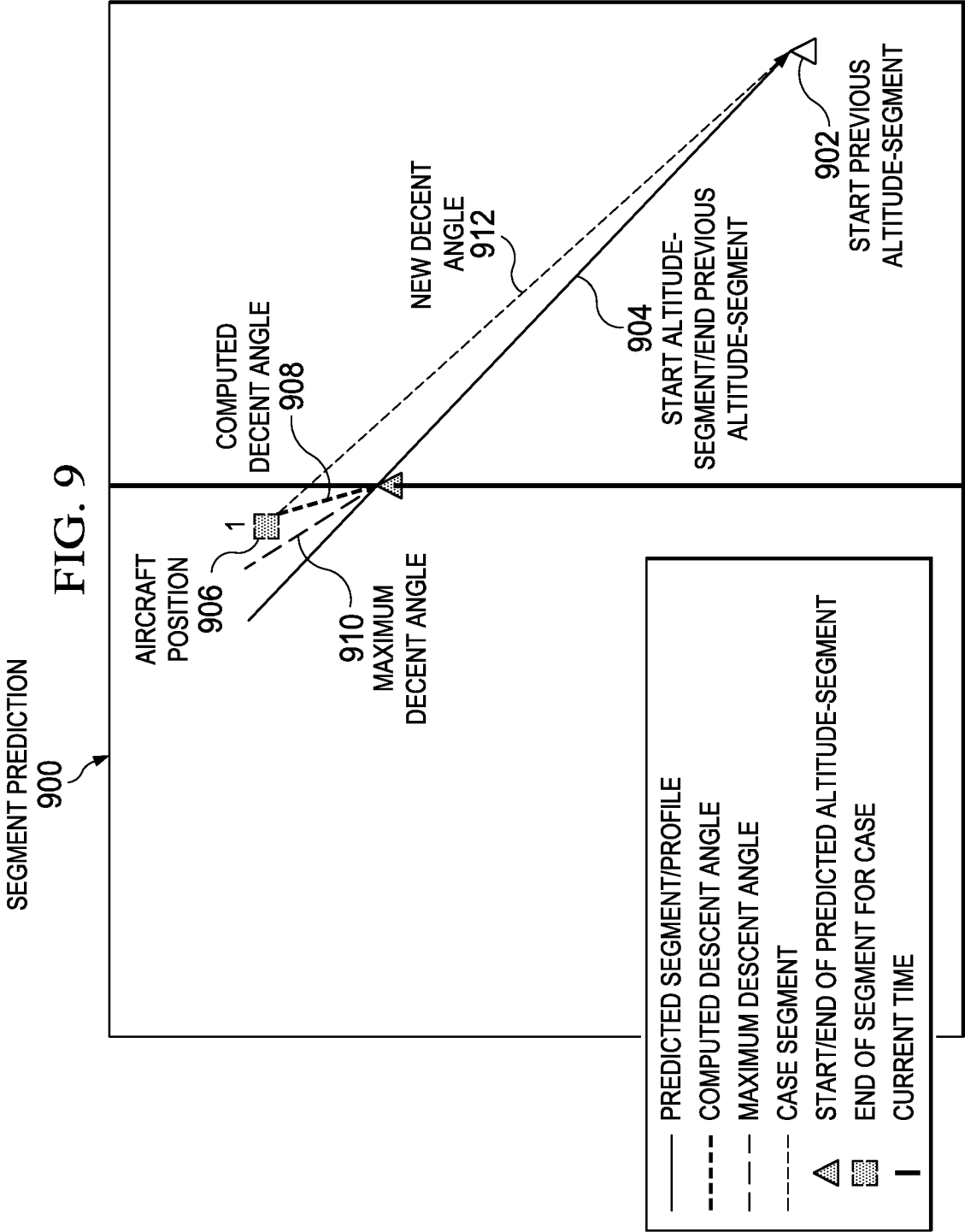
DIRECT ROUTING
IMPLEMENTATION
1000

FIG. 10









10/10

FIG. 11

