

## GENERAL

In this question you are told that your client has designed a new pipe gripping tool for plumbers. His/her invention is an improved gripping device which can be used to stop a pipe from turning and which does not need to be tightly squeezed, but instead achieves a strong grip when used with just one hand.

The device has a pair of jaws and a single actuating handle. The jaws are connected by a pivot. Pulling on the actuating handle causes the jaws to grip tightly onto the pipe.

## INDEPENDENT CLAIMS

It is always important for candidates in to consider who is going to need to prevent who from doing what, and what might be his likely business. In this case the principal outlet is going to be the manufacturer of grippers, particularly grippers used by plumbers.

In this paper it was necessary to draft a claim which clearly distinguished over a conventional pair of pliers. There are different ways to draft a claim that achieves the required scope and the examiners will reward previously unanticipated approaches equally with those that have been envisaged when setting the examination.

An independent claim which read:-

A handle; inner & outer opposed jaws, inner one fixed on the handle, outer one pivoted to the handle, [gripping surface on the jaws], location of the pivot such that when the jaws are engaged upon a workpiece one jaw is pulled towards the other when handle pulled. (It is arguable that the jaws must grip in some fashion to function and so must per se have a gripping surface)

or

[Gripping] tool/gripper [for pipes &c.] comprising: [inner and outer] opposed jaws, [inner] one rockable/rollable/pivotable /movable on a workpiece/pipe &c. by a handle, other pivoted to the handle [Gripping surface on the jaws] pivot located such that rocking/rolling/movement of the one jaw [on the workpiece/pipe &c.] pulls the jaws towards each other.

or

Gripping tool comprising: a pair opposed jaws, one jaw having an actuating handle extending therefrom, other jaw having an arm extending therefrom, the arm being pivotally attached to the handle, actuating the handle causing at least a part of the handle to pivot away from the arm to cause the jaws to pivot towards each other.

would achieve passing marks from those available for the independent claims.

As mentioned previously, ‘means plus function’ is a well recognised style of drafting and good marks can be achieved with that style. Claims limited simply by the result to be achieved often run the risk

of being no more than a ‘free beer’ type claim because they lack any distinguishing structure which provides the claimed function.

This year, some candidates failed to distinguish adequately over a conventional pair of pliers actuated only by one handle. However, this could readily be remedied by defining the arrangement of the pivot in relation to the jaws which enables gripping force to be applied by displacing the handle or by defining that parts of the handle and arm move apart to cause the jaws to grip together.

Examiners were pleased to note that few candidates unnecessarily limited their independent claims by including features which were not subsequently referred to in the remainder of the claim. As mentioned previously, identifying unnecessary limitations is sometimes difficult to spot and to be self-critical over. To help with this problem, candidates are encouraged to consider trying to sketch out their claims. This often reveals features which have no interaction with others in the claim. This can be helpful in two ways: the first is that the feature may not be necessary at all and can be removed; the second is that the feature needs to be present, but its interaction with the other features has been omitted and needs to be included.

## DEPENDENT CLAIMS

Quite a variety of dependent claims in the traditional graduated form were then available, for example (in no particular order):

- Adjustable jaws
- Adjustment mechanism
- Thread, nut, window in collar etc.
- Pivoted collar
- Upper Spring to grip initially
- Lower spring to push apart
  
- V-shape/non-parallel jaws
- ‘Outer’ jaw perpendicular to arm, inner jaw sloping
- Gripping surface on the jaws (if not in claim 1)
- Roughened jaws
  
- Inner jaw abuts arm to prevent over compression
- Plastic jaw surfaces
  
- pivot ‘behind’ inner jaw (many candidates used the word ‘behind’ which was used by the client, but this raises the question ‘behind in relation to what?’ – presumably the outer jaw?)

In this case method claims were not expected. The client was off to see a manufacturer. Would the client sue a user of the tool?

An apparatus omnibus claim was expected.

Candidates might find it useful first to make bullet point notes on the 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 and cause a UK-IPO examiner to change his mind when assessing novelty and inventive step. If a candidate is unable to envisage how the feature of a dependent claim might convince the examiner that an amended claim was now novel and inventive due to the inclusion of that dependent feature, then perhaps that feature ought not to be a dependent claim. A guide to this is the ability to specify the problem solved or advantage obtained by the feature of the dependent claim. Superfluous dependent claims will incur unnecessary cost when filing subsequent foreign applications. The examiners are looking for quality rather than quantity.

A total of 60 marks were available for the claims.

## SPECIFICATION

The body of the specification should start with a title (Rule 12(4)&(6)). The title ought not to be narrower in scope than the independent claims. In this case a suitable title might be “Gripping Tool”

The introductory portion of the description ought to explain 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 subject matter of the independent claim(s). In this case “The present invention relates ... tool for holding a workpiece, particularly a hand tool for that purpose.

The next introductory portion of the description is becoming understood as “Background to the Invention”. This ought to acknowledge the known and relevant prior art and set the scene for the invention.

It was expected that the description should then include a “Summary of the Invention”, which provides some justification for the chosen claims including, to a general extent, the dependent claims. This justification may 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 “the invention” (best avoided), “aspects of the invention” (when referring to independent claims), “preferred features” and “embodiments of the invention” (when referring to dependent claims).

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 particularly helpful to the Examiners when reviewing the drafted claims, particularly where unexpected wording is used. Although this examination paper is drafted with a particular result in mind, as mentioned above, the Examiners acknowledge that other solutions sometimes arise unexpectedly; a well constructed introduction proves invaluable in those circumstances. Also, candidates would continue to be well advised to 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 or omitting the structural features that provide the claimed function.

Quite a few candidates are resorting to a preamble which just refers to claim numbers. Whilst this is acceptable and saves time, candidates should be careful to ensure that this brevity does not lead to inadequate supporting arguments explaining the advantages of the features of the corresponding claims.

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.

A total of 15 marks were available for the introductory portion.

The body of the specification should continue with the description (Rule 12(4)).

The specific description setting out the structure of the apparatus in some detail, followed by its mode of operation, was looked for, with variations or other embodiments described separately and subsequently and in as much detail as possible. Again, candidates are reminded that the specific description generally describes embodiments of the invention and the wording of the text should therefore reflect this. The use of the word ‘preferably’ in the specific description can lead to doubt as to whether the feature being referred to is actually a necessary part of the particular embodiment being described. ‘Preferred features’ should be set out in the introduction /summary of the invention and the dependent claims. If alternative features are possible in an embodiment, then these can be described as such.

Candidates are reminded that a purpose of the description is to satisfy Section 14(2) 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 and that the terminology of the claims can be followed through to the specific description. For simple mechanical cases, at least, one test of a specific description is whether it can be understood without the drawings.

Some candidates use headings in the description. These are not typically used in UK specifications, but if used they should be used correctly – a passage headed Prior Art should only refer to the prior art.

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 embodiment.

## ABSTRACT

The abstract commences with the title (Rule 15(1)), and then indicates the technical field (Rule 15(3)(a)), the technical explanation of the invention (Rule 15(3)(b)) and the principle use of the invention (Rule 15(3)(c)). The abstract should indicate the figure which should accompany the abstract when published (Rule 15(4)). Where a feature of the invention included in the abstract is illustrated in a drawing, the feature must be followed by the reference for that feature used in that drawing (Rule 15(6)). It is in this case, at least, sufficient to repeat the main claim, without including the word “invention”, perhaps with a little explanation or material from an important dependent claim.

A total of 5 marks were available for the abstract.

## 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.

Candidates would do well prior to the exam to write on lined paper with their intended writing instrument and check to see whether they can easily read a photocopy of their work. If not (and fibre tip or felt tip pens seem to be the worst), select another writing instrument since examiners cannot give marks for things they cannot read.