Intellectual Property Office

BL O/0123/25

12 February 2025

PATENTS ACT 1977

APPLICANT	David Arthur Tibbs
ISSUE	Whether patent applications GB2301332.9 and GB2303235.2 comply with Section 1(1)(a), Section 1(1)(b), Section 1(1)(c), Section 4(1), Section 14(3), Section 14(5)(b) and Section 76 of the Patents Act 1977
HEARING OFFICER	Nikki Dowell

DECISION

Introduction

1 This decision concerns patent applications GB2301332.9 and GB2303235.2. Patent application GB2301332.9 was filed on 31 January 2023 claiming priority from an earlier application filed on 21 April 2022 and was published as GB2617888. Patent application GB2303235.2 was filed 3 March 2023 claiming priority from GB2301332.9 and was published as GB2626812. The first examination report in GB2301332.9 raised objections under clarity, sufficiency, and novelty/inventive step. Similar objections were raised in GB2303235.2.

2 The examiner has maintained that the claimed invention lacks industrial application and is insufficient because it operates contrary to the well-established physical law of conservation of energy[1]. The applicant disagrees and, following several rounds of correspondence, requested a hearing. The matter came before me on 12 December 2024, where Mr Tibbs represented himself. I am grateful for the skeleton arguments received 25 November 2024, which I have considered.

3 During the hearing Mr Tibbs indicated his intention to abandon the earlier application GB2301332.9 and therefore my considerations will be directed towards the later application GB2303235.2. However, it is noted that regarding industrial application and sufficiency, both applications would stand and fall together. In each case the search is incomplete therefore if I find the later application to be allowable, I will remit the application to the examiner to complete the search.

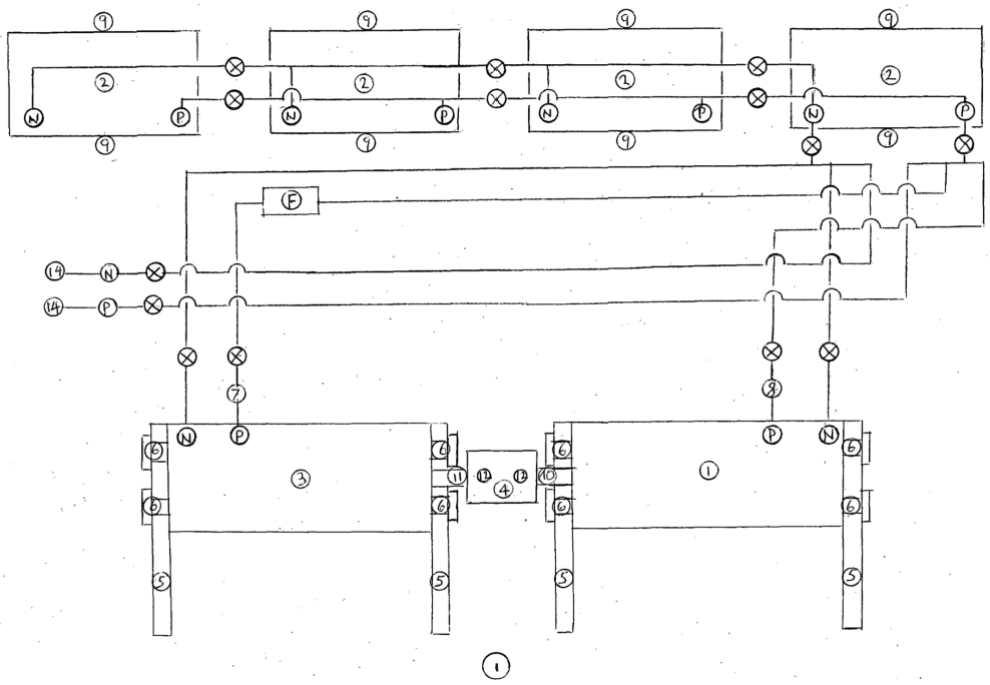
4 The crucial matters before me are whether the invention is capable of industrial application and is sufficiently disclosed. Other issues I am asked to consider are set

[1] See https://en.wikipedia.org/wiki/Conservation_of_energy

out in the prehearing reports, namely clarity, novelty and/or inventive step, and in the case of GB2301332.9, added matter.

The invention

5 The invention relates to a power module for an electric vehicle as set out in the figure below from GB2303235.2. The invention comprises an alternator 1, a battery 2, and an electric motor 3 connected as shown. To his credit, Mr Tibbs informed me that he had built a working model of his invention, however he was unable to bring the model to the hearing. Nevertheless, Mr Tibbs was able to describe how the invention worked wherein, in use, the batteries power the electric motor and mechanical energy produced by the electric motor is converted to electrical energy at the alternator, and this electrical energy is used to charge the batteries.



6 Mr Tibbs alleged that the combination of a specific motor and alternator produces more energy than it draws from the battery, and therefore the surplus energy is used to charge the battery of the power module and provide additional energy to the vehicle on-board battery 14. This description is consistent with the skeleton arguments received 25 November 2024 where the applicant alleges that the invention generates ‘free’ electricity.

7 The current claims, filed on 2 May 2023, have twelve individually numbered features including the components of the system (alternator, DC motor and batteries), its function (to keep the batteries charged, charge batteries fitted in an associated electric vehicle and be usable in all weathers) and define aspects not required (power from the national grid, fossil fuels or hydrogen etc). At the hearing it became apparent that Mr Tibbs intended that these are all elements of a single claim to his invention.

8 The invention is an electricity generator which comprises a motor used exclusively to convert electrical energy stored in a battery to mechanical energy to drive an

alternator. The alternator converts that mechanical energy into electrical energy to charge the battery of the power module and batteries of an electric vehicle. The system is said to not produce emissions and not require the national grid (except to pre-charge batteries) or fossil fuels.

The law

9 The law regarding the industrial applicability of inventions is set out in section 1 of the Patents Act 1977 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) it involves an inventive step;*
>
> *(c) it is capable of industrial application;*
>
> *(d) …*

10 Section 4(1) of the Patents Act 1977 defines "capable of industrial application" as follows:

> *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.*

11 Guidance from the Manual of Patent Practice[2] and precedent caselaw provides that processes or articles alleged to operate in a manner which is contrary to well-established physical laws, such as those often referred to as perpetual motion machines[3], are regarded as not being capable of industrial application. That guidance also states that in such cases the specification can also be regarded as not being complete enough to allow the invention to be performed under section 14(3).

> *Section 14(3)*
>
> *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.*

12 The Act also sets out various requirements that must be met for a patent to be granted. These include, amongst other things, that the invention must be new, involve an inventive step, the claims be clear and no matter added by amendment. The relevant parts of the Act read as follows:

> *Section 2(1)*

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[2] See paragraph 4.05 of https://www.gov.uk/guidance/manual-of-patent-practice-mopp/section-4-industrial-application

[3] See https://en.wikipedia.org/wiki/Perpetual_motion

An invention shall be taken to be new if it does not form part of the state of the art.

Section 3

An invention shall be taken to involve an inventive step if it is not obvious to a person skilled in the art, having regard to any matter which forms state of the art by virtue only of section 2(2) above.

Section 14(5)

The claim or claims shall -
(a) …
(b) be clear and concise;
(c) …

Section 76(2)

No amendment of an application for a patent shall be allowed under section 15A(6), 18(3) or 19(1) if it results in the application disclosing matter extending beyond that disclosed in the application as filed.

13 I shall begin by assessing whether the invention is capable of industrial application and then consider the question of sufficiency. If I find the invention to be capable of industrial application and is sufficient then I will consider the other issues including those set out in Sections 2(1), 3, 14(5)(b) and 76(2) of the Act.

Arguments and assessment regarding industrial applicability

14 In their exam report of 7 October 2024 on GB2303235.2, the examiner, in replying to comments in Mr Tibbs letter of 13 December 2023, states that the suggestion the alternator outputs more energy than is drawn by the motor violates the principle of conservation of energy.

15 During the hearing Mr Tibbs asserted that he had built a working model of his invention using off-the-shelf components including a 12-volt electric motor, which draws 160 amps from the battery to spin up an alternator which may produce 250 amps. Mr Tibbs further explained that the motor only draws 160 amps from the battery, but 250 amps is produced at the alternator therefore there is a surplus of 90 amps, and this is used to charge the battery of the power module. Mr Tibbs acknowledged that he had only managed to work his invention for about 20 minutes before the motor began to heat up. When asked whether the invention used another power source, other than the battery, Mr Tibbs confirmed that it did not.

16 The law of conservation of energy (and the associated first and second laws of thermodynamics[4]) defines that the total energy of an isolated system will remain constant. In any process, some heat is always produced, therefore some input energy will not be available to do work. Consequently, work done must always be less than the input energy and efficiency will always be less than 100%. Therefore,

[4] See https://en.wikipedia.org/wiki/Laws_of_thermodynamics

the alternator will produce less energy than being used to power the motor with any shortfall provided from the battery. There will not be any surplus energy to charge the battery. During operation of Mr Tibbs model, I predict that the battery will gradually discharge until there is not enough energy in the system to turn the motor and the arrangement will slow to a stop.

17 As the kernel of the invention is that it generates surplus electricity without any additional power source I am confident that it will not work as described and is therefore not capable of industrial application as required by section 1(1)(c) of the Act. Furthermore, having read the specification in its entirety I have not been able to identify any allowable amendment to overcome this issue.

Sufficiency

18 The examiner states that as the claimed invention is not capable of industrial application, the disclosure also does not teach the skilled reader completely enough how to work the invention in the manner described. I agree, the teaching of the applications and the skilled persons common general knowledge alone would not be sufficient to enable the claimed invention to be put into practice and function as described.

Other matters

19 As I have concluded that the invention is not capable of industrial application and is insufficient it is not necessary for me to consider the other objections.

Conclusion

20 Having considered all the information available to me I find both applications lack industrial application under section 1(1)(c) and sufficiency under section 14(3). I therefore refuse the applications under section 18(3) of the Act.

Appeal

21 Any appeal must be lodged within 28 days after the date of this decision.

NIKKI DOWELL

Patent Examination Group Head