

**THE JOINT EXAMINATION BOARD
PAPER P3**

**Preparation of Specifications for United Kingdom and Overseas Patents
2007**

EXAMINERS' COMMENTS

GENERAL

In this question you are told that the client is a beekeeper and he has produced a 'smoker' which he wishes to disclose to a manufacturer. That is accordingly the business which it is your task to protect. The client has written to you to tell you about the new type of smoker which is used to administer smoke to a bee hive. The client has disclosed the invention at a demonstration today and you have no way of obtaining any further information. You are told that you are to provide the widest practicable protection for your client.

INDEPENDENT CLAIMS

At the very least, the independent claim should be novel over the prior art and should also cover the embodiment(s). Somewhere between these extremes is the claim which provides the widest practicable protection. In some situations it is necessary to have more than one independent claim to cover the embodiments or more than one inventive feature, but that was not the case here.

An independent claim was expected to the smoker. The smoker is a device for producing smoke and needs to be distinguished over the garden incinerator described at the top of page 3 (as well as the prior art approach of burning a bundle of damp straw). The description at page 3 fourth paragraph, first three sentences, identifies that a restricted air inlet ensures generation of smoke in a controlled manner (see also page 4, last sentence of the clients description) and a claim to this feature was expected.

Independent claims along the lines of :-

A smoker, comprising: an enclosure for receiving combustible material, the enclosure having an outlet for smoke and an inlet providing a restricted flow of oxygen to the enclosure, whereby the combustible material burns to produce the smoke.

or

A bee smoker, comprising: a firebox operable to receive a combustible material, said firebox having a chimney and an air inlet operable to restrict an airflow into said firebox to cause said combustible material, once ignited, to smoulder and provide a smoke emission from said chimney.

would lead to a good pass mark.

Whether the apparatus was “a smoker” or a “bee smoker” or “a smoker for use in calming bees” were each considered to be equally acceptable. The terms “outlet” and “chimney”, as well as “air” or “oxygen” were considered to be interchangeable. The omission of the some structure which “prevented”, “inhibited” or “restricted” airflow would result in a lower mark since those claims generally lacked novelty over the known garden incinerator. Also, claiming the result to be achieved without reference to any structure attracted a lower mark. However, marks could be clawed back by a dependent claims which added features to provide a claim co-terminus with the above.

The inclusion of a mechanism which forces air into the chamber (the second half of the fourth paragraph on page 3) was considered to be an unnecessary limitation. Features such as “an airflow generator”, “a grate”, “an offset chimney”, and “a narrowing chimney” are all considered inessential features and ought to therefore be the subject of dependent claims.

In this case method claims were not expected. The client is in contact with a manufacturer and the manufacture and sale of the products, rather than licensing use, seems the most practicable way of exploiting the invention.

As mentioned in previous years, drafting multiple independent claims in a shotgun fashion to cover a variety of novel features showed a lack of judgement on the part of the candidate and rarely scored highly. This approach can also cause considerable difficulty to the candidate when drafting the introductory portion of the application, as well as causing unnecessary unity problems.

A total of 40 marks were available for the independent claim(s). Where more than one independent claim was presented, the available marks were split between the claims.

DEPENDENT CLAIMS

Candidates were told to include no more than ten dependent claims.

Quite a variety of dependent claims in the traditional graduated form were available, for example:

- providing an airflow generator to direct airflow through the container inlet
- the airflow generator is intermittently operable
- the generator outlet is spaced from and aligned with the container inlet
- the generator outlet is convergent
- the spaced outlet/inlet arrangement entrains surrounding air
- the airflow generator is a bellows
- the bellows is spring loaded
- the inlet comprises a horizontal duct
- a grate is spaced above the bottom of the container
- the inlet is located between the grate and the bottom of the container
- the container comprises a removable lid
- the lid is hinged
- the lid has an insulating handle
- the chimney is offset

- the chimney narrows
- the container comprises a protective liner
- the container comprises an external shield
- the container has a hanging hook

A total of 25 marks were available for the dependent claims. Since no more than 10 dependent claims were requested, only the first 10 dependent claims were marked.

An apparatus omnibus claim is expected in a UK application.

Candidates might find it useful to make bullet point notes on features of their dependent claims to enable them to structure these claims in a sensible order prior to writing them out. This might also provide some time advantage to candidates when writing out the claims since subsequent renumbering and awkward dependencies can be avoided.

Candidates might also wish to consider whether features that they have selected for a dependent claim would truly assist in prosecution. Do they provide an advantage or benefit? If a candidate is unable to envisage how the feature of a dependent claim might provide patentability in the face of a rejection of the preceding claim(s), then perhaps that feature ought not to be the subject of a dependent claim.

DESCRIPTION

The body of the specification should start with a title (Rule 12(4) & (6) of the December 2007 Rules). The title ought not to be narrower in scope than the independent claims.

The introductory portion of the description ought to have explained the field of the invention sufficiently to assist the search examiner in determining the technical classification. Again, the field of the invention ought not to be narrower in scope than the independent claims.

The introductory portion of the description ought then to have acknowledged the known and relevant prior art and set the scene for the invention. In this regard, only the known “straw wafting” technique ought to have been acknowledged. It was considered that the known “garden incinerator” or “wood burning stove” ought not to have been acknowledged since they are not considered to be relevant prior art in the technical field of ‘bee smoking’.

It was expected that the description should then include a summary of invention which provides some justification for the chosen claims including, to a general extent, the dependent claims. This justification should include an indication of any benefits or advantages provided by the independent and dependent claims. Care should be taken to distinguish between the use of the terms “aspects” (typically used to introduce a statement of invention) and “embodiments” (typically used to introduce a preferred feature) of the invention.

Notwithstanding the obvious benefits to the client of setting out a cogent introduction and summary of invention, which provides an initial justification/arguments in favour of the novelty and inventive step of the drafted claims, for the purposes of the Examination this section is helpful to the Examiners when reviewing the drafted claims, particularly where unexpected wording is used. A well constructed introduction helps the examiner

understand the reasoning behind the chosen claims as well as the intended scope, which in turn helps the examiner award marks. Examiners do not want side notes setting out the candidates reasoning. Also, candidates should carefully review their arguments set out in the introduction against their drafted claims and summary of invention section to ensure that they are consistent. This may be useful to candidates as an internal check to help ensure that they do not fall into the trap of failing to claim what they clearly understood the invention to be.

A total of 10 marks were available for the introductory portion.

The body of the specification should continue with the description and the drawings (Rule 12(4)). A list of figures ought to be provided (Rule 12(7)).

Candidates are reminded that the drawings generally show embodiments of the invention and ought to be described as such. Consistent reference numerals ought to be used in the description and different drawings when referring to the same feature.

The specific description setting out of the structure of the apparatus in some detail, followed by its mode of operation, was looked for, with alternative embodiments described separately and subsequently and in reasonable detail. Again, candidates are reminded that the specific description generally describes embodiments of the invention and the terminology used in the claims should find its counterpart in the introduction and the specific description.

Candidates are reminded that the purpose of the description is to satisfy Section 14(2) & (3) and to ensure that the application does not fall foul of Section 72(1)c.

It would be advisable, therefore, that all the claimed features are clearly disclosed (Section 14(2)). A good test for a specific description is whether it can be understood without reference to the drawings.

A total of 20 marks were available for the specific description, with most of these marks being allocated to the sensible annotation of the drawings provided and the associated description of the embodiments.

ABSTRACT

The abstract commences with the title (Rule 15(1)), and then indicate the technical field, the technical problem and the gist of the solution of the technical problem (Rule 15(2)). The abstract should indicate the figure which should accompany the abstract when published (Rule 15(4)). The Abstract should not contain redundant words such as “This invention comprises ...” or simply repeat the text of claim 1. “A bee smoker” or the like was the expected start.

A total of 5 marks were available for the abstract. Relatively easy marks were lost on this part of the answer.

MISCELLANEOUS

Notes to the Examiner are rarely useful and do not gain marks since they do not form part of the drafted specification on which candidates are being examined. Other perennial advice is worth repeating also. Write on every other line. Perhaps make each claim the subject of a new page, or at least leave very large gaps between them, this way you make plenty of room for later amendments.

MARKING SCHEDULE

The schedule used for this year's examination is attached. This is a paper in which candidates can take different approaches, which, if properly drafted and based on the information contained in the question, are equally acceptable. The apportionment of marks emphasises the importance of getting the correct scope for the independent claim(s). The marks awarded for the independent claim(s) will depend on the scope and wording of the claim(s).

Section	Criteria	Mark	Comment
INTRO			
Title	No narrower than main claims	1	
Field of Invention	Encompasses but no narrower than main claims	1	
Prior art	Acknowledge no more than prior art disclosures	1	
	Sensible description to set scene	1	
Summary of Invention	More than a list of claims – highlight how features of the claims overcome any problem highlighted in prior art/provide advantages	6	
DESC			
List of Figs	Sensible description of fig 1 & 2	2	
Labelling of Figs	Sensible labelling of fig 1 & 2, correct sheet numbering	2	
Description	Sufficient in detail to provide enabling disclosure of claims, provide back-up positions for all features, especially if not claimed	16	
MAIN CLAIM Sufficient & sensible breath - Novel	<p>A smoker [for] [use in calming] [bees], comprising: an enclosure for receiving combustible material, the enclosure having an outlet for smoke and an inlet providing a restricted flow of oxygen [air] to the enclosure, whereby the combustible material burns to produce the smoke.</p> <p>A bee smoker, comprising: a firebox operable to receive a combustible material, said firebox having a chimney and an air inlet operable to restrict an airflow into said firebox to cause said combustible material, once ignited, to smoulder and provide a smoke emission from said chimney.</p>	40	
DEPENDENT CLAIMS	MAXIMUM OF 10 CLAIMS	25	
	Airflow generator operable to direct airflow through the container inlet		
Suitable back-up positions for main alternatives.	- intermittently operable		
	- generator outlet spaced from and aligned with the container inlet		
	-- generator outlet convergent		
	-- spaced outlet/inlet entrains surrounding air		
Sensible order	- bellows		
	- spring loaded		
Antecedence, dependencies.	Inlet comprises horizontal [or downwardly sloping in the direction of airflow] duct		
	[Ventilated] grate spaced above the bottom of the container		
	- Inlet located between the grate and the bottom of the container		
	Container comprises removable lid		
	- hinged lid		
	- lid has insulating handle		
	Offset chimney		
	narrowing chimney		
	Container comprises a protective liner		
	Container comprises external shield		
	Hanging hook		
	Omnibus claim(s)		
ABSTRACT	Title, technical field, problem, solution, figure	5	

