PATENTS ACT 1977

IN THE MATTER OF patent application 9724578.1 in the names of Josef Feliks Dembski, Ian Hubbard and Sandra Diana Dembski

STATEMENT OF REASONS FOR DECISION

1. These are the reasons for my decision of 20 May 2002 refusing application 9724578.1.

History of the application

- 2. The application was filed on 20 November 1997. It is entitled "Turbo Repulse Motor". The application was duly searched and on 30 April 1998, the search report issued together with a letter which indicated that the examiner was of the view that the invention was incapable of industrial application by reason of contravening Newton's laws of motion.
- 3. Mr Dembski, responded to this letter with explanation. After the filing of Form 10/77 on 5 June 1998, the case was examined, and a letter dated 29 March 2001 issued in which the examiner reiterated and further explained his view, raising formal objection under sections 1(1)(c) and 14(3) of the Patents Act 1977. I note that this examination letter mentioned other objections to the application, but action to rectify these were deferred in view of the fundamental objection to patentability. After a number of exchanges of correspondence, it became clear that neither the examiner nor Mr Dembski were persuaded by the arguments of the other.
- 4. As a result, a hearing was held before me on 20 May 2002, at which Mr Dembski appeared in person, and Mr Vosper also attended as examiner in the case, using a video-conferencing facility.

The invention

- 5. The invention described involves two turbines, where the input of each one is connected to the output of the other, so forming a closed loop around which liquid is driven by the turbines. The turbines are connected by driven gearing so arranged that one is rotated at half the speed of the other, the slower-driven turbine being twice the axial length of the faster-driven turbine, and the connection ducting being twice as wide in the direction of flow from the slower turbine to the faster as the width in the direction from the faster to the slower. Each connecting duct has a bend intermediate the turbines. The stated effect of driving the liquid around the circuit is that the entire device will experience a force in one direction. The invention is said to be of particular use in driving space vehicles.
- 6. At the time of the hearing, claim 1 read:-

- 1. A Turbo Repulse Motor comprising a housing body provided with multiple turbines arranged on the horizontal line x-x, having a wide upper part channelled body 1 through which a liquid runs at a slow speed and a narrow lower part channelled body 5 through which a liquid runs at a fast speed, produced by the multiple turbines, a turbine 18 having a shaft 3 accommodated in a bearing housings 4 and 16 grab with the provided blades 20 the slow running liquid from a wide channelled body 1 and throw away the fast running liquid produced by the turbine 18 into a narrow channelled body 5 via a radial bend 17 escaping through the end 10 and push forcibly against the blades 20 of a slow rotating turbine 21, thus causing the Turbo repulse Motor to go in an upwards direction.
- 7. Claims 2 to 4 are appendant in form, and claim 5 is an "omnibus" claim referring to the construction of the drawings.

The issue and the relevant law

- 8. The only issue raised and argued in the correspondence and at the hearing was whether the device could work in the way described consistent with well-established natural laws, in particular Newton's laws of motion. Formal objection was raised under section 1(1)(c) and section 14(3) of the Patents Act 1977.
- 9. Section 1(1) of the Patents Act 1977 ("the Act") states
 - "1(1) A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say -
 - (a);
 - (*b*);
 - (c) it is capable of industrial application;"

The Act defines "industrial application" in Section 4(1), which states:-

"Subject to subsection (2) below, an invention shall be taken to be capable of industrial application if it can be made or used in any kind of industry, including agriculture."

It is settled law, under these Sections, that processes or articles alleged to operate in a manner which is clearly contrary to well-established physical laws are regarded as not having industrial application.

10. Section 14(3) of the Act states:-

"The specification of an application shall disclose the invention in a manner which is clear enough and complete enough for the invention to be performed by a person skilled in the art"

Arguments

- 11. I have carefully considered all of the submissions made in the correspondence and at the hearing.
- 12. I would summarise Mr Dembski's position as being that the device is consistent with Newton's law of motion, and that the resultant movement is an effect of a summation of the various actions and reactions of the flow of liquid acting on the parts of the device, and parts of the device acting on the liquid. The actions and reactions specifically referred to by Mr Dembski are those between the turbine wheels and the liquid; and between the liquid and the bends in the ducting. Various of his letters quantify these effects and assert that the sum of these is a net force in one direction. In justifying the action/reaction between turbine and liquid, he draws analogies with the paddles of a paddle steamer, the hand of a swimmer, and a bucket on a lever used to propel a boat.
- 13. The examiner, on the other hand, is of the opinion that the device as a whole must be subject to Newton's third law, the application of which would say that no movement can result from the forced circulation of liquid. He also argues that the action and reaction of the turbine and the liquid would result in a torque about the axis of the turbine, rather than a force transverse to the axis of the turbine. Although the examiner's original objection included one under section 14(3), this issue has not been touched upon in the correspondence, nor addressed at the hearing, separately from the issue under section 1(1)(c).
- 14. These conflicting views are represented throughout the correspondence, with no agreement or change in position by either side.
- 15. Mr Dembski, at the hearing, stressed his long experience as an engineer, which I have no reason to doubt, and went on to explain how he considered that his invention worked, by reference to and emphasising points made previously in the correspondence.

Assessment

- 16. Whilst it is clear to me that the turbine blades and liquid will necessarily involve forces of action and reaction in their interaction, it seems to me that these would, as the examiner says, result in a torque tending to rotate the turbine wheel about its axis. I am not persuaded that there would be a force produced which would be transverse to the axis.
- 17. Furthermore, Mr Dembski seems to me to have focussed upon particular areas of interaction and forces thereby produced, when the overall system is rather more complicated. He also draws analogies with "open" systems (the paddle steamer, the swimmer, the boat). However, it is abundantly clear that the device of the invention is a "closed" system. I am sure that accepted science would say that such a closed system, and therefore the device as a whole, must be subject to Newton's laws of motion. I have no evidence, other than Mr Dembski's fervently held and sincere belief, that Newton's third law is not contravened by the device as a whole. I am therefore driven to the conclusion that the device will, according to well-established natural law, not work as described.
- 18. The invention therefore does not fall within the definition of industrial applicability

contained in section 4(1) and so does not comply with section 1(1)(c).

- 19. I can not envisage any way of amending that would not also offend under these sections.
- 20. As I said above, the examiner deferred consideration as to whether or not there are other potential objections to the application. None of these potential objections was aired in the correspondence or before me, and so I come to no conclusion as to whether or not there may be other reasons for objection to the application. Neither do I come to a conclusion as to whether the application contravenes section 14(3).

Summary

21. In my decision of 20 May 2002 I refused the application and, as foreshadowed. in that decision, this statement has set out my reasons for doing so. The 6 weeks allowed for appeal against that decision runs from the date of the decision, that is from 20 May 2002.

Dated this 27 th day of May 2002

B WESTERMAN

Deputy Director, acting for the Comptroller

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