P3 2011 Examiners Comments

A main claim along the following lines was acceptable:

A pipe string fluid collector device, comprising:

first and second opposing faces, each having an aperture for receiving joined adjacent pipes of a pipe string extending in an axial direction; and

a flexible wall coupling the first and second opposing faces defining a fluid collection chamber, the flexible wall accommodating movement of said first and second opposing faces with respect to each other in said axial direction during unjoining of said adjacent pipes.

A side aperture or slot could also be specified, since in practice it is unlikely that the collector could be slid over the end of the pipe string.

A means for urging the opposing faces apart could also be specified.

What about drainage? It is difficult to imagine a device which does not drain whilst in use. It could happen - by tipping and spilling once the top pipe is free. Thus a drain might be specified.

Candidates with high scores tended to have a claim not limited to pipe strings per se, and specified end faces and a flexible sleeve.

The client identified two problems:

Sometimes the spacing between the tongs is too small to receive the collector, and 'worse' the upper pipe pulls out of the collector and so mud goes everywhere.

Any solution needed to address at least the second problem.

Having set out your claim: does it solve the problem; are all the features essential, and are any features defined too narrowly?

The client's device had an open pored foam which seemed to serve many purposes, but there were alternatives presented: the impervious neoprene outer skin formed the (outer) box sleeve, springs could be used to allow compression/expansion of the device, inflatable bladders could form the axial seal. Whilst foam of a certain pore size or consistency and having drainage means might not require an outer skin, a requirement for a foam in claim 1 was considered to be too narrow.

A candidate focussing on the foam might consider the function he/she is attributing to the foam in his/her analysis and look for more general terminology.

Was means for actually expanding the device in the axial direction absolutely necessary? Perhaps not, if the top and bottom walls are made to grip the pipes tightly, or perhaps the pressure of the mud itself will expand the device.

Do other pipe separation contexts need to be covered? As noted, higher scoring candidates tended to do this, but, in practice, expanding to cover other technical fields needs to be done with care as it invites the patent office examiner to extend his search far afield. See also the discussion on Technical Field in Fundamentals of Patent drafting by Paul Cole, CIPA 2006

A heavy hint was dropped that method claims were desirable (final paragraph of client's letter – "the way we use it is certainly new"). These cover the possibility of hire which is common in this industry, and important with more complex apparatus. A simple method claim for using the device was acceptable.

Dependent claims identified by the examiners and their relative importance (A>B>C):

a biasing mechanism for urging the first and second opposing faces apart in the axial direction. A (Could be in claim 1)

the biasing mechanism comprises at least one spring. B

the at least one spring comprises a coil spring. C

the biasing mechanism comprises foam. A

the foam at least partially fills the fluid collection chamber. C (claim doesn't really say anything)

a drain formed in at least one of the first and second opposing faces and the flexible wall. Drain A, but could be in claim 1 – location in bottom wall as dependent claim, B.

the foam defines ducts. B

the ducts couple with the drain. B (probably better if combined with ducts above)

the aperture extends to a periphery of each of the first and second opposing faces to an opening in the flexible wall extending in the axial direction between the first and second opposing faces. A

the foam defines a cylindrical void dimensioned to fit an external diameter of said adjacent pipes. B

the foam has a cut extending in the axial direction between the cylindrical void in the opening in the flexible wall. A

the cut curves in a direction orthogonal to the axial direction. A

foam defines a v-shaped entry at the opening of the flexible wall. A

inflatable bladders at the opening of the flexible wall. B

a fixing for retaining the flexible wall at the opening. B

a portion of flexible wall retained by the fixing at the opening to form a seal B.

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. (Apparently ‘uninventive’ dependent claims might be of use in licensing, but there is no suggestion of that here).

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, and most candidates use the opening words of the main claim. Perhaps in search of something pithy, some candidates referred to things such as a 'Box Collector' or a 'Flexible Sleeve', but it does raise the question of whether all the limitations which might be implied by these names are intended. It is not always easy to think of a succinct name or title, and the time honoured, if old fashioned, 'Apparatus (and Method) for controlling leakage of fluid when disconnecting a pipe string' is a way out of the problem (assuming your main claim is to be this narrow).

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).

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.

Referring to the given prior art drawings is acceptable, but candidates can stand out by showing they are able to describe the prior art without relying on the drawings.

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.

Cutting and pasting text from the question is allowable, but, even when the text is then edited, it does make it difficult to show that you are capable of writing a cogent description which adopts the terminology of your claims.

The question asks candidates to draft a specification. Claims are of limited value if not supported by the description. Whilst the claims, particularly the independent claim(s), are of primary importance and getting them right usually leads to a pass, candidates should allocate sufficient time to the description and abstract. Many candidates seem to leave themselves too little time for the description and abstract, or perhaps they do not think they are important?