

Examiners' Comments

P4 2010

General comments

As in previous years, the paper this year aimed to provide a straightforward test of a candidate's basic competence in responding to an examination report while giving due attention to their client's commercial needs.

Whilst there was a 'right answer' for Claim 1 as far as the examiners were concerned (see below), reaching it was not a requirement to pass the exam and many candidates who passed arrived at a different answer. Claim 1 was allocated 25% of the marks – a fairly typical amount for this paper – and a candidate was mostly likely to pass if they provided a sensible amendment and justified it well to the Examiner and to the client, backing their answer up with useful and accurate advice relating to the client's situation. This is the minimum that one would expect in a real-life situation and this is what the paper ideally aims to test.

The technology covered by the paper was considered to be accessible to all, except that it was anticipated that the term 'over-centre' might not be widely known (indeed an Internet search for the term – a luxury not afforded to the candidates taking the paper – did not immediately reveal any useful definitions). However, it was felt that the meaning of 'over-centre' could be deduced from the context, and that in any event a successful solution to the paper did not depend on the feature. Many patent attorneys will find themselves in a similar situation in 'real-life' after being handed a response that is due immediately!

The paper was not intended to be a drafting test to see who could rewrite the claim using as few words as possible. Nor was the paper intended to provoke an in-depth analysis of infringement and validity, or to prompt a candidate to recite Section 60 of the Patents Act. That is not to say you will necessarily be marked down for doing so but your time will more productively be spent elsewhere.

Brief introduction to the paper

GB 0714285.6 ('the application') concerns an open-top sports car that has a number of different mechanisms for retaining a hard-top roof section in place between the windscreen and a roll hoop member that is pivotably attached to the body of the car.

In a first embodiment a strut assembly is attached between the roll hoop and the rear of the car. The strut assembly comprises two struts pivoted together that can move between a folded position (to allow the roll hoop to be lowered and the roof removed) and an over-centre position, in which the roll hoop is locked upright and urged against the roof section by the struts so as to hold it firmly in place, creating an air- and water-tight seal.

In a second embodiment spring-loaded damper assemblies are provided in place of the struts in order to provide a compressive ('urging') force against the roll hoop, and in turn against the roof, as before. A catch is provided to release the spring loading so that the roof can be removed.

In a third embodiment (which can be combined with the first or second embodiments) the roof panel is held in position using clips at the front and rear of the roof section.

US 3141592 ('D1') discloses a number of systems for attaching a (soft-top or hard-top) roof to a car using a hoop that includes roof-supporting pillars that are detachably connected to the

rear of the car. The base of the pillars is made wide so as to provide increased stability. In a first embodiment the feet of the pillars are secured in place using “mechanical quick-release connections” and the pillars may be separable from the roof. In a second embodiment the hoop (including the pillars) can be pivoted between an upright and an open position. The pivoted hoop is secured in place using a quick release catch as before.

Impractical Classics – October 2006 (extract) (‘D2’) discloses using latches and catches to attach a soft-top roof to a windscreen, and teaches the importance of applying tension to the roof fabric in order to create an airtight and watertight seal.

The Examiner raises a novelty objection to Claim 1 based on D1, and objects that Claims 2 and 3 are furthermore not inventive in view of routine features of soft top cars, and that Claim 4 is not inventive in view of D2.

The client asks you to reply to the report, and tells you that he has a lot of interest in the strut embodiment of his invention, and that he is working on an automated version of the spring-loaded damper embodiment, which might also be expected to sell well.

Claim 1

25% of marks were allocated to Claim 1. Ideally an amendment to Claim 1 was sought which covered both the strut and spring-loaded damper embodiments. In particular, protection was sought for the feature of a retaining means that applies a compressive force to the roll hoop member, causing it to apply a compressive force to hold the roof in place (thereby creating an effective water-tight seal without the need for clips and the like). This was considered to be the main inventive concept in the light of the new prior art. By contrast, a claim limited to applying a biasing force but not necessarily a compressive force was problematic, since it covered the arguably obvious combination of the soft top roof embodiment of D1 with the teaches of D2 regarding tensioning the roof fabric.

It was possible to protect the above-mentioned compressive force feature in two separate independent claims relating to the strut and spring-loaded damper embodiments respectively (one of which might have to be filed in a divisional application) and a fair amount of credit was given for this approach (in part under the ‘divisional’ mark allocation), but the examiners felt that this was an unnecessary cost and delay, and that the disclosure was considered somewhat ‘thin’ for a divisional application directed to the spring-loaded damper embodiment because it was based on only a single paragraph of text in the application as originally filed.

An alternative Claim 1 included features of the strut assembly and the ‘over-centre’ feature of the pivoted struts, usually with a proposed divisional that was directed to the spring-loaded damper embodiment. This over-centre feature could be argued to give rise (at least implicitly) to the compressive force feature which was considered to be the main inventive concept. However, in general terms it is not necessarily the case and one can imagine strut assemblies with over-centre positions that serve other purposes – indeed many candidates argued that the purpose of the strut assembly was merely to allow the roll hoop to be locked in place, without any reference to the roof or the compression thereof.

On this note, another possible amendment to Claim 1 included the strut assembly and the feature that the struts could be locked into place. This gave a little bit to work with in terms of inventive step, but did not really relate to the significant advantages concerning the compression of the roof, and did not provide a significant advance over the quick release clips of D1 which also locked the roll hoop into place (and were arguably less complex and costly).

A disappointingly frequent choice of amendment to Claim 1 included only the features of the strut assembly from Claim 2. Given the Examiner's (admittedly unsupported) objection to strut assemblies *per se* as being routine features of soft-top cars, and because the struts *per se* did not give rise to the main advantages of the invention, this claim was considered liable to refusal on the grounds of lack of inventive step, especially if a candidate did not properly address the Examiner's objection to Claim 2 in the response. A script limited to this feature did not necessarily fail but a candidate had to do well on other aspects of the paper in order to make up the marks for a pass.

A yet further amendment (which was mostly presented for the independent claim of proposed divisional applications) included the feature of the spaced-apart projections on the edges of the roof for engagement with recesses in the windscreen and roll hoop. This is not a very useful amendment because it essentially relates to the technical detail of implementing the broader invention relating to sealing the roof using compression (although in its favour it does cover both the strut and spring-loaded damper embodiments).

It will be appreciated that a claim integer can be removed from an independent claim during prosecution if the amendment does not add matter and the excised feature is not essential to the invention. One would ideally want to be able to point to a passage in the application as originally filed which clearly states that the excised feature is optional or otherwise clearly inessential. If not, such an amendment carries the risk of the application being refused or (worse) a granted patent being revoked.

It is therefore normally preferable not to remove any feature from an independent claim unless there is a compelling reason, such as the claim scope being unduly narrow on account of an inessential feature and, in particular, if a potential infringement would otherwise fall within the scope of the claims were it not for the presence of such a feature.

In the present case one could contemplate directing Claim 1 solely to the car roof, retaining means, and/or roll hoop in isolation, for example on the grounds of assuring direct infringement by someone providing any of those components as a spare part. Clearly the roof section of an open-top car is not 'essential' in some senses, but the case for claiming it in isolation – or indeed for claiming the rest of the car without it – is not compelling because the invention relates to the interaction of the retaining means, roll hoop and roof in combination. There is furthermore not considered to be any basis for broadening the claim beyond the scope of open-top cars – with the body shell, and so on, which that technical field implies – but if there were, one might then expect a deluge of new and highly relevant prior art to be cited, and there would be nothing significant to gain since all areas of concern to the client (including possible infringements) would already have been covered.

Dependent claims

Some 15% of the marks were allocated to the dependent claims. Credit was given for a sensible choice of additional dependent claims and for appropriately adapting the existing dependent claims to match the amendments to Claim 1.

Assuming that Claim 1 included the preferred 'compressing' feature that covered both strut and spring embodiments, credit was generally given to dependent claims directed to the following features:

- The strut assembly (e.g. Claim 2 as filed)
- The struts being moveable an over-centre position so as to lock the roll hoop in place
- The detailed structure of the struts that gives rise to the over-centre feature

- The struts being lockable by pushing up the pivot point / unlockable by pulling down the pivot point
- The spring-loaded damper assembly
- A quick-release mechanism for the spring-loaded damper assembly

Dependent claims including the following features were generally not given credit (nor usually penalised – but see below):

- The roll hoop being composed of a lamination of glass-reinforced plastics and foam material (likely a commonplace choice of materials)
- The roof being fastened additionally with clips or catches (commonplace, and in prior art)
- Claims to the strut pivot structure that were divided into different claims for each strut (because neither feature in isolation would lead to the desired effect without the features of the other)
- Dependent or independent method claims (because the infringer would usually be the end-user, if anyone – but see below)
- Rewritten or additional omnibus claims
- Kit of parts claims (no real basis for the separate parts)

Original Claim 3 (the rear hood section being connected to the roll hoop member and/or body shell) appears to be a commonplace feature but candidates were not penalised for leaving it in.

By way of exception to method claims being given no credit, some credit was given if the claim(s) covered the process of moving the roll hoop into position, thereby providing a way of covering (via contributory infringement) any system for automating the roll hoop mechanism (as is currently in development by the client), although it was also expected that the candidate would explain this point in the client memorandum.

Full credit was not given when candidates appeared to be taking a ‘scattergun’ approach and including very large numbers of dependent claims regardless of merit, since one might reasonably expect an objection to arise in real life from such an approach, especially if the claims give rise to inconsistencies. In addition such an approach was a waste of the candidate’s time.

Divisional applications

5% of marks were allocated to divisional applications. Where an acceptable Claim 1 was provided that did not necessitate the filing of a divisional application (and the candidate recognised it), these marks were given for overall clarity instead.

As noted above, credit was given for claims directed to the spring-loaded damper embodiment when Claim 1 of the parent had been directed to the strut embodiment, for example, but this approach was not ideal because of the unnecessary extra cost and delay and because, being based on only a paragraph of text, the subject-matter of the divisional was a bit ‘thin’.

Letter to Patent Office

30% of marks were allocated to the response to the examination report, split between basis/support, novelty, inventive step and clarity headings.

- Basis/support

Generally speaking, a candidate can achieve a pass mark for this section by correctly listing page and line numbers for each new or amended claim, but usually there is more to do in order to get full marks.

In the case of a claim that covered both the strut and spring-loaded damper embodiments, the examiners were looking for a candidate to forestall a possible lack of support objection, for example by identifying statements in the description that mentioned, in relation to both embodiments, how each resulted in an urging/compressive force being applied to the roof panel via the roll hoop.

Candidates were penalised if they made substantive amendments to the claims without giving any support/basis – including (and in fact especially) if claim integers were removed from the claim. In some cases marks were lost with regard to Claim 1 also because the removal or renaming of elements caused antecedent basis issues or other problems with the remainder of the claim set.

- Novelty

Again, pass marks could usually be obtained by identifying briefly features of Claim 1 that were not disclosed in the prior art (and this is arguably a good approach in a real-life situation given issues with file-wrapper estoppel in the US and so on) but in this paper the examiners would rather see more evidence that a candidate understands the cited prior art in particular, and the concept of novelty more generally – for example by identifying correspondences between features of Claim 1 and each prior-art citation before identifying features of Claim 1 that are not present in the citation (the points of novelty).

In the examination report, the Examiner has objected to the novelty of Claim 1 on the basis of D1 only but it is advisable in general to address the novelty against all citations, if only to reassure the examiners that you know what you are doing. On this note, candidates are not expected to perform a novelty or inventive-step analysis for all dependent claims although if there is a good back up claim it would be advisable to address these issues for that particular claim.

- Inventive step

This is the key section for candidates to pick up marks, particular those with a ‘borderline’ claim 1.

Candidates are reminded that the Pozzoli decision (and no longer Windsurfer, though the two are closely related) is the current authority on assessing inventive step in the United Kingdom. Candidates are expected to be familiar with the steps set down in this decision and (for highest marks) to apply them in their answers. In this regard, the concept of the ‘closest prior art’ does not feature in any of the steps laid down in Pozzoli, although applying the European problem/solution test is admissible provided that candidates are consistent and stick to either the UK or European approach.

In many cases candidates argued that their Claim 1 involved an inventive step with reference to a feature (usually the compression of the roof panel) that was not recited in the claim. This was a common cause of marks to be lost. Apart from the weakening of the inventive-step argument, this is usually a clear indication that the claim does not have the right feature(s) in it. Furthermore if one constructs an inventive-step argument around a feature that is not in a claim, it is possible for an Examiner (especially at the European Patent Office) to fire the argument back as evidence that the missing feature is an essential one which must now be included in the claim.

Candidates are also strongly advised to base their arguments on information given in the paper, rather than to speculate wildly or try and be too creative/clever. The examiners are not looking for advanced mechanical insights but a competent analysis of the facts at hand. Again, if no inventive-step arguments spring readily to mind it is more likely that Claim 1 needs a rethink. In real life, far-fetched inventive-step arguments can store up problems for later if they turn out to be technically incorrect or implausible.

Candidates who limited Claim 1 to the strut assembly or the struts-plus-locking features faced problems with inventive step because struts were considered commonplace in the field of open-top cars and what the claim basically boiled down to was replacing one commonplace feature for locking a roll hoop in position (quick release catches and the like, in D1) with another commonplace feature (struts).

There is little that can be done to counteract the Examiner's assertion that struts are commonplace in the field of soft-top cars, save to argue that open-top cars with a hard roof are a different technical field (not very convincing) or to request that he provide evidence to support his assertion (as many candidates suggested, but which is likely to lead to more problems when the Examiner finds more prior art to support the assertion). We are also asked to take all facts presented in the paper as a given, and arguably the Examiner's assertion is one such fact which we should take as a given.

For the over-centre or locking versions of the strut Claim 1 (and especially for 'plain' strut claims that did not include these features!), it was not a very persuasive argument that the struts could easily be unlocked (by pulling down the pivot point) because this was true also of quick-release catches, giving rise to a possible counter-argument that pivoted struts are merely an obvious alternative to quick-release catches. It could possibly be argued that if struts were indeed commonplace, as the Examiner suggests, pivoted/locking/over-centre struts were not, or at least not to perform a function similar to locking a roll hoop in place.

For a Claim 1 that includes the feature that the retaining means exerts a compressive force on the roll hoop and (in turn) the roof panel, the inventive-step arguments flow more easily. No longer equivalent in function to the quick-release catches, the compressing arrangement of retaining means, roll hoop and roof panel provides the advantage (indicative of the presence of inventive step) that a water and air tight seal can be made at the edges of the roof, overcoming a deficiency of the roof of D1.

If we take the observations in D2 as forming part of the common general knowledge ("as any skilled person will tell you..."), it can be argued that the skilled man seeking to improve the second embodiment of D1 would be taught away from the present invention, since the disclosure in D2 teaches that water- and air-tight seals are created by placing a roof fabric under tension, rather than under compression, and nothing in D1 provides any suggestion to the contrary. Furthermore, the skilled man would not consider compressing the roof in D1 since it discloses the use of a soft top roof as well as a hard top roof, and compressing the former clearly does not provide a useful result.

Many novelty and inventive-step arguments put forward by candidates could be summed up as: "The prior art discloses feature Y instead of feature X and furthermore doesn't contain any suggestion of feature X so it would not be obvious for the skilled man to consider using feature X instead of feature Y, and therefore the claim is inventive." That is not to say that such arguments are not used in real life, but when that is all that one can say about inventive step, one is on shaky ground (and in this paper it does not provide the examiners with much evidence that you fully understand inventive step and any arguments in support thereof).

- Clarity

Some credit may have been given under this heading or the next for recognising that divisional applications cannot be filed after the parent application is granted, and that the IPO is not obliged to give any warning before doing so. In practice, a standard pre-grant letter about divisional applications is almost always sent by the Examiner if one flags one's intention, although it should not be relied on for the above reasons. Credit was usually given here or under the next heading if it was recognised that a two-month extension of time as of right was available in order to give the client time to consider a draft response.

Client memo

Some 25% of marks were allocated to the client memo. As always, candidates were expected to provide an analysis of the new prior art, to comment on the Examiner's objections in the examination report, to give the attorney's own opinion (not just parroting the Examiner's view) on whether or not the claims required amendment, to provide a reasonable analysis of the options for amendment, and to provide an explanation of why a particular amendment was chosen, with particular reference to the client's commercial considerations. This is basically good practice whether taking this paper or reporting to a client in real life, and a competent attempt at this will usually get a candidate at least a pass in this section.

A (non-exhaustive) list of additional points that could be covered includes:

- The UKIPO is indeed the UK patent office
- A two-month extension of time is available
- A brief discussion of infringement issues (e.g. you can only sue with a granted patent / provisional protection / a reasoned decision on whether or not to give notice to potential infringers / jurisdiction only covers UK, and so on – it's not the practice paper)
- A discussion of whether or not to file a divisional application (and if so, what it should cover and why)
- Addressing a possible non-unity objection regarding covering both strut and spring embodiments in Claim 1 (whether this amendment was chosen or not)
- The clip embodiment is not protectable (in view of D1, D2, etc)

Some candidates chose to include their entire question paper with their answer, usually covered in rough workings and hastily scrawled comments. This is not helpful and did not lead to the award of any additional marks. Of course, an amended version of the printed claims is quite acceptable.