

## **PATENTS ACT 1977**

IN THE MATTER of

Patent Application No GB9615577.5

in the name of Jeffrey Ian Ayres

### **DECISION**

#### **Background**

1. Application No GB9615577.5, entitled Magnatronic drive/generator, was filed on 24 July 1996 together with a form 9/77 and fee, requesting preliminary examination and search. The examiner issued a letter on 2 October 1996 which explained that he was unable to perform a search because, in his view, the invention claimed operated in a manner contrary to the principle of conservation of energy and as such did not satisfy section 1(1)(c) of the Patents Act 1977. In response, on 6 November 1996, Mr Ayres filed an amended description and claims and on 7 February 1997 the examiner issued a search report.

2. Following publication of the application on 4 February 1998, a form 10/77 was filed requesting substantive examination and the first substantive examination report under section 18(3) issued on 6 March 2000. In this report objections were raised to the amended claims and description filed on 6 November 1996, namely that matter not present in the application as filed had been added and that the scope of the claims was not clear. Mr Ayres responded on 8 March 2000 expressing his displeasure with the service provided by the Office and requesting acceptance of his application as it stood. The examiner issued a further examination report on 10 May 2000 proposing amendments to the description and claims. In a response dated 18 May Mr Ayres stated that he wished to return to the wording of the original application. This resulted, in an examination report dated 23 August reiterating the objection first made in October 1996, that the invention related to an arrangement which did not satisfy the requirements of section 1(1)(c) of the Act. The examiner also indicated that revision was necessary to the claim to distinguish it from the prior art listed on the search report. Mr Ayres responded that he wanted his application to proceed in its original form immediately. The examiner then issued a further

official letter dated 14 August indicating that he was minded to refuse the application and giving Mr Ayres one month to decide whether he wished to be heard in the matter. Mr Ayres replied on 17 August stating that he wished to proceed with his application but that he did not wish to attend a hearing. I will therefore decide, on the basis of the papers on file, whether the application may proceed.

### **The application**

3. The application relates to an arrangement of electro-magnetic motor and generator which provides an electrical output both to drive the arrangement and to provide surplus output. In one embodiment the unit comprises a motor drive unit consisting of a central rotor unit with magnets and an array of outer magnets, the drive being provided by attraction between opposite poles of the rotor and outer magnets. A generator driven from the motor section provides the power to drive the motor. My Ayres has stated that he wished his application to proceed in its original form. Claim 1 as filed reads :-

“The Magnatronic Drive /Generator is an electro-magnetic motor which provides high torque mechanical (sic) drive, plus generates electric output, which will either drive the unit and provide surplus output.”

### **The law**

4. The examiner has objected that the claim does not satisfy the requirements of sections 1(1)(a) and (c) of the Patents Act 1977. The relevant parts of section 1(1) read as follows :-

*“A patent may be granted only for an invention in respect of which the following conditions are satisfied, that is to say -*

*(a) the invention is new;*

*(b) ....*

*(c) it is capable of industrial application; ”*

5. Industrial application is defined in section 4(1) which reads :-

*“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.”*

Arrangements which operate in a manner which is clearly contrary to well-established physical laws are regarded as not having industrial application (MOPP 4.05).

6. Novelty is defined in section 2, the relevant parts of which read :-

*“2(1) An invention shall be taken to be new if it does not form part of the state of the art.*

*2(2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, process, information about either, or anything else) which has at any time before the priority date of that invention been made available to the public (whether in the United Kingdom or elsewhere) by written or oral description, by use or in any other way.”*

### **The first issue**

7. The examiner objected that the claimed invention did not comply with the principle of conservation of energy which states that the total energy of an isolated system is constant. Energy may be converted from one form to another but is not created or destroyed. The examiner pointed out that, in the present application it was envisaged that, once the machine was in motion, continuous operation would be achieved with no further energy being provided from an external source. Such a system, even without extracting power therefrom, as proposed in the present application, would contravene the above principle since maintenance of operation would be conditional on topping up the energy of the system to compensate for energy losses, e.g. those due to friction.

8. Mr Ayres has not specifically commented on objections raised. He has however asserted that the description, claims, drawings and abstract meet with the required specifications.

9. The invention described and claimed has no separate source of input power, power for the system being provided from electrical power which the system itself generates. In my view such a system, with no power source to replace friction and other losses, contravenes the

principle of conservation of energy and there is no way that such an arrangement could operate according to natural law. Hence it is not capable of industrial application.

### **The second issue**

10. The examiner has also objected that the claim does not clearly include technical features which distinguish the invention from cited documents which form part of the state of the art.

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11. Whilst the claim is not wholly clear the only technical feature disclosed is an electro-magnetic motor providing high torque and generating an electric output. The search report relates to the amended claims filed on 6 November 1996 but I am satisfied that documents cited on the search report include this feature. For example GB2278242 (Flack), published on 23 November 1994, describes a generator section comprising input and output rotors and a motor section comprising a fixed casing and the output rotor. The output rotor has pairs of magnetic poles which may be permanent magnets or electromagnets, power for the latter being provided by batteries or other external power source. Windings on the input rotor are connected to brushes from which electrical power may be extracted when the differential speed between the input and output rotors results in the generation of current in the windings. Some or all of this power may be transmitted to windings on the casing. Torque multiplication is achieved. In my view the original claim of the present application is not clearly distinguished from such an arrangement.

### **Summary**

12. I have found that the claim as filed does not clearly distinguish the invention from cited prior art cited and therefore does not comply with the requirements of section 1(1)(a) of the Patents Act 1977. I have also found that the invention as described and claimed does not permit of industrial application because it purports to operate in a way which contravenes the principle of conservation of energy and hence does not comply with the requirements of section 1(1)(c). It seems to me that the latter finding is fatal to the application since I can envisage no allowable amendment which would meet the objection. I therefore refuse the application.

## **Appeal**

13. This being a technical matter, any appeal must be lodged within six weeks of the date of this decision.

Dated this     day of October 2000

JACKIE WILSON

Deputy Director, acting for the Comptroller

**THE PATENT OFFICE**