P4 2008 EXAMINERS' COMMENTS

Although the subject-matter was simple, there were plenty of issues for candidates to deal with, and many did so with some flair, gaining very high marks. One problem that the paper poses is how to amend the specification to cover the client's most commercially important product, without adding subject matter.

The client sells scaffold caps and bungs and the caps can be used in any type of scaffold pole. There are two types of scaffold caps, the first having a tapering structure and flange and the second having similar tapering, external and internal ribbing and no flange. The client also sells bungs to be used with either type of scaffolding end cap. Correspondingly, there are two independent claims, and a non-unity objection because the Examiner has located prior art relating to ends caps that fit in or on pipes.

The two cited pieces of prior art, GB 2087596 (D1) and US 3932969 (D2) are, as nearly all candidates recognised, not concerned with scaffolding. Nevertheless it was important to note how they affected the client's claims, and many candidates lost their way at this point because it is important to consider not only novelty but obviousness, especially in simple technologies, for example where the problem to be solved is stopping debris getting into a pipe. Candidates need to consider in such situations, the problem that the invention solves and whether it is obvious for prior art in another area, to be used in the situation that the current invention relates to.

GB 2087596 discusses sleeves and a bung that fit on or in heating pipes. The bung is of a frusto-conical shape and has a flange, while the walls of the sleeves are relatively thick. The specification also gives a good outline of problems associated with the art of preventing debris getting into pipes. The bung is of little relevance to the application, except in showing a flange (claim 2), but the sleeves are. The embodiments of Figures 5 and 8, being tapered, could be inserted into the end of a suitable tube as in claim 1. Note that the claims of the application do not specify or imply any dimensions and so claim 1 is anticipated.

US 3932969 describes end caps/plugs where ribbing forms a stepped structure that contacts the pipe, and the last paragraph of the description outlines that the flange can be used to pull the plug out of a pipe. This time the pipe is bigger than a scaffold tube but, again, this does not provide a distinction and hence claim 2 is also anticipated.

In the opinion of the examiners, therefore, there was no way of defending claim 1 or claim 2 as they stand, even if one of them were to be deleted to overcome the non-unity objection.

In the opinion of the examiners it was not possible to write a claim having basis in the original application that was inventive and covered both embodiments. Nevertheless, there were some reasonable attempts and these candidates gained marks if what they did was supported by adequate explanation to the UKIPO Examiner and the candidate as to why they took this less certain route. The next question therefore is, can both embodiments still be covered and, if not, which should be retained?

The client states that one product is much more important than the other, which was a strong indication that candidates should follow the client's hint and structure claims towards the flangeless version (claim 1) but also including a suitable distinguishing feature. Since the appeal of the product is its good fit in a pipe, the natural way to bring this out seem to be to specify that the end cap has longitudinal ribs, as described on page 7. Good candidates clearly explained to the UKIPO Examiner and the client why they had chosen this option and gained high marks for this. It is important for candidates to explain the choice of amendments because this clearly shows the Examiners that the candidates have understood the invention and are not simply selecting a feature at random.

Some candidates did not appreciate the difficulty in claiming <u>only</u> a sleeve/plug, with no reference to the tube as an element of the claim. Using terminology in claim 1 such as "in use" does not overcome prior art if there is no definition of the tube in the claim. On the other hand, it is not desirable to limit the claim to the combination of the tube and cap, since the client sells caps to companies that have their own tubes. Not all appreciated the novelty-destroying effect of a sleeve intended for use as a cap but in fact likely to be suitable as a plug (Figure 8 of GB 2087598).

Some candidates included in claim 1, reference to an interference fit without saying that there were ribs. Candidates then had to argue that the prior art did not show an interference fit, which seems an uphill struggle because pushing anything into a tube so that it is held in place by the contact between it and the tube could be an interference fit. If candidates followed the interference fit arguments, they needed to back up their amendments clearly with precise definitions of what an interference fit was in the context of the invention. If claim 1 is amended to include <u>both</u> the longitudinal ribs <u>and</u> the interference fit then the relation between these should be explained or recited in the claim to show that the candidates had identified the way the invention worked and good candidates explained this to the client and the UKIPO Examiner.

Other approaches could gain marks if properly presented and argued, though the examiners still felt that they were unlikely to lead to swift grant and, as this is what the client wanted, the highest marks were given to the safest option for the client.

Not many candidates decided on directing claims to the flange of claim 2, which is good because there is a clear steer in favour of Fig. 3 rather than Fig. 1. However, many candidates tried to cover all the embodiments, for instance by specifying dimensions (i.e. c. 4 cm diameter), or by saying that the plug/sleeve is suitable for a scaffold tube. These at least gives novelty and arguably is adequate to cover the competition but it does leave the client with claims that are easier to work around and there are inventive step issues to overcome. With some functional recitation of the taper etc. being of a suitable degree, one can make some headway to supporting the distinction that the plug is intended not to be removable in normal use, in contrast to both the citations, which must be "removable". In general, for justifying a main claim covering both embodiments, it is not enough merely to state that there are two embodiments so one can simply go to the highest common factor of existing claims 1 and 2; it is necessary to prove to the Examiners that the candidate has logically thought about all possibilities, taking into account the technical improvements of the invention. The candidate

then needs to construct very clear and precise arguments to the UKIPO Examiner as to why the claims have been modified in this way.

A further possibility, given support, is a constant-thickness smooth taper. This distinguishes over Fig. 8 of D1 and over D2, and it covers both embodiments. However, such an amendment relies entirely on the drawings, and there is no discussion of the constant thickness nor its supposed benefits in the description, so candidates started to run into added matter issues.

Many candidates tried to keep the claim covering tubes other than scaffolding, but this seems the least of the client's worries.

Quite a few candidates thought, or stated, that the tubular portion of the cap in D2 was not "continuous", and that therefore a distinction of this kind could be made. A tube must be "continuous" or it does not function. One assumes that what was intended was that the taper angle is not continuous. Again, there is little support in the specification for an amendment relying on this suggestion and so marks could not be awarded if subject-matter was added.

Many who put in the "second end" to deal with the clarity objection (a laudable aim in itself) also specified that the plugging member is located at this end; this seems an unnecessary restriction, though probably not harmful in practice. Some argued that merely mentioning one end in a claim was acceptable, and the examiners were not minded to contest the point.

Once the main claim had been drafted, candidates were expected to prepare a good set of subclaims to provide good fall-back positions for the client, since the existing set is sparse.

SUBCLAIMS

Possibilities include: Dimensions, thicknesses, angles etc. if not in claim 1; Details of the ribs, if not in claim 1; materials/colour; the plugging member being a mesh etc.; the bung; a combination of a scaffold tube with the cap; Omnibus claim.

A subclaim to the flange on the end cap, when the main claim has longitudinal ribs, cannot be included as there is no support for this (it will be noted that former claim 8 was dependent only on claim 1). There is scope to add sub-claims to details of the longitudinal ribs and a combination of an end cap and a bung and also to a combined scaffold/end cap (optionally with bung) kit as in the client's e-mail he may start selling this to increase turnover.

One needs to have dealt with non-unity objection, of course. Some candidates retained two independent claims with the same novel feature (e.g. the deformable nature of the inner plug part). This is not completely implausible, but given the fact that the presence of several independent claims is often objected to, it is unlikely to lead to swift grant.

An omnibus claim should be included. This should say "plug substantially as described herein", not "as substantially described …", as more than one candidate wrote and this is a good example of candidates not being absolutely precise with their wording. The Examiners appreciate that candidates have exam nerves but where there are errors such as this, full marks cannot be awarded

Given that two embodiments are described in the specification, where there are features that are not common to both embodiments, this is a clear indication that a divisional application is required. It was worth looking for a divisional application to cover at least the flanged embodiment, or to have a go at covering both. This could be done by defining the interference fit using the diameters and tapering mentioned in relation to the flanged embodiment (using claim 2 as a base) or alternatively by claiming the cap interference-fitted into a scaffold tube. A divisional to a bung alone does not seem tenable, even if supported by the specification, because the client's main area of interest is the caps and because bungs *per se* are already known in the prior art.

- **LETTER TO BPO**

This should mention a proper explanation of what has been done with former claims 1 and 2 to deal with the unity objection. It should also include reference to the possibility of filing a divisional application and to accelerated prosecution in light of potential infringers.

The novelty discussion should make sure the invention overcomes the features shown in all the figures of GB 2087596.

The Inventive-Step arguments should relate the aim of the invention (non-removability) to claimed features. Most candidates appreciated this. Also, the fact that the GB 2087596 caps are designed to go on the outside means that they are not required to deform, so some distinction can be drawn here if deformation is a part of the amended claims.

Note that the ribs of D2 are not "radial", as many candidates mentioned, but circumferential - no marks were deducted for this error, but again, it does illustrate the need for precise language.

We are looking for Form 51 to take over representation.

- **MEMO TO CLIENT**

This should explain the choice of main claim and how, if at all, to cover the excluded embodiment. The purpose of adding additional dependent claims could usefully be mentioned. Also there needs to be an explanation how to cover the bung (if possible). There should be a discussion of possible divisional applications, giving the client the option, even if this is only to dismiss them.

A long analysis of why the claims are anticipated is not needed here - just a paragraph, because the client knows there is a difficulty. What is needed is an explanation of the amendments made and why they were selected in the light of the technical features of the invention.

Exam Tips:

- Please use the page numbering of the exam paper and the nomenclature/references numbers *in* the paper – some candidates make up their own nomenclature/references numbers, which must be time consuming.
- Write neatly if you can: if an answer cannot be read, examiners cannot give marks.

- Some of the best papers are not the longest, so be precise and succinct.
- Be consistent, if a candidate gives contradictory arguments, or the claims do not tally with the arguments, the examiners cannot give marks which would be otherwise available for clear reasoning.
- Consider writing in double line spacing so that, if you want to add something, there is room.
- Some candidates put the main claim and subclaims on separate pages so there was room to make amendments. Therefore, leave plenty of space between sections of your answer and in the margins if you are likely to make changes.
- A paper that makes good consistent points is often more likely to pass than if one excellent point is made but the rest of the paper has poor points or there are contradictions in the arguments made.