



22 September 2006

PATENTS ACT 1977

APPLICANT Colin Hannay

ISSUE Whether patent application number GB 0413690.9 complies with

sections 1 and 14

HEARING OFFICER D J Barford

DECISION

Introduction

- Patent application number 0413690.9 ("the application") entitled 'Increased Radiant Heating from Gas, Wood and Coal Fireplaces" was filed on 18 June 2004 in the name of Colin Hannay. Priority was claimed from an earlier application filed on 10 March 1995. However since this is more than 12 months from the filing date of the present application, Mr Hannay was informed in a letter dated 5 July 2004 that this claim to priority was not valid. The application was published on 21 December 2005 as GB 2415249.
- A combined search and examination report was issued under sections 17 and 18(3) on 12 November 2004, the examiner objecting that in his view the claims were not clear and lacked novelty and inventive step. Further reports under section 18(3) were issued on 8 March 2005 and on 18 August 2005. Mr Hannay has responded to these reports by way of arguments which have not been accepted by the examiner. In consequence, Mr Hannay has been offered a hearing but has requested a decision on the papers.
- In a final report dated 21 June 2006 the examiner re-iterated all of the outstanding objections in full, Mr Hannay's response, in a letter dated 6 July 2006, again being by way of observations rather than amendment.

The application

The application, which has remained completely unamended despite the issue of four examination reports, relates to increasing the efficiency of a fireplace by inserting a metal panel into a hole in the chimney flue shaft to radiate heat that would otherwise be wasted up the chimney.

- There are seven claims of which claim 1 is the only independent claim. They read:
 - 1. I claim an invention for Increased Radiant Heating whereby a frontal section of wall of the Chimney Flue Shaft is removed for fitting over it a Front Cover Hotpanel.
 - 2. An invention for Increased Radiant Heating as claimed in Claim 1 where a Lateral Beam Support is installed to reinforce the wall vacated below it.
 - 3. An invention for Increased Radiant Heating as claimed in Claims 1 and 2 whereby a Front Cover Hotpanel from a flat rustless steel sheet about 2mm thick is fitted over the removed section of chimney flue to dissipate heat.
 - 4. An invention for Increased Radiant Heating as claimed in Claims 1 to 3, whereby the Front Cover Hetpanel is fixed in position by a Securing Bracket Surround.
 - 5. An invention for Increased Radiant Heating as claimed in Claims 1 to 4, whereby On/Off Tap Regulator can regulate gas flow heating temperature as required to warm the environment.
 - An invention for Increased Radiant Heating as claimed in Claims 1 to 5
 whereby heating efficiency in the environment is increased through
 Heat Dissipation from the fitted on Front Cover Hotpanel.
 - 7. An invention for Increased Radiant Heating as claimed in Claims 1 to 6, whereby a Thermal Plastic Mesh Guard is fixed about 2in. (5cm) over the Front Cover Hotpanel to prevent scalds resulting from inadvertent contacts with it.

The law

6 Relevant are sections 1(1), 2(1) and (2), 14(5), and 18(2) and (3). These read:

Section 1

- 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) the invention is new;
 - (b) it involves an inventive step;
 - (c) ..
 - (d) ..

Section 2

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

(2) The state of the art in the case of an invention shall be taken to comprise all matter (whether a product, a 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.

Section 3

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 part of the state of the art by virtue only of section 2(2) above ...

Section 14

- (5) The claim or claims shall -
 - (a) define the matter for which the applicant seeks protection;
 - (b) be clear and concise;
 - (c) ..
 - (d) ..

Section 18

- (2) On a substantive examination of an application the examiner shall investigate ...whether the application complies with the requirements of this Act and rules and shall determine that question ..
- (3) If the examiner reports that any of those requirements are not complied with, the comptroller shall give the applicant an opportunity within a specified period to make observations on the report and to amend the application so as to comply with those requirements ..., and if the applicant fails to satisfy the comptroller that those requirements are complied with, or to amend the application so as to comply with them, the comptroller may refuse the application.

The issues

Four patent specifications have been cited by the examiner having regard to novelty and inventive step. All were published before the filing date of the application and therefore form part of the state of the art as defined in section 2(2) quoted above. They are:

GB 2296969 A (Hannay) GB 1071083 A (Bennett) GB 557201 A (Noden) EP 0280447 A (Halvor)

- The **Hannay** document, which is by the applicant himself, describes removing a section from the front of a chimney flue shaft to form an opening into which is inserted an assembly of metal pipes and rods for picking up waste heat. A metal panel may be positioned behind the assembly to perform the same function as the panel of the application.
- The **Bennett** document describes a chimney having a flue shaft which is built to incorporate in the flue what is described at page 1 lines 27 to 30 as "at least

- one heat conductive and/or radiating panel to conduct and/or radiate heat from the panel into a room adjacent the chimney breast".
- The **Noden** document describes a chimney having flues wherein, as described at page 4 lines 57 to 62, "the portions of the flues .. passing through the attic space are formed or provided with metal plates or the like whereby the waste heat is utilized to warm the air in the attic space".
- 11 The **Halvor** document describes a plastics safety guard.

Claim 1

- The examiner has objected that claim 1 lacks clarity in that its wording requires no more than the step of removing a front section of wall of a chimney flue shaft. The second part of the claim which reads "for fitting over it a Front Cover Hotpanel" merely requires that a hotplate *could be* fitted over the removed section. The examiner points out that the claim would need to be amended if it is essential to the invention that a panel <u>is</u> fitted. He also points out that since the Hannay document describes removal of a front section of wall of a chimney flue shaft, it destroys the novelty of claim 1 as presently worded. He goes on to argue that even if the amendment referred to above were made, claim 1 would then be obvious in the light of what is described in Bennett.
- Mr Hannay's response to this was "It has novelty in that there has been nothing else like it. The only doubt is whether it is an invention in the limited sense of the word. Generally considered, it is an idea actualized by the removal of a frontal section of wall and replaced by a metal plate of specified thicknessIt is the frontal panel which is important in my application. The other parties mentioned Messrs A Bennett- do not have such a general feature in their claims."
- I note the points made by Mr Hannay, and it seems to me highly probable that his intention is indeed to include in claim 1 as an essential feature of his invention the step of fitting a plate or panel over the opening. However for the reason explained by the examiner, that intention is not clear from the wording of the claim as it stands. Accordingly I find that claim 1 is not clear as required by section 14(5)(b).
- If claim 1 is interpreted not to require the step of fitting the panel, then technically it relates to no more than knocking a hole in a chimney, and therefore, having regard to sections 1(1)(a) and 2, lacks novelty in the light of the Hannay document which clearly describes this.
- Of more significance perhaps is the question what would be the effect of clarifying claim 1 by clearly including the step of fitting the panel over the opening. It would then no longer lack novelty in the light of the Hannay document since in this document an assembly of metal pipes and rods is inserted and a metal panel positioned <u>behind</u> the assembly.

- 17 Of relevance are the Bennett and Noden documents, Bennett being identified by the examiner as the closest prior art. Taking the inventive concept of the present application to be the steps of knocking an opening in a chimney and fitting over it a panel to dissipate heat, the difference between this and Bennett is that in Bennett the opening is formed and the plate fitted *during* construction of the flue rather than after.
- It is a well established principle that in order to establish whether there is an inventive step I need to decide whether, without any knowledge of the invention, this difference constitutes a step which would have been obvious to a skilled man or whether it would require any degree of invention.
- Who is the skilled man here? Well I think it might be reasonable to take him to be a general builder or alternatively perhaps a heating engineer. Would such a person, knowing what was described in Bennett, require inventive ingenuity to apply the idea to a house that has already been constructed? I think the answer to this has to be no. Constructional alteration of houses is commonplace and it would be obvious to the skilled man in my view to see that what is described in Bennett could readily be applied to existing houses without the need for anything but the most basic of building skills.
- For completeness, I note that in Bennett the part of the flue that is fitted with the plate is constructed with an increased cross-section to allow the hot gases to slow down and "collection means" as described flaps are formed in the chamber to collect soot etc. These features do not form part of the present invention; and to my mind would not impede the skilled man in reaching the conclusion described above, namely simply to apply the hot panel concept to an existing chimney by knocking a hole in it without the further adaptations of an enlarged chamber with soot collectors.
- Accordingly I conclude that claim 1 is obvious in the light of Bennett and, having regard to sections 1(1)(b) and 3, lacks an inventive step.

Claims 2 to 7

- The features introduced by claims 2 to 5 and 7 do not appear to me, on the face of it, to go beyond common general knowledge. Indeed examples are to be found in the cited documents. For instance Hannay describes the features of claims 2 and 5, and Bennett describes the feature of claim 4. Regarding claim 3, Bennett describes a heat conducting panel and Hannay describes a metal panel (albeit positioned within the flue). Regarding claim 7, Halvor describes a plastics safety guard, albeit for use with a cooker. Accordingly these claims also appear to me on the face of it to lack inventive step.
- Claim 6 appears to introduce no additional feature to the claims to which it is appendant, since increased heating efficiency is an inevitable consequence of fitting of the panel. It is therefore redundant.

Conclusion and next steps

- I have concluded that claim 1 is not clear and lacks novelty, and that if amended in the way discussed above in paragraph 12 it would still lack inventive step. I have also concluded that claim 6 adds nothing and is redundant.
- I have also concluded that on the face of it claims 2 to 5 and 7 lack inventive step. That said however, I am conscious that the inventiveness of some at least of these claims has not been fully argued. I will therefore give the applicant a period of two months from the date of this decision to submit amendments to overcome my findings.
- I should make it clear that I shall refuse the application under section 18(3) if, within that period:
 - (i) claim 1 is not amended, or
 - (ii) it is amended solely to include the step of fitting the panel (as discussed in paragraph 12 above), or
 - (iii) it is amended, but no genuine attempt is made by the applicant to introduce into claim 1 a feature which he can reasonably argue is inventive.

Appeal

Under the Practice Direction to Part 52 of the Civil Procedure Rules, any appeal must be lodged within 28 days.

DAVID BARFORD

Deputy Director acting for the Comptroller