1. Introduction

This year’s paper focussed on novelty, inventive step and added subject-matter. Novelty and some of the inventive step attacks were based on public prior use.

The client’s letter drew attention to the following aspects: that priority was claimed from two deemed withdrawn European patent applications, the relationship of the patent to the priority documents and the amendment to claim 3 during the examination procedure. Candidates were expected to interpret this information and apply it accordingly in the notice of opposition.

Annex 1, the patent to be opposed, relates to a device for removing corks and contains two independent claims.

Independent claim 1 is directed to a device for removing corks having a housing and a rotatable cork extraction element. The extraction element comprises at least a straight portion having a handle attached to it and a spiral cork engaging portion and wherein the spiral cork-engaging portion has at least two different pitch sizes. This subject-matter is then restricted in dependent claims 2, 3 and 4.

Independent claim 5 relates to a cork extraction element comprising a straight portion having an attached disk and a spiral portion having a friction-reducing coating. Dependent claims 6 and 7 characterise the coating and its extension.

2. General comments

Candidates needed to establish the effective dates of each claim. This is necessary in order to determine which documents, or content disclosed therein, are valid prior art when arguing against novelty and inventive step of specific claims.
It is necessary to identify other relevant information in addition to claim features, such as definitions, technical effects, objective technical problems and any hints in the Annexes, and use that information to develop convincing arguments. The specific reference in the relevant document (e.g. paragraph, claim, figure, as appropriate) has to be cited. If prior art uses different terminology to the feature in a claim, it should be explained why it has the same meaning, on the basis of the information provided in the Annexes. All the information necessary to oppose the patent is to be found in the Annexes (including Annex 1). For example, in this year’s paper the information that the pitch size corresponds to the distance between two adjacent turns was given in Annex 1, [0010]. Citation of this reference was expected when arguing that Annex 2 disclosed a cork extraction element having two different pitch sizes. The candidate’s own knowledge of the technical field of the invention shall not be used (R. 22 IPREE).

The problem-solution approach requires identification of the closest prior art for each inventive step attack. A specific reasoning for the choice of the closest prior art should be provided (see the Guidelines G-VII, 5.1). In this year’s paper all of the Annexes disclosed, or provided evidence of, cork removing devices, so a more detailed reasoning is required. For example, a motivation for choosing Annex 6 as closest prior art for claim 1 may be that it comprises an enclosed chamber.

The argumentation against inventive step should clearly identify the distinguishing feature(s) of the claim when compared to the closest prior art. Any associated technical effect(s) to that/(those) feature(s), as set out in the patent to be opposed, has to be identified and the appropriate basis must be cited. This applies to independent and dependent claims. The objective technical problem(s) to be solved has(have) to be established based on the technical effect(s).

A comprehensive answer includes specific reasons explaining why the skilled person would combine documents, for example by pointing to a specific part of the other document that is related to the same purpose or the same objective technical problem. In this year’s paper, the argumentation against inventive step of claim 1 involves consultation of Annex 2. A substantiated argument would be to cite that
Annex 2 also relates to cork extraction devices, which may also be used to pull out corks from bottles (A2, [0009]).

The reasoning for lack of inventive step should also include a substantiated argumentation as to “how and why” one would arrive at the subject-matter of a claim when combining the teaching of prior art documents. General statements (e.g. “The skilled person would combine the teaching of the documents without any technical hindrance”) are not considered as convincing reasoning for combining features of specific documents. For example, suitable reasoning in this year's paper are that both A2 [0009] and A6 [0008] disclose piercing elements made of metal.

In addition to the attacks set out in the “possible solution”, marks were awarded for other plausible, well-reasoned attacks.

For the opposition to be admissible it is required that the patent to be opposed as well as the opponent are identified. Payment of the opposition fee should be indicated. It should be borne in mind that the opponent is generally the company and not the person signing the client’s letter. Use of the pre-printed opposition form can be helpful.

A reply letter to the client was not expected.

3. Notice of opposition

Effective dates of the claims and prior art.

The information provided in the client’s letter was to be used to establish the effective dates of the claims. The payment of the filing fee and search fee is not required to obtain a filing date and the fact that the earlier applications were deemed withdrawn does not affect the right to claiming the priority from them (Article 87 (2) and (3) EPC and Rule 40(1) EPC).

Claim 3 as granted has two alternatives, which had to be assessed separately. The first alternative (dependence on claim 1) was disclosed in the first priority document.
The second alternative (dependence on claim 2) extends beyond the content of the application as originally filed.

Candidates were expected to provide a discussion of the relevance of Annex 4. The annex itself could not be used to attack the claims as it was published after the filing date of Annex 1. There was no evidence in Annex 4 of an oral disclosure. However, this document was evidence of public prior use. It was expected that answers include when the prior use took place, what was made available and under what circumstances (see the Guidelines, G-IV, 7.2). It was expected that candidates realise that the cork-screw sold at the fair was prior art for claims 5-7. The sale of the cork-screw made all its features, including the coating’s composition, available to the public.

**Claim 1**

An inventive step attack based on the combination of Annex 6 and Annex 2 was expected. Annex 6 is the closest prior art, because it discloses a pull-type cork removing device having an enclosed chamber and thus requires the least amount of structural and/or functional modification. Annex 2 is not directed to a cork extraction element comprising a helical part, a straight part and a handle. Annex 3 does not disclose a rotatable cork extraction element. The corkscrew sold at the fair is not available for this claim for inventive step. Annex 5 does not disclose such an enclosed chamber. A novelty objection for this claim was not expected.

**Claim 2**

Annex 5 is the closest prior art, because it discloses a lever-type corkscrew comprising a rotatable cork extraction element. Annex 6 is a pull-type corkscrew, which comprises a spring around the extraction element’s straight part. The spring would not allow the toothed arms to engage with ridges placed on the straight part. Given that there are two distinguishing features over Annex 5 with separate and unrelated technical effects, an inventive step attack based on partial problems (see the Guidelines, G-VII, 5.2 or 6) with the combination of Annex 5, Annex 2 and Annex 6 was expected.
Claim 3

When dependent on claim 1

This alternative provided a feature already disclosed in Annex 6, and was therefore to be attacked using the analogous argumentation as that used for claim 1.

When dependent on claim 2

An objection of subject-matter extending beyond the content of the application as filed was expected. A complete reasoning required a consideration of the information available in the application as filed and why this was not sufficient basis for the amended dependency.

Claim 4

An inventive step objection starting from Annex 6 as closest prior art was expected. This claim provided an additional unrelated feature. Thus, an attack based on partial problems was expected, with combination of Annex 6, Annex 2 and Annex 3. The additional feature of this claim provides a mixture of non-technical and technical effects. Therefore, only the latter needed to be addressed with the problem-solution approach.

Claim 5

A novelty attack was expected based on the corkscrew sold at the fair. A complete reasoning needed to include a consideration on the availability to the public of the chemical composition (see G1/92 or the Guidelines G-IV, 7.2.1). An additional argumentation as to lack of inventive step of claim 5 was not expected.
Claim 6

The corkscrew sold at the fair is the closest prior art and not Annex 4 as such. It is the only cork extraction element comprising a disc. An inventive step attack based on this element in combination with Annex 2 was expected. A fully reasoned argument required the motivation to consult Annex 2. This annex disclosed a spiral-shaped cork extraction element having a friction reducing coating (see claim 3 of Annex 2).

Claim 7

The corkscrew sold at the fair is the closest prior art and not Annex 4 as such. It is the only cork extraction element comprising a disc. An inventive step attack based on this element in combination with Annex 2 was expected.
Possible solution - Paper C 2017

Notice of opposition (in combination with Form 2300).

Effective dates of the claims and prior art (12 marks)

Effective dates of the claims

Claims 1, 2, 3 - when depending on claim 1 - and 4 are entitled to the first priority date, i.e. 08.04.2010, because their subject-matter is part of priority document EP 10223223.

Claim 3 - when depending on claim 2 - extends the subject-matter beyond that as originally filed (see below).

Claims 5-7 are entitled to the second priority date, i.e. 28.03.2011. Their subject-matter can only be found in priority document EP 11117055.

Prior art

Annex 2, Annex 3, Annex 5 and Annex 6 were all published before the earliest priority date of Annex 1, i.e. 08.04.2010. Each document is therefore prior art according to Article 54(2) EPC for all claims.

Although Annex 4 was published after the filling date, it is evidence of public prior use after the first priority date and before the second priority date.

In order to show that a product was made available to the public prior to the priority date, it is necessary to provide the following information: when the prior use took place; what was made available; and under what circumstances (Guidelines G-IV, 7.2). The wine fair took place in Oporto on 25-27th March 2011 (Annex 4, line 4), i.e. prior to the second priority date of Annex 1 (the effective date for

Therefore, the corkscrew sold at the fair can be used under Article 54(2) EPC against the subject-matter of claims 5-7.

**Claim 1 (20 marks)**

Annex 6 is the closest prior art, because it discloses a pull-type cork removing device having an enclosed chamber and thus requires the least amount of structural and/or functional modification.

Annex 6 discloses a corkscrew (see title), which is a device for removing corks (Annex 1, [0002]). Annex 6, [0005], discloses a structure forming an enclosed chamber. Annex 6, [0006] or figure, discloses that the structure may be cylindrical. The central element is rotatable (Annex 6, [0009]). The central element comprises a helical part, a straight part and a handle (Annex 6, [0004] or figure or claim 1). According to Annex 1, [0002], a helical part is a spiral part. The central element is a cork extraction element (Annex 6, [0009]).

The subject-matter of claim 1 differs from Annex 6 in that the spiral portion has two different pitch sizes. The effect is to provide higher cork stability during removal and avoiding breakage (Annex 1, [0010] and [0011]).

The objective technical problem is how to avoid cork breakage.

Annex 2 also relates to a cork extraction device (Annex 2, [0001]), which may also be used to pull out corks from bottles (Annex 2, [0008] or [0009]). Annex 2 discloses a spiral hollow element that is inserted into the cork (Annex 2, [0008], [0009] or claim 2). Annex 2, [0009], discloses that in order to avoid breaking the cork, the piercing element has less turns in its upper half. If there are less turns, then the distance between two adjacent turns is larger. The distance between two adjacent turns is the pitch size (Annex 1, [0010]). Hence, Annex 2 discloses a spiral cork engaging element having two different pitch sizes.
Both Annex 2, [0009], and Annex 6, [0008], disclose piercing elements made of metal. Furthermore, Annex 2, [0009], discloses that two different pitch sizes avoids cork breakage. Therefore, the skilled person would modify the device of Annex 6 by introducing two different pitch sizes in its spiral portion.

Thus, the subject-matter of claim 1 does not involve an inventive step over Annex 6 combined with Annex 2 and does not comply with Article 56 EPC.

**Claim 2 (20 marks)**

Annex 5 is the closest prior art, because it is the only prior art document disclosing a lever-type cork removing device comprising a rotatable cork extraction element (Annex 5, [0005]).

Annex 5 discloses a bottle opener used to remove corks, i.e. a cork removing device (Annex 5, [0001] or [0003]). Annex 5, [0005], discloses a rotatable cork engaging element. The cork engaging element has a helical shaped section, a ridged straight section and a handle (Annex 5, [0003]). According to Annex 1, [0002], a helical section is a spiral section. Annex 5 also discloses that the ridges (Annex 5, [0005] or figure) engage two toothed side arms (Annex 5, [0003], [0005], claim or figure).

The subject-matter of claim 2 differs from Annex 5 in that: a) the spiral portion has two different pitch sizes; and b) a housing providing an enclosed cylindrical chamber.

The effect of feature a) is to provide higher cork stability during removal and avoiding breakage (Annex 1, [0010]) and addresses the objective technical problem of avoiding cork breakage. The arguments set out in claim 1 concerning the problem and solution addressed by this feature also apply to claim 2.

The effect of feature b) is to protect the user from trapping a finger (Annex 1, [0007]) and solves the objective technical problem of how to provide a safer device.
The two differences do not mutually influence each other and have no synergistic effect. They solve separate partial problems and should therefore be treated separately (see the Guidelines, G-VII, 5.2 or 6).

Annex 6 would be considered by the skilled person as it relates to cork removing devices comprising a spiral cork engaging element (see figure). Annex 6 discloses that the structure may be formed from metal ribs covered with plastic material in order to form an enclosed chamber (Annex 6, [0005]). The preferred shape for the housing disclosed in Annex 6 is a cylindrical one (Annex 6, [0006]). This document also discloses that the structure minimises the risk of injury (Annex 6, [0006]), i.e. it provides the solution to the posed technical problem.

Annex 5 already discloses the possibility of having a supporting element comprising at least two ribs (Annex 5, [0003]).

It would be obvious for the skilled person to modify the supporting element according to Annex 5 by including a plastic cover when addressing the partial problem relating to feature b).

Therefore, the subject-matter of claim 2 does not involve an inventive step over Annex 5 combined with Annex 2 and Annex 6 and does not comply with Article 56 EPC.

Claim 3 (10 marks)

When dependent on claim 1

Annex 6 is the closest prior art for the same reasons as set out in claim 1. Annex 6 also discloses that the structure, which houses the central element is made of polyethylene (Annex 6, [0005]).

Therefore, the argumentation for lack of inventive step applies to this claim for the same reasons as for claim 1.
Thus, the subject-matter of claim 3 does not involve an inventive step over Annex 6 combined with Annex 2 and does not comply with Article 56 EPC.

When dependent on claim 2

Annex 1 discloses two separate embodiments. Paragraphs [0006]-[0012] of Annex 1, disclose a first embodiment of the cork removing device (a pull-type cork removing device) and paragraphs [0013] and [0014] of Annex 1 disclose a second embodiment of the device (a lever-type cork removing device).

Annex 1, [0013] discloses that the toothed side arms are coupled to a metal housing. Annex 1, [0014] discloses that the metal housing provides the necessary structural support for the side arms.

Although [0008] of Annex 1 discloses that polyethylene may be used for the first embodiment, there is no disclosure that polyethylene could also be used for the second embodiment.

Annex 1, [0014] discloses that the metal housing provides the necessary structural support for the side arms. There is no disclosure or indication that a polyethylene housing would provide the necessary structural support.

The new dependency introduces a new combination of features which extends beyond the content as originally filed contrary to Article 123(2) EPC.

Therefore, claim 3 is objected to under Article 100(c) EPC.

Claim 4 (12 marks)

Annex 6 is the closest prior art for the same reasons as set out in claim 1. Claim 4 further characterises the handle as being flower shaped. This shape implies a multiple lobed handle (Annex 1, [0012]).
The subject-matter of claim 4 differs from the disclosure of Annex 6 in that: a) the spiral portion has two different pitch sizes; and b) a flower shaped handle.

As the features are independent and have no synergistic effect, they solve independent partial problems and can be treated separately (Guidelines, G-VII, 5.2 or 6).

The effect of feature a) is to provide higher cork stability during removal and avoiding breakage (Annex 1, [0010]) and addresses the objective technical problem of avoiding cork breakage. The arguments set out in claim 1 concerning the problem and solution addressed by this feature also apply to claim 4.

There are two effects associated with a flower shaped handle: 1) it is aesthetically pleasing (Annex 1, [0012]); and 2) it provides a better grip (Annex 1, [0012]).

Effect a) is non-technical and does not need to be addressed for inventive step.

Effect b) has a technical nature and motivates the partial problem of how to provide a more ergonomic shape.

Annex 3 is also from the field of cork removing devices (Annex 3, [0004]). It discloses a clover-shaped handle, i.e. a handle comprising three or four lobes. Therefore, Annex 3 discloses a multiple-lobed handle that provides a better grip (Annex 3, [0009]).

Annex 6 discloses that the handle may be of any shape (Annex 6, [0007]). The skilled person would therefore be prompted to modify the handle of the device according to Annex 6 by using a multiple-lobed handle as disclosed in Annex 3 in order to solve the posed problem.

Thus, the subject-matter of claim 4 lacks inventive step over Annex 6 in combination with Annex 2 and Annex 3 and does not fulfil Article 56 EPC.
Claim 5 (6 marks)

The corkscrew sold at the wine fair comprises a cork-engaging element having a straight portion, an attached disk and a spiral portion (Annex 4, photo). According to Annex 4, lines 43-44, these corkscrews comprise a polyfluorocarbon coating. This coating is known to have friction-reducing properties (Annex 2, [0006]).

The chemical composition of a product is state of the art when the product as such is available to the public and can be analysed and reproduced by the skilled person, irrespective of whether or not particular reasons can be identified for analysing the composition (see G1/92 or the Guidelines G-IV, 7.2.1). The sale of the corkscrew as documented in Annex 4 made all its features, including the coating's composition, available to the public.

Therefore, the subject-matter of claim 5 was publicly available prior to the second priority date and lacks novelty over the corkscrew sold at the fair. The requirements of Article 54(2) EPC are not fulfilled.

Claim 6 (11 marks)

The corkscrew sold at the wine fair is the closest prior art. It comprises a cork extraction element having a disc and it also has the technical features as set out in claim 5.

The cork extraction element according to claim 6 differs from the closest prior art in that it comprises a Polybacchus coating.

The effect of the distinguishing feature is to reduce the friction between synthetic corks and the extraction element (Annex 1, [0017] and [0018]).

The objective technical problem to be addressed is how to avoid pushing synthetic corks into the bottle due to excessive downward pressure.
Annex 2 is concerned with spiral-shaped cork extraction elements (Annex 2, [0008] or [0009]) and would therefore be consulted by the skilled person. It discloses that a friction reduction layer allows for a smoother insertion of the element in synthetic corks, i.e. the layer reduces the force which has to be exerted by the user (Annex 2, [0005]). Annex 2, [0006], also discloses that Polybacchus is the preferred material and that the spiral part is coated (Annex 2, cl. 3). The element sold at the fair already comprises a polyfluorocarbon coating (Annex 4, lines 43-44). Therefore, the skilled person would choose Polybacchus according to Annex 2 as the polyfluorocarbon coating for the known cork extraction element in order to solve the objective technical problem.

Thus, the subject-matter of claim 6 lacks inventive step over the corkscrew sold at the fair in combination with Annex 2 and does not fulfil the requirements of Article 56 EPC.

**Claim 7 (9 marks)**

The corkscrew sold at the wine fair is the closest prior art for the same reasons as set out in claim 6.

The cork extraction element according to claim 7 differs from the closest prior art in that it comprises a Polybacchus coating extending over a third to at most two-thirds of the spiral portion starting from the extraction tip.

The effect of the distinguishing feature is the provision of a compromise between the reduction of the friction between synthetic corks and the extraction element and cost (Annex 1, [0017] and [0018]).

The objective technical problem is how to avoid pushing synthetic corks into the bottle due to excessive downward pressure at a lower cost.
Annex 2 is concerned with spiral-shaped cork extraction elements (Annex 2, [0008] or [0009]) and would therefore be consulted by the skilled person. It discloses that a friction reduction layer allows a smoother insertion of the element in synthetic corks, i.e. reduces the force which has to be exerted by the user (Annex 2, [0005]). Annex 2 also discloses that Polybacchus is particularly good in achieving the necessary properties, albeit expensive (Annex 2, [0006]). It explicitly discloses that the lower half of a spiral piercing element is coated with Polybacchus (Annex 2, claim 3). Annex 2, [0005], discloses that the necessary properties are achieved by only coating the tip and the lower half of the extraction element. This extent of coating falls within the range of one third to two thirds. Therefore, the skilled person would be motivated to coat the cork extraction element of the corkscrew sold at the fair as disclosed in Annex 2.

Thus, the subject-matter of claim 7 lacks inventive step over the corkscrew sold at the fair in combination with Annex 2 and does not fulfil the requirements of Article 56 EPC.
Examination Committee II

Paper C – 2017 – Marking sheet

<table>
<thead>
<tr>
<th></th>
<th>Max</th>
<th>Marker</th>
<th>Co-Marker</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claim 1</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claim 2</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claim 3</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claim 4</td>
<td>12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claim 5</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claim 6</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Claim 7</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>