

CLAIMS

1. A method for determining the velocity of a device through space by
 - generating a particle having the property of mass
 - giving the particle a velocity measured relative to the device
 - accelerating the particle sufficiently to cause the emission of electromagnetic radiation
 - measuring the wavelength of this radiation and correlating it with the calibrated velocity through space of the same species of particle of mass
 - obtaining the velocity of the device through space by subtracting the velocity of the particle of mass relative to the device from the velocity of the particle of mass through space.
2. A method of calibrating the method of Claim 1 by
 - measuring the velocity through space of a particle of the same species as in Claim 1
 - accelerating this particle in the direction of motion sufficiently to produce electromagnetic radiation
 - measuring the wavelength of electromagnetic radiation produced at this velocity
 - repeating the process at other known velocities.
3. A method for determining the velocity of a device through space as claimed in Claim 1 where the species of particle used comprises electrons, positrons, protons, α -particles and positive and negative ions or other charged particles.
4. A method for determining the velocity of a device through space as claimed in Claim 1 where the charged particle is generated by use of electrodes.
5. A method for determining the velocity of a device through space as claimed in Claim 1 where the charged particle originates from the decay of radioactive material.
6. A method for determining the velocity of a device through space as claimed in Claim 1 where the particle is accelerated by static electric field.
7. A method for determining the velocity of a device through space as claimed in Claim 6 where the apparatus comprises a vacuum tube.
8. A method for determining the velocity of a device through space as claimed in Claim 7 where the vacuum tube incorporates detection and analysis of electromagnetic radiation.
9. Apparatus which implements the method of any preceding claim.