

ABSTRACT

(Fig. 2)

Device and method for performing thermal compensation
of a weapon barrel

A device and a method are proposed for performing thermal compensation of a weapon barrel of a gun (10) having at least one weapon barrel (11) which is mounted in a barrel cradle (3), and in a barrel support (4) as a prolongation of the barrel cradle (3), wherein a plurality of temperature sensors (p1-p16) are integrated into the barrel cradle (3) and the barrel support (4) and are connected via data lines (6) to a data box (7), and the data box (7) is connected to a data processing device (9), wherein the data processing device (9) can act on actuators of the gun (10). The temperature at the barrel cradle (3) and the barrel support (4) is measured by means of temperature sensors (p1-p16). The temperature difference between the upper and lower sides and the right-hand and left-hand sides of the barrel cradle (3) and also of the barrel support (4) are then determined. The barrel inclination is then calculated from these values, and the barrel inclination is then compensated by adjusting the orientation of the weapon barrel (11) in its azimuth and/or elevation.

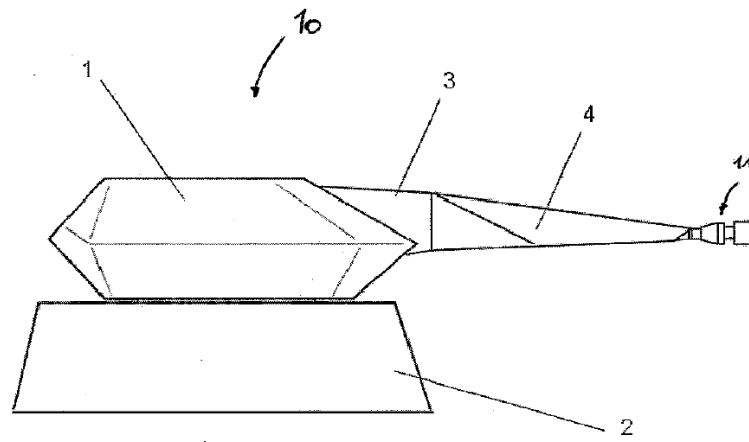


Fig. 1

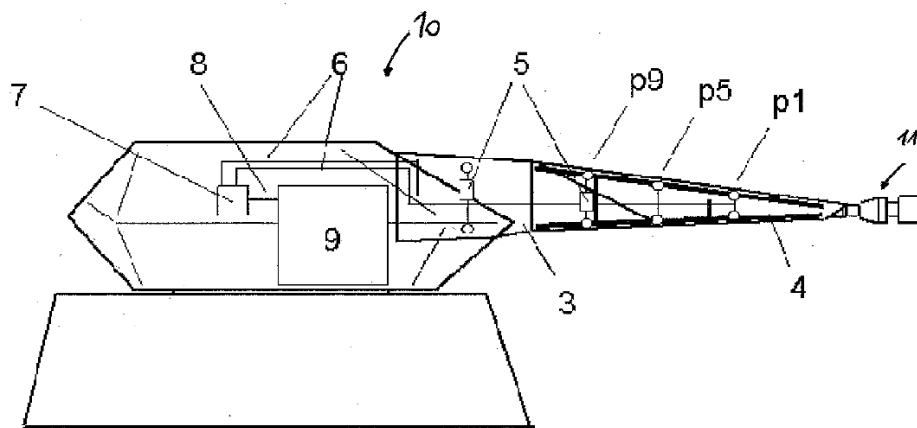


Fig. 2

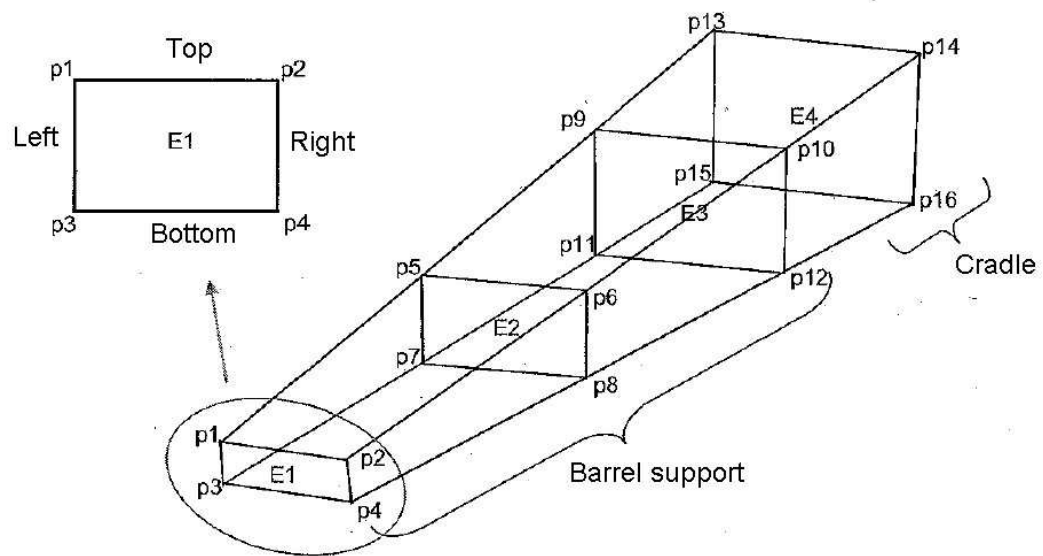


Fig. 3

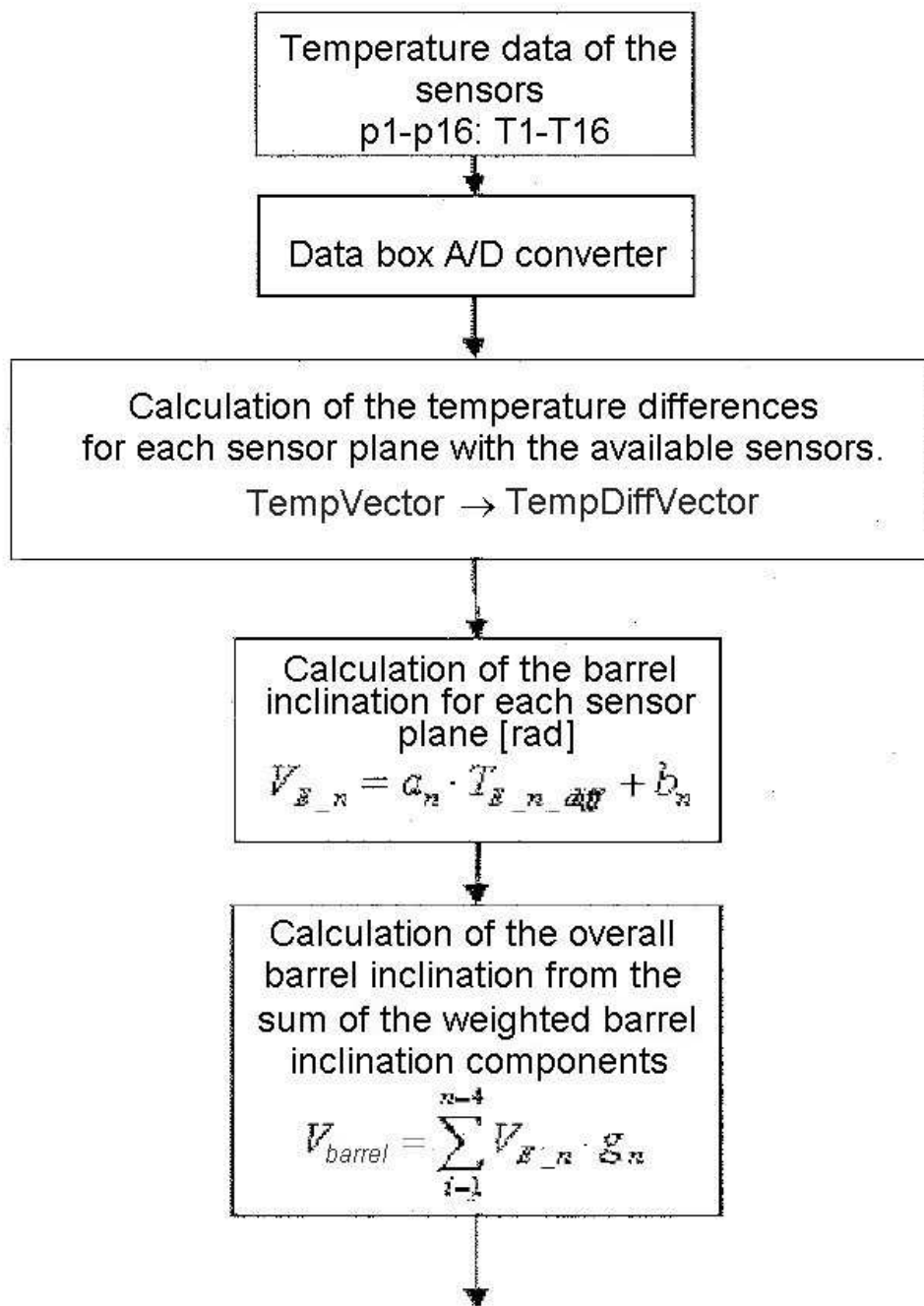


Fig. 4