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What can it do for us?

IDV stands for Impulse Drive Vehicle. It is a vehicle we've all seen in comics, at the cinema and on television. Its shape is defined by its propulsion system; <u>the impulse drive</u>.

It is an inevitable fact that the IDV will eventually replace all other vehicles; cars, bicycles, buses, trains, aeroplanes, ships, space-ships, etc.

It needs no roads, refuelling stations, or traffic control and can travel at any altitude in any direction. It can also hover, overcoming gravitational acceleration without wings, rotating blades or rocket engines.

A profusion of external sensors can automatically - and instantly - stop and/or redirect a vehicle entirely eliminating the possibility of accidental (or even deliberate) collision. And because journey times will be significantly reduced; e.g. a sixty-minute journey today will be cut to four minutes, congestion will be massively reduced and today's <u>anti-social speed-limits</u> can be eradicated. Travel will once again become pleasurable and affordable.

The Vehicle

In theory, an IDV can be any shape or size, but the conventional shape is a disc with a dome. The disc houses the principal impulse drive in its periphery and a smaller unit would normally (but not necessarily) be installed in the dome providing vertical movement and the ability to hover. In space which is devoid of all atmospheric gases, the vehicle can travel dome-first, giving a clear view of the way ahead.

Because the impulse drive issues no exhaust, the vehicle can be completely sealed from dangerous atmospheres and/or an external vacuum (e.g. outer space) making it capable of travelling safely in any environment.

Apart from the impulse drive, its <u>energy cell</u> and electricity generator (all of which can be any conceivable size) an IDV can be a completely unobstructed spherical shell, making it ideal for freight. Because it can be fitted with distance detectors covering 360° in all three dimensions, and because it can be instantly stopped, redirected or made to hover, it will be 100% safe manned or unmanned.

Fact or Fiction

We don't believe in 'flying saucers' today because we have no idea how they work, and we're scared of things we don't understand. We are essentially simpletons; who automatically deny anything and everything we don't understand or are told to deny by our '*superiors*'. This policy applies in particular to academics, governments and many businesses, where bigotry and the acquisition of money together override any and all forms of progress.

What's really bizarre, is that this concept and its technology was known in the 1970s. So why do we today persistently dismiss 'UFOs' simply because we don't understand them?

But it no longer matters whether or not we believe in '*flying-saucers*', we at last know how and why they work.

Because the impulse drive operates under constant acceleration (not constant velocity), when coated with <u>Anti-Drag</u>, the behaviour and performance of objects that flit across the sky in seconds leaving no vapour trails - the impulse drive issues no exhaust - can be fully explained.

When powered by neutron energy, the IDV can travel between planets, and even star-systems, without ever running short of fuel, which is free.

And we could have them here on Earth today.

Like it or not, accept it or not, the IDV is the inevitable vehicle of our future. And it was predicted almost a hundred years ago by many of our science fiction writers of the period.

Title of the Invention:

The impulse drive vehicle.

Abstract:

The present invention relates to a vehicle propelled by impulse drive that can travel under constant acceleration in any direction, including vertical, by overcoming gravitational acceleration.

Cited Patents:

A: The impulse drive.

B: The minimisation of drag resistance.

C: The safe and controlled release of neutron energy.

References:

The Mathematical Laws of Natural Science; Keith Dixon-Roche; ISBN 979-8-61029-449-0

Definitions:

By definition: **3D** shall mean three dimensional; or any direction.

By definition: **velocity** shall mean the rate of change of distance, for example; metres per second (m/s).

By definition: **acceleration** shall mean the rate of change of velocity, for example; metres per second squared (m/s²).

By definition: **force** shall mean an accelerating mass; force = mass multiplied by acceleration.

By definition: an **ID** shall mean a fully operational impulse drive system (cited patent 'A').

By definition: an **IDV** shall mean a vehicle propelled by an ID.

By definition: a **disc** shall mean any predominantly circular shape. Refer to FIG A for the potential range of shapes that constitute a disc.

By definition: a **dome** shall mean any predominantly ellipsoid shape mounted in the disc (FIG B).

By definition: a **gimble** shall mean a pivotal mechanism that can rotate about its own horizontal and vertical axes.

By definition: EME shall mean electro-magnetic energy.

By definition: a **power-supply** shall mean a device for energising an ID.

By definition: a **propulsion-system** shall mean a mechanism for propelling a vehicle in a safe and controlled manner.

By definition: **cargo** shall include goods and passengers.

By definition: 'g' shall mean the acceleration due to gravity at sea-level on the earth's surface (for example; $1g = 9.8066 \text{ m/s}^2$).

Description:

The invention of the impulse drive (cited patent 'A') facilitates the invention of a vehicle - either via a single ID that rotates within a 3D gimble (FIG C) driving the vehicle in any direction, or; via two independent IDs (FIG D); the horizontal of which is fixed in its horizontal plane and the vertical of which may or may not rotate about its vertical axis.

The IDV's power-supply may be any electrical storage or electrical generation facility, including but not limited to; neutron-energy, EME storage, batteries or mechanical engine fuelled by fossil fuels, hydrogen, helium, etc.

Its propulsion system (ID) induces in an IDV, a constant accelerative force;

for example, the ID described in the example calculation provided (in the cited document A), induces a smooth 20-millisecond impulse every 84 milliseconds, which to all intent and purpose, may be deemed continuous;

thereby endlessly increasing its velocity. This offers two key benefits;

- 1) Infinite potential velocity, and;
- 2) The ability to overcome a planet's gravitational acceleration;

enabling an IDV to transport its cargo in any direction; horizontal or vertical or any combination thereof.

An IDV's ability to overcome gravitational acceleration means that vehicles are no longer confined to road, rail, sea or space. In fact, if powered by neutron-energy (cited patent 'C'), considerably less than a kilogram of rock-fuel is required for a return journey to our moon at 1g, and less than 100kg is needed for a return journey to Mars. Moreover, an IDV need only carry sufficient fuel for a one-way journey to any planet on which it can land, as it may be refuelled using the surface rock at its destination.

Unlike an aircraft, which is confined to an optimum altitude where sufficient atmospheric density is required to keep it aloft, an IDV's ability to travel above the earth's surface increases with altitude (even into outer-space), where the earth's gravitational acceleration diminishes.

The ID propulsion system allows an IDV to re-enter the earth's atmosphere at any angle and at any velocity, eliminating the problems of frictional heat prevalent in today's space-vehicles.

An IDV's entire external surface may be fitted with copious proximity and velocity sensors (FIG E) covering all three degrees of freedom. When considered together with; its multi-directional potential, the instant response of an ID together with the simplicity of computer-controlled navigation, accidental impact in an IDV may be, to all intent and purpose, eliminated. Moreover, a 'disc and its dome' (FIGs A & B) of any configuration may be shaped to ensure that any possible impact - accidental or deliberate - is limited to a glancing blow.

The IDV's external surface may be wrapped with 'anti-drag' (cited patent 'B') to minimise or eliminate drag resistance when travelling through an atmosphere.

Design Options:

The IDV is principally a 'disc with a dome' propelled by impulse drive, however, there are a number of options that may be applied to the basic design to optimise performance and efficiency:

1; the IDV may be propelled by a single ID (impulse drive system);

2; the IDV may be propelled by two IDs (impulse drive systems), the vertical of which may or may not rotate about its vertical axis;

3; the disc may be any shape up to and including a sphere to maximise capacity for a given volume. The dome in such a shape will be incorporated within the disc;

4; the IDs may be powered by any electrical storage or electrical generation facility including neutron-energy (cited patent 'C');

5; the IDV's outer surface may be fully or partially covered with an 'anti-drag' system (cited patent B).

Benefits:

The unique features of this vehicle are that it;

1a. replaces all other forms of transport and transit;

1b. allows travel in a 3D environment;

1c. renders accidental impact virtually impossible;

1d. can travel between origin and destination entirely under acceleration/deceleration;

1e. will accommodate the largest possible impulse drive that will fit within its shape, thereby minimising the ID's bullet mass, magnetic capacity, weight and cost;

1f. dispenses with the need for a drive train, together with the associated, cost, weight and reliability implications.

1g. can travel through an atmosphere with negligible drag resistance;

1h. can travel both around the earth's surface and in outer-space (see 2a to 2i below);

1i. in the form of a sphere, an IDV's shape makes it ideally suited as a satellite space-station maximising accommodation for a given volume;

1j. as a satellite, it can alternate between elliptical (zero energy) and circular (fuel-driven) orbits, and travel between earth and its orbital path under its own power.

1k. renders redundant all roads, railways, ports, airports, bridges and associated infrastructures; 1l. can be manufactured any size ...

... and if fuelled with neutron energy (cited patent 'C');

2a. costs nothing to run;

2b. rarely needs refuelling;

2c. can be refuelled anywhere in the universe (rock);

2d. eliminates the risk of fire in an accident (see 1c above);

2e. renders redundant all refuelling stations and associated infrastructure;

2f. requires no inlet for fuel ignition;

2g. issues no exhaust;

2h. can be sealed completely from external contaminants;

2i. is totally silent.

To summarise; the IDV is quiet, safe, fast, clean, reliable, offers a long operational life and its fuel is free and universally available if energised by neutron energy.

Figures:



Claims:

Refer to **Definitions** for a definition of the terms used in these claims.

1. A vehicle propelled by a single impulse drive mounted on a gimble.

2. A vehicle propelled by two or more impulse drives the vertical of which may or may not rotate about its vertical axis.

3. A vehicle propelled by a single impulse drive mounted on a gimble that comprises an ellipsoid main fuselage.

4. A vehicle propelled by two or more impulse drives the vertical of which may or may not rotate about its vertical axis, that comprises an ellipsoid main fuselage.

5. A vehicle propelled by a single impulse drive mounted on a gimble that comprises an ellipsoid main fuselage with a predominantly clear dome mounted on or in its upper surface.

6. A vehicle propelled by two or more impulse drives the vertical of which may or may not rotate about its vertical axis, that comprises an ellipsoid main fuselage with a predominantly clear dome mounted on or in its upper surface.