

## **2013 PAPER P4**

### **SAMPLE ANSWER 1**

This script is an example of an answer to the above examination question paper. The answer received a pass mark. It is a transcript of the handwritten answer provided by the candidate, with minimal re-formatting to improve readability.

We hope you will find it helpful when preparing for this examination, but please note it is not a model answer. You may also find the Examiners' Reports and the Final Examination Guidance Documents useful too. You will find these in the Examination Support area of the PEB website.

## **Claims**

1. A fence section for a fence to be made up of a number of such sections hinged together at vertical edges of the sections, the fence section comprising:  
  
a first vertical edge, incorporating an integral hinge segment which comprises at least two fingers, each finger having only a groove no deeper than half-round, for receiving a joining rod – the fingers each facing in opposite directions – and  
  
a second vertical edge opposite the first edge, similarly incorporating an integral hinge segment having at least two fingers, each finger having only a groove no deeper than half-round, for receiving a joining rod – the fingers each facing in opposite directions – the fingers of the second edge cooperating with those of the first edge of the adjacent fence section to form a hinge;  
  
and the joining rods in the assembled fence each being located in use, in the recesses in alternating fingers in the manner of a hinge pin, with its axis passing through the fingers of each fence section.

Additional dependent claims:

2. A fence section according to claim 1, wherein the grooves are half-round.
3. A fence section according to claim 1 or claim 2, wherein <features of previous claim 2>.
4. A fence section according to any one of the preceding claims, wherein each hinge segment comprises at least three fingers.
5. A fence section according to any one of the preceding claims, wherein each hinge segment comprises at least four fingers.
6. A fence section according to any one of the preceding claims, wherein each vertical edge has the same number of hinges.
7. A fence section according to any of claims 1 to 3, wherein each vertical edge has a different number of hinges.
8. A fence section according to any one of the preceding claims, incorporating more than one integral hinge segment.

9. A fence section according to any one of the preceding claims, made from moulded plastic.
10. A fence section according the claim 9, made up of vertical pickets connected by horizontal bars.
11. A fence section, according to any one of the preceding claims, wherein <features of previous claim 3>.
12. A fence section, according to any one of the preceding claims, wherein <features of previous claim 4>.
13. A fence section according to any one of the preceding claims, wherein <features of previous claim 5>.
14. A fence section according to any one of the preceding claims, wherein, in use, <features of previous claim 6>.
15. A fence, comprising fence sections according to any one of the preceding claims, supported solely by one or more joining rods.
16. A fence according to claim 15, wherein the hinges between the sections allow the fence to follow a meandering or random course, or to enclose areas bounded by obtuse and right angles.
17. A fence section substantially as described herein and with reference to the accompanying figures.

DIVISIONAL CLAIM (NOT FILED WITH RESPONSE → FOR CLIENT)

A hinge connector comprising two segments to be joined along a vertical edge, each segment comprising <features of amended claim 1>.

⇒ Basis at P5, L8-13.

## LETTER TO UKIPO

Dear Sirs,

I refer to your letter dated 20<sup>th</sup> August 2013 and provide a reply to the objections therein. Please make me the representative for this case as shown in the attached PF51.

As a precaution, please notify me before issuing a S18(4) communication to give the client an opportunity to file a divisional application, if desired.

### Claim amendments

An amended set of claims is enclosed. Basis for the claims can be bound in the application as filed, as detailed below.

Claim 1 has been amended to refer to grooves rather than recesses\* (basis at P4, L21 and throughout the application) and to specify that the hinges on each vertical edge face in opposite directions (basis at P5, L34-35 and P4, L21-22).

Basis for the rest of the claim is shown in the table overleaf.

\*No deeper than half-round (basis at P5, L31).

### BASIS TABLE

| CLAIM | BASIS                           |
|-------|---------------------------------|
| 2     | P5, L31-32                      |
| 3     | Previous claim 2                |
| 4     | P6, L4                          |
| 5     | P6, L5                          |
| 6     | P6, L6                          |
| 7     | P6, L6                          |
| 8     | P6, L7                          |
| 9     | P6, L8                          |
| 10    | P6, L9                          |
| 11    | Previous claim 3                |
| 12    | Previous claim 4                |
| 13    | Previous claim 5                |
| 14    | Previous claim 6                |
| 15    | Previous claim 7                |
|       | P6, L8                          |
| 16    | Previous claim 8                |
| 17    | Throughout allocation + figures |

## Novelty

### D1

D1 discloses a fence panel with hinges (4) having a groove that receives the joining pin (30). However, the groove in D1 is deeper than half-round (see P14, L19-20 and Fig 5), and amended claim 1 specifies that the groove should not be deeper than half-round. Moreover, the hinges in D1 face the same directions, whereas amended claim 1 specifies should face opposite directions.

Therefore, claim 1 and dependent claims are novel over D1.

### D2

D2 describes hinges (14) along the vertical edges that receive the dowel (11) or joining rod. However, the hinges in D2 have complete holes rather than “grooves” as in claim 1. As such, hinges of D2 cannot face in opposite directions.

Therefore amended claim 1, and dependent claims, are novel over D2.

For the avoidance of any doubt, also novel over wooden fences or slots that are secured by staples or nails (e.g. see P13, L3-5) because those panels do not have grooves which receive a joining rod.

### Clarity

- Previous claim 6 (amended claim 14) has been specified to be “in use”, i.e. when joining rod present, thus addressing the examiner’s client’s objections against this claim.
- Previous claims 7 and 8 have been amended to refer to the fence panels copying fence sections, thus addressing the client’s objection to these claims.

## Inventive Step (Windsurfing / Pozzoli Approach)

The skilled person is a manufacturer of fence parts and panels, particularly in the field of manufacturing connecting parts using low-cost plastic moulding (see e.g. P4, L1-5). The skilled person probably has knowledge of other garden devices constructed from low cost plastic moulding and knowledge of other garden fences.

The common general knowledge includes fences constructed from panels linked together e.g. see fences described in D1 and D2 and particularly P13, L 1-10.

The inventive concept of claim 1 is the use of hinges with grooves no deeper than half-round and facing in opposite directions along a vertical edge to receive a joining rod to form a hinge between fence panels.

The advantage of these features is that the rod can be supplied / mounted separately, such that panels can easily be inserted or removed without disturbing adjacent sections (P4, L9-10), and without having to turn or adjust connecting hinges (P4, L18). The half-round construction means it is easy to manufacture the grooves and easy to insert the rod, whilst the opposite facing feature ensures that the rod is held firmly so as to support the fence. These features providing advantages of simple manufacture and stability are not taught or suggested by the prior art for the reasons outlined below.

### D1 alone

Describes advantages of snap-fit construction which relies on grooves being narrower than diameter of joining rod. Therefore, takes away from “no deeper than half-round” feature. No motivation to provide extra strength by having opposite facing hinges because strength provided by snap-fit.

### D2 alone

Holes provide additional strength over grooves so no motivation to move to grooves. Not a removable set up so ease of insertion not important. Cannot have opposite facing hinges with holes so this feature cannot be obvious.

### D1 and D2 combined

D2 permanent construction, so no motivation to provide easier insertion / removal. Might combine with D1 because in some field but combining does not lead to claimed invention of less than half-round groove because no motivation in either document to improve ease of removal – solve A in D1.



## CLIENT MEMO

Dear Mr F. Ence,

Thank you for your letter. I have filed the enclosed response at the UKIPO. We were well within the deadline of 20<sup>th</sup> December 2013, so there was no need to request extension under S117B. In fact, I have filed the response early because it appears you are keen to obtain a granted patent as soon as possible for your negotiations with the Garden Centres. I have not requested accelerated examination because I think there is a chance that you may want to file a divisional application, so instead I have requested that the examiner notify use before issuing a S18(4) communication to give us 1 month to consider this option. I also note that this application has published (August 2013) so I suggest you make use of the published application for your negotiations until we receive a notice of allowance, which I hope will be soon.

### Amendments

Although, as you not in your letter, your fence design differs from D1 because it has a separate joining rod, this difference is not currently reflected in claim 1. Your claims refer to the fence panel, and as the examiner points out, at the second to last paragraph of D1, there is contemplated a fence panel with entry slots on both edges. Therefore we needed to amend claim 1 to make the difference between the panels clear.

Similarly, although your fence uses grooves rather than holes for receiving the joining rod, claim 1 refers to "recesses" which could encompass the holes of D2. D2 also has a separate joining rod in the form of a dowel. Therefore, an amendment is also required to achieve novelty over D2.

### Options for amendment

I note from your letter that the advantageous features of your fence panels over the prior art designs are (i) a move away from snap-fit for ease of insertion and removal and (ii) reliable manufacture. (i) is achieved by use of alternate facing fingers to grip a separate joining rod and grooves with less than half-round depth. (ii) is achieved by using grooves rather than holes.

Therefore, I propose making these amendments to claim 1. These amendments cover your preferred commercial embodiment, and as I have argues, are inventive because even by combining D1 and D2, an inventive step would be required to arrive at the present invention with advantages (i) and (ii) above.

I also considered the feature of a joining rod that extends below the fence segments into the ground, but this would be known or obvious from D2 and, as the joining rod is not a feature of the fence section itself, this did not seem to be an appropriate amendment. But I have included as a dependent claim.

### Divisional

There is no obvious need for a divisional application, unless you wish to pursue broader claims to hinged connectors in general (see attached proposed claim). As a precaution, I have asked UKIPO to give us time to file any such divisional before grant.

Many of the other advantageous features of your fence are already disclosed by prior art e.g. clearance for priority (D1) and rod supporting ground (D2) so no other suggestions for divisionals. But please let me know if other subject matter of interest.

### Dependent claims

Added further fall-back as may be useful if validating challenged post-grant. Kept other dependent claims too. Added claim to fences – good for royalties if sold together and proving infringement.

### Infringement

No mention of potential infringes in memo. Claims as granted will protect from anyone using a fence panel with claimed features (even if including other features). Can enforce patent only once granted (though will have some rights from publication under S69 – may be affected by recent amendments).

Let me know if suspect inf. and can request accelerated exam.

## NOTES TO ACCOMPANY CLIENT MEMO

- Filing date of application is 24<sup>th</sup> February 2012  
  
∴ Compliance date is 4½ years from filing date because this is earlier than 12m from exam report.  
→ 24<sup>th</sup> August 2016
- Deadline for filing divisionals is 3m before compliance date  
  
→ 24<sup>th</sup> May 2016

Still plenty of time for this option, but must be filed before receipt of S18(4) communication ∴ ask UKIPO to notify before issuance if divisional is of interest.

- Date today is 9<sup>th</sup> October 2013 and deadline for reply is 20<sup>th</sup> December 2013 – still well within deadline but can reply before this date. Client wants protection asap so reply asap.
- Publication is typically 18m from filing date (no priority claim) i.e. 24<sup>th</sup> August 2013, so application already published → can show to garden centres as evidence of patent pending to help negotiations.
- Application refers more broadly to “hinge connector” so would broaden claims if broader use would be of commercial interest (no issue with unsearched subject matter in UK). However, current commercial interests appear to be limited to garden fences from comments in letter so have not made this amendment now – please let me know asap if this would be of interest. Could file a divisional application with broader claims.

- D1
- had fingers with grooves (24 and 24a)
  - can be in both sides of fence panel (P14, L36)
  - pin = joining rod.
  - pin is integral to a fence panel and is not continuous along whole length of panel.
  - hinges face same direction, no suggestion to alternate.
  - snap-fit rather than join / joining rod insertion.
  - vertical status for ground but not same as “pins / joining rods”.

Published on 10<sup>th</sup> June 2005, but not granted → check whether fence panels would infringe the claims as published? Could the patent be enforced against client once granted?

- D2
- has fingers for receiving joining rod (17).
  - fig 3 cross-sectional view.
  - holes for dowel, not gripping fingers facing alternate directions
  - grooves better for manufacture
    - but obvious from D1? why not combinable?
  - dowel acts as post and guide. (P16, L34) so this feature not novel.

D2 = US application, granted 29<sup>th</sup> Nov 2007

→ check for UK equivalents that might be relevant for FTO in UK.

#### Possible amendments

Amend “recesses” to “grooves” → sufficient to exclude holes of D2 or “half-round” groove required? (P4, L21)

“grooves alternately face towards mid-plane” → instead of snap-fit allows easy removal.