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PATENTS ACT 1977

APPLICANT

Christopher Strevens

ISSUE Whether patent application number GB 0619471.6 complies with sections 4(1) and 14(3)

HEARING OFFICER

R C Kennell

DECISION

- 1 This application entitled "Hydrogen Bomb" was filed on 2 October 2006 with no claim to any earlier priority and was published under serial no. GB 2 442 525 A on 9 April 2008.
- 2 The examiner has reported (under section 17(5)(b) of the Act) that search would not serve any useful purpose. He has proceeded with substantive examination, but the applicant (who is not professionally assisted) has not been able to overcome his objections. A hearing was offered to resolve the matter, but with the agreement of the applicant I am deciding the matter on the basis of the papers on file on the application.

The applicant's specification

3 The constructional detail in the specification is sparse, and is summarised in the abstract accompanying the published specification as follows:

"A hydrogen bomb is disclosed comprising a plastic case having a magnetic strip to allow the bomb to be stuck to metal objects. The bomb may be powered from a lithium battery. The bomb may comprise a small coil provided around a tube of hydrogen that may ignite a fusion reaction. Current may be supplied by a 0.1μ F capacitor charged to 100,000 volts."

Most of this information is annotated on a single roughly drawn sketch showing lithium surrounding a tube of hydrogen around which a few coils are wound, and a push button for firing. The specification also states that the bomb is "simply made from common materials" and that the detonator is a flash gun mechanism which may be constructed from a commercially available kit, "with H_2 instead of Xe in the flash tube". There is no further information about how all these

components are connected. Most of the remaining disclosure (including the claims) consists of numerical values for various physical properties of the bomb. The specification does however state that "the hydrogen fusion ignites the lithium into a Li + Li > Ar + 2e reaction".

Arguments and analysis

- 4 The examiner has pointed out that the above reaction is unbalanced and clearly contrary to well-established physical laws since it would produce a carbon, rather than an argon, isotope, and that in any case the description does not provide sufficient information as to how a fusion reaction would take place. He is therefore maintaining an objection that, because the invention contravenes well-established physical laws, it is neither "capable of industrial application" as required by section 1(1)(c) of the 1977 Act nor disclosed "in a manner which is clear enough and complete enough to be performed by a person skilled in the art" as required by section 14(3).¹ (Section 4(1) of the Act states that an invention is capable of industrial application "if it can be made or used in any kind of industry, including agriculture".)
- 5 I have read the specification and the correspondence very carefully, but I can find nothing to persuade me that the examiner's reasoning is wrong. Bearing in mind that the energy from a nuclear fission reaction is normally required to initiate a fusion bomb, I find it impossible to conceive how a nuclear fusion reaction could be initiated from some sort of improvised device in the way that the applicant appears to be suggesting. Also, I do not think there is enough in the very sketchy constructional details to enable the skilled reader to construct a viable bomb of any sort.
- 6 In any case, I think it may be questionable whether the applicant has actually invented anything. In his e-mail of 23 November 2007 he asserts that the bombs are already in use and he claims to have seen two London buses "vaporized by these bombs including all the passengers". I would observe that if the bombs were in fact nuclear fusion bombs as the applicant suggests, then the destruction would have been unlikely to be confined to the buses and their passengers.
- 7 The examiner has objected (under section 14(5) of the Act) that, insofar as they do not add matter to the specification which was not present on the filing date, they do not clearly define the scope of the protection sought. The claims are simply recitations of numerical values for various physical properties of the bomb with no constructional details whatsoever. I agree with the examiner.

Conclusion

8 I therefore uphold the examiner's objections. Since it is not possible to add new information to the specification in order to overcome these, I refuse the application under section 18(3) of the Act.

¹ See paragraphs 4.05 and 14.79 of the Office's "Manual of Patent Practice; <u>www.ipo.gov.uk/practice-sec-004.pdf</u> and <u>www.ipo.gov.uk/practice-sec-014.pdf</u> respectively.

Appeal

9 If the applicant disagrees with my decision he has a right of appeal to the Patents Court. Under the Practice Direction to Part 52 of the Civil Procedure Rules, any such appeal must be lodged within 28 days.

R C KENNELL Deputy Director acting for the Comptroller