SPATIAL MOTION WITHOUT MATERIAL PROPULSION

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16. Abstract

This document describes the retrograde system of a space vehicle permitting the motion in space without the projection of gas by rotor or jet engine. It is composed of masses, which accelerate, decelerate and guide the center of gravity in space in an ordered actuation. The invention may be used to replace rotors and jet engines of our present space vehicles. In space, it may use electrical solar energy and develop indefinitely in the solar system.

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Mr. André FENIOUX
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September 6, 1979

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Gentlemen:

Please find enlosed the copy of a patent application in France regarding spacial motion without material propulsion, together with the very recent authorization for its disclosure.

Upon receiving this authorization, I thought of you.

You now have the opportunity of evaluating the system, and I would be highly honored to know its application prospects.

I am prepared to assist you in the calculation of ratios which, you must agree, is quite simple. In any case, the related constant energy process would warrent future modifications of these ratio calculations. Here again, I am bound by the secret of my country. This process of constant energy must certainly be of interest to you for its direct integration with that of spacial motion (there is no patent being prepared at present for this purpose). To share it with you without any risk, there is only one solution. As you may see, I am a follower of your ideal. Mine, is being a cosmonaut, very sincerely, all my ideals lie there, and France could not reproach me for it.

Devoted to your initiative, I remain

Sincerely yours,

P.S.: In the future, I will write in your language.

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Patents Administration

Patent Application No. 79/18601
Date:of Application: 7/18/79

FENIOUX ANDRE
GRAND PICHET CREON
40240 LABSTIDE D ARMAGNAC

Subject-Matter: Disclosure and Operating Authorization

Paris, 7/27/79

Gentlemen:

I am pleased to notify you that the Ministère de la Défense has authorized you to disclose, operate and register outside of France, the invention of which you have applied for patent rights as listed above.

I must, however, inform you that this authorization permits only that you may be released from the bond of secrecy to which you were held by article 25 1° of law no. 68-1 of January 2, 1968. This does not prejudice in any way the value of your invention, nor its patentability. Your application will be the subject-matter of examinations and procedures provided by current legislature.

Additionally, I must inform you that this authorization does not preclude the application by competent organizations of regulation provisions, which subject the operation to special conditions, such as an approval, a certification, a marketing authorization, etc.

Very truly yours,

S. CARPENTIER

SPATIAL MOTION WITHOUT MATERIAL PROPULSION

by A. Fenioux

This invention was designed for use in aeronautics and aero-   <u>/1</u>*
space, as it permits new performances in this sector to be attained.

At the present time, we depend on engine power for our spacial
endurance. This limits our radius of operation in space and in time,
as well as in the velocity which requires matter for deceleration
(retrorocket).

These fuel masses, inert potential, transported until consumed,
are eliminated. We now depend on solar energy power converted into
electrical energy and our endurance therefore is relative to the
entire solar system and with this process, we will be able to leave it
as soon as a constant energy source may be adapted to replace solar
energy. The main objective of this invention is to come into equil-
ibrium with the motion of the energy medium of the entire solar system.
At present, we do not know how to use electrical energy for spacial
motion. Furthermore, this invention is not noisy and is nonpolluting.

To obtain this result, two systems must be distinguished in this
vehicle: the first is the power or engine system, which contains by
strong demand a fuel cell type buffer power, enabling the vehicle to
pull away from earth's gravity or to decelerate spontaneously, depend-
ing on whether acceleration or deceleration is needed. This buffer
power will be regenerated in space by photo-electric cells covering
the outside surface. In order to perform an operation, it will be
necessary to have an excellent control of its power, the charge of
which will be a function of time and the quality of the photo-electric
cells. This is because solar energy is constant in time and not in
space.

The second system of the device is a resistant system, consuming
electrical energy.

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*Numbers in the margin indicate pagination in the foreign text.

The sketches attached show only this latter aspect, as it is the subject-matter of the claims. It is made with a light metal circular frame (13). An even number of dynamotors (1 to 6') is arranged along the circumferance of the frame. The axis of each one will be perpendicular to the radius of the frame. These dynamotors will be specially designed so that the rotor mass and its diameter are greater than that of the stator located on the inside (17). Each dynamotor in its motion of acceleration or engine, will absorb electrical energy, whereas it will restore close to 90% of it during its motion of deceleration or braking. The axis of each component will /2 be reversible by 180°, with the north end passing to the south end perpendicular to the radius of the device; the main inverter (8) will transmit accurate actuation commands to these dynamomotors and control the inversion of 180° of of each component on the radius. This inversion will occur by using an electromagnet with reversible polarity, placed on the inversion axis (15). This constitutes the general structure. The operating principle is the following: when an arbitrary electric engine accelerates in space, the rotor and the stator assume an inverse motion. If the stator mass is larger than that of the rotor and the center of gravity of the system is on the outside of the rotating axis, this center of gravity will shift during the acceleration in the opposite direction of the rotor motion. When the rotor is suddenly braked, the system returns almost to its point of departure. If it does not return exactly to the starting point, this is due to power losses. In order to prevent the system from returning to the starting point, the engine should be inverted along its axis by 180° at the moment where it is potential energy. At that moment, it is braked by making it return its energy and the center of gravity continues the same trajectory it began initially. This trajectory is sinusoidal and generates vibrations which disappear when several components are arranged along the periphery of a circle. The more there are of them, the less the system oscillates. The general operation is therefore relative to a cycle, which is described as follows: For the vertical take-off or climbing motion; engine no. 1 is started up. The observer located at the center of the device will see the direction of rotation from the outside toward the inside, i.e.

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the region inside the rotor will accelerate from top to bottom. At the samemtime, engine 1' opposite the device will start up in the same direction, then all of the engines will start up one after the other and then two by two diametrically opposite, so that when the first two started up will have reached their maximum rate of rotation, the last two will start. When the first two will have reached this maximum rate, they will be inverted by 180° and switched into the dynamos and so forth up the the last ones. These dynamotors operate by two's for simplicity, but could be divided into 4, 8, 16, etc. We will consider them by two.'s. They move successively two by two. When the braking due to the effect of the dynamotor will have made the rotors of the first two immobile, they will be immediately restarted in the opposite direction. Accordingly, this prevents an inversion at   /3 180°, and in the total cycle, the inversion at 180° occurs only one time out of two, and so forth. The take-off power will be a function of the mass of the vehicle, of its initial elecctric power and the coiling capacity which may more or less rapidly absorb this power, which is in any case directly restored by the effect of the dyna- motor during the vehicle operation.

To navigate and guide itself in space, 1, 2, 3 or 4 components should be de-activated in the direction of the selected curve. To land, the vehicle must be in the same spacial direction as during the take-off and its climbing power must be slightly less than the gravi- tational pull of the earth by reducing the intensity and by spreading the inversion frequency. The vehicle power potential may be greater during the landing than during the take-off. That is a function of the time spent in space and the power expended during the return, which is always less than at the beginning. This excess power may serve in space to recycle the surrounding air of the vehicle. The principle of the device is based on numerous relatively related equil- ibriums. The excess or lack of such or such quantity or quality of equipment, or even of such or such excess or lack of mass will be brought to light during the bench test, in order to prepare a ratio guideline which will be the subject-matter of additional certificates. The aim of the present patent application is to have the opportunity to work with associates.

Industrial applications of this process are numerous and will
be fully brought to light only after the use which will be made of it.
It is especially a space vehicle which will offer knowledge of the
solar system, and therefore of the benefit we may draw from it. It
is not sensible to believe that an air vehicle can be made with fuel
cells. If a constant energy source, however, were revealed to us,
this would be possible, and would undoubtedly outdo the automobile
and the airplane. With this in mind, there are serious reasons to
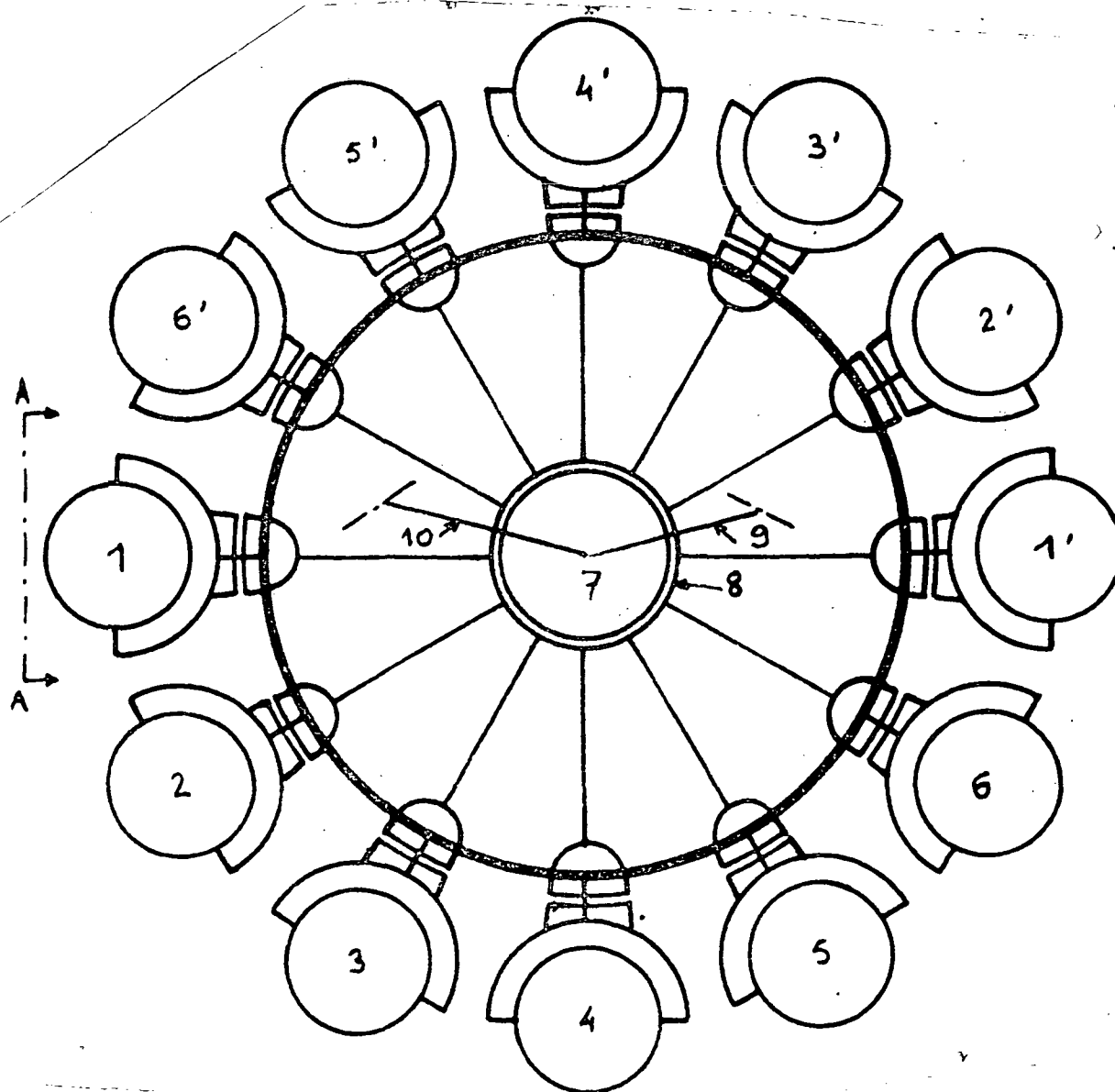be hopeful.

"Single" Plate
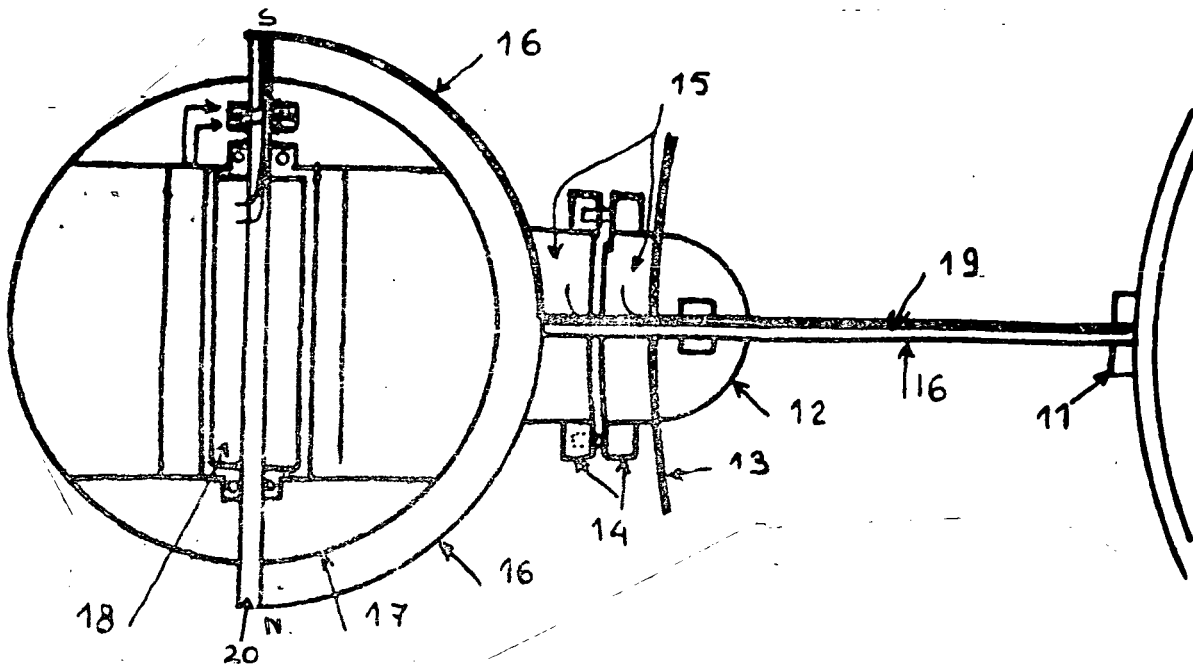
Figure 1

SECTION A A

Figure 2

Key: 7. Programmer 8. Inverter 9. Supply and Distribution Wiring for Electric Power 10. Control Cable 11. Assembly Bearing 12. Inversion Bearing 13. Frame 14. Inversion Stops 15. Inversion Electromagnets 16. Support Bar of Mobile Components 17. Spherical Rotor Outside 18. Fixed Stator on its Axes 19. Supply Wiring for Electromagnets and Mobile Component (Dynamotor) 20. N, S. Axis reversible in S, N., along perpendicular line of bar 16.

CLAIMS

1 - Spacial motion without material propulsion, characterized by the fact that it does not discharge any mass in space. 2 - Spacial motion in accordance with claim 1, characterized by the fact that it utilizes an

ordered actuation of masses to set into motion. 3. Spacial motion
in accordance with claim 2, characterized by the fact that an order-
ed mass actuation is used to produce the motion, with the spacial
inversion at 180° occuring at the moment where mass 2a is in its
potential energy coming from the driving energy and going toward
the resisting energy. 4. Spacial motion in accordance with claim 2,
characterized by the fact that in the second part of its cycle, the
inversion in the rotational direction prevents inversion at 180° at
the moment when the mass is immobile coming from resistant energy and
going toward the driving energy.

Summary of the Technical Contents of the Invention

Retrograde system of a space vehicle permitting the motion in
space without the projection of gas by rotor or jet engine.

It is composed of masses, which accelerate, decelerate and guide
the center of gravity in space in an ordered actuation.

The invention may be used to replace rotors and jet engines of
our present space vehicles. In space, it may use electrical solar
energy and develop indefinitely in the solar system.