Examiners' Report Paper C 2015

1. Introduction

This year's paper tested the ability to deal with novelty, inventive step and added subject-matter. The paper also required dealing with the public availability of prior disclosure and assessing the time rank compared to that of the claims of the patent to be opposed.

The client's letter gives information about three important topics: amendments during the examination procedure, the relationship of the patent to the priority document, and details about the prior disclosure of Annex 2.

Annex 1, the patent to be opposed, contains three independent claims. Independent claim 1 covers a broad range of sports articles. This subject-matter is then restricted in dependent claims 2, 3, and 4. Claim 5 relates to a damper without specifying the type of sports article. Claim 6 concerns a method for obtaining a sports article.

2. General Comments

In the Notice of Opposition, the effective date of each claim (or claim alternative) has to be established. This is necessary to determine which documents (or parts thereof) are valid prior art when arguing against novelty or inventive step of specific claims.

According to Rule 22 IPREE, the candidate’s own special knowledge of the technical field of the invention shall not be used. All the information necessary to oppose the patent is found in the exam documents. The relevant part of the Annexes should be cited when using the information, e.g. paragraph or figure or reference number, as appropriate.

When comparing a claim with a prior art document, any features should be identified with a reference in the prior art document. Further, if the prior art uses a different terminology than the feature in the claim, it should be explained why it has the same meaning, on the basis of the information provided in the exam documents. For example, in this year's paper the information that an electronic component may be an integrated circuit was given in A1 [0016]. Citation of this reference was expected when arguing that Annex 6 discloses an electronic component.

The problem-solution approach requires identification of the closest prior art for each inventive step attack. A substantiated argumentation of the choice includes a reason *why* a document is chosen as the closest prior art. For example, in this year's paper a motivation for choosing Annex 5 as the closest prior art against claim 5 may be that it has the same purpose of frequency selective damping.

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

A comprehensive answer includes a substantiated argumentation *why* another document would be considered, e.g. by pointing to a specific part of the other document that is related to the same purpose or the same objective technical problem. For example, in this year's paper, the argumentation against inventive step of claim 2 involves the consultation of Annex 4. A substantiated argument would be to cite aspects of Annex 4 that are related to specific issues also identified in closest prior art of Annex 3, e.g. improving ergonomics, riding at high speed or riding in a standing position.

The reasoning for lack of inventive step should also include a substantiated argumentation as to ″how and why″ one arrives at the subject-matter of a claim when combining the teaching of prior art documents. A generic statement such as ″By combining A2 and A6 one arrives at claim 2.″ does not include an explanation ″how and why″ the modification would be made.

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 the prior art; added subject-matter

The information provided in the client's letter was to be used to establish the effective dates of the claims. For claims 3 and 6 an argumentation was expected that their technical content is not disclosed in the priority document. For claim 4 the alternatives 4a (dependence on claim 2) and 4b (dependence on claim 3) had to be assessed separately. An argumentation as to the validity of the priority of claim 4a was expected. Claim 4b extends beyond the content of the application as filed; it has no effective date.

Answers were expected to include a discussion of the relevance of A2 and the information given in the client's letter. A2 is associated with two prior disclosures, an internet disclosure (A2(blog)) and an oral disclosure (A2(oral)). The last two paragraphs of A2 do not form part of these two prior disclosures.

A2(blog) is valid prior art according to Art. 54 (2) EPC for the claims not entitled to priority, in view of the available evidence (time-stamp and witness).

The validity of A2(oral) as prior art is not certain (unspecific circumstances; uncertain content, cf. T1212/97). If, however, A2(oral) was used in an argumentation against the claims, it was expected that all the circumstantial detail available be presented, and further evidence and corroboration be offered. The blog as such does not constitute evidence for the oral disclosure.

A full assessment of the time rank of Annex 6 requires the details of its status under Art. 54 (2) and (3) EPC. A6 is prior art under Art. 54 (3) EPC because it is a published European patent application having a priority date that is earlier than the effective date for claims 1, 2, 4a, 5 of Annex 1.

Claim 1

It was expected to argue for lack of novelty based on Annex 5 as prior art under Art. 54 (2) EPC and Annex 6 as prior art under Art. 54 (3) EPC. Marks were available for using A2(oral) to argue against novelty of claim 1, provided that the answer included a substantiated reasoning as to the status of A2(oral) as a prior public oral disclosure (cf. comments on A2(oral) in the previous section). An additional argumentation as to lack of inventive step of claim 1 was not expected.

Claim 2

An argumentation against inventive step was expected based on Annex 3 as the closest prior art, because it concerns a unidirectional snowboard and thus has the same purpose (racing downhill). Annex 2 concerns a freestyle snowboard. Annexes 4 and 5 do not disclose a snowboard.

Claim 3
An argumentation against inventive step was expected based on the closest prior art arising from Annex 2. It concerns a freestyle snowboard and thus has the same purpose (enabling bidirectional use). Annex 3 concerns a unidirectional snowboard and Annex 6 mentions a snowboard only in very generic terms.

Claim 4a
An argumentation against inventive step was expected; the closest prior art being Annex 3 for the same reasons as for claim 2. Since the only additional feature is the type of piezoelectric material, it was sufficient to refer to the argumentation already provided in the context of claim 2.

Claim 5
An argumentation against inventive step was expected based on Annex 5 as the closest prior art, since it is the only document disclosing a damping device for the purpose of frequency-selective damping (the dampers of Annex 3 are not frequency selective, cf. A3 [0006]).

Claim 6
An argumentation against inventive step was expected based on the closest prior art arising from Annex 2. Annex 2 relates to method for finding a damper mounting position in a sports article having a core of varying thickness, which is the same purpose as discussed in Annex 1. Annex 3 [0011], last sentence, teaches away from combining the 1st and 2nd setup of Annex 3.

Possible solution – Paper C 2015

Obtainable marks for "Use of Information" and "Argumentation" are indicated in parentheses in each section's heading.

Notice of opposition (in combination with filled in Form 2300).

Effective dates of the claims and the prior art; added subject-matter ***(10/7)***

Effective dates

Claims 1, 2, and 5 are part of the priority document; their effective date is 15.10.2009.

Claims 3 and 6: Their technical content and the corresponding parts of the description, A1 §17-§18, were not disclosed in the priority document. Therefore the priority claim for claims 3 and 6 is not valid (G3/93, G2/98, Guidelines F-IV 2.2); the effective date for claims 3 and 6 is the filing date, 4.10.2010.

Claim 4 was added during examination. It defines 2 alternatives: the first being the combination of the features of claims 1, 2 and 4 (″claim 4a″), the second being the combination of the features of claims 1, 3 and 4 (″claim 4b″).

Claim 4a corresponds to A1 §14. This is part of the application as filed and its priority document. Therefore the priority for claim 4a is valid; the effective date for claim 4a is 15.10.2009.

Added subject-matter – Art. 100 c EPC

Claim 4b, as added during examination, defines via the reference to claim 3 that the damper of claim 1 comprises a composite of a matrix and fibres of piezoelectric material comprising P27, i.e. that the fibres comprise P27. P27 is disclosed in A1 only for flat pieces (such as monolithic platelets), cf. A1 §13-§15. Fibres are disclosed only with the material PGGB (*A1 §17*), not with P27. Thus, the combined feature of fibres of piezoelectric material comprising P27 extends beyond the content of the application as filed. Therefore claim 4b contravenes Art. 100 c EPC (and does not have an effective date).

Prior art

A3, A4, and A5 were published before the priority date of A1 and are prior art under Art. 54 (2) EPC for all claims.

A2(blog), the content of A2 §1-§10 and figures 1 and 2, was made available to the public as an *internet disclosure* on 18.09.2010 (Guidelines G IV 7.5.3.3). A2(blog) contains a computer-generated time stamp (*cf. A2, line preceding §1*). Ms Dela Udenevis can testify as a witness or via affidavit that the blog entry of A2 was indeed publicly available on 18.09.2010. A2(blog) was made available to the public after the priority date of A1 but before its filing date; it is therefore prior art under Art. 54 (2) EPC for the claims not entitled to priority (claims 3 and 6 of A1).

A2(oral), the content of A2 §1-§10 and figures 1 and 2, was made available to the public as a *public oral disclosure* in September 2009 in Seattle at the public trade fair *"*Skip, Hop & Jump*"* by Sam Cauliscrest. Regarding the circumstances of this public oral disclosure, we propose to hear Mr Sam Cauliscrest, the presenter, and Ms Dela Udenevis as witnesses (or via affidavit). We will make any additional evidence available as soon as possible. Insofar as it has been made available to the public before the priority date of A1, we assert that A2(oral) is prior art under Art. 54 (2) EPC for all claims.

A6 has a priority date (3.10.2008) before the priority date of A1 (15.10.2009); it was published (3.4.2010) before the filing date of A1 (4.10.2010). For the claims entitled to priority (claims 1, 2, 4a, 5 of A1), A6 is prior art under Art. 54 (3) EPC since it is a published EP-application. For the claims not entitled to priority (claims 3 and 6 of A1), A6 is prior art under Art. 54 (2) EPC.

Claim 1 – Lack of novelty ***(10/7)***

A5 discloses a sports article comprising an elongate body (*A1 §1: a ski is a sports article having an elongate body*) having a core (*A5 §3: "core"*), wherein the thickness of the core varies along the longitudinal axis of the elongate body (*A5 §3: "core is thinner at the shovel 72 and tail 73 and thicker at the waist 74"; this implies a variation of the thickness of the core*); and at least one damper (*A5 §5: "electronic system 80 dampens"*), said damper comprising piezoelectric material (A5 §4), and an electronic component (*A5 §4-§7: "control circuit 85" as part of the electronic system 80*).

Therefore claim 1 contravenes Art. 54 (1), (2) EPC in view of A5.

A6 discloses a sports article (*a golf-club is a sports article, A6 §8*) comprising an elongate body (*handle+shaft+head, cf. fig. 2*) having a core (*A6 §5: "core"*), wherein the thickness of the core varies along the longitudinal axis of the elongate body (*A6 §5: tapering "from a larger width to a smaller width" implies that the thickness varies*); and at least one damper (*A6 §5-§7, dampers 97a-c*), said damper comprising piezoelectric material (*A6 §6*); and an electronic component (*A6 §7: "flexible piezoelectric film embeds circuitry" comprising an integrated circuit; this is an electronic component, A1 §16*).

Therefore claim 1 contravenes Art. 54 (1), (3) EPC in view of A6.

A2(oral) discloses a sports article comprising an elongate body (*A1 §1: a snowboard is a sports article having an elongate body*) having a core which longitudinally varies in thickness (*A2 §3: "core … machined so that the snowboard varies in thickness according to figure 1; fig. 1 shows a varying thickness, cf. also A2 §2*); and at least one damper (*A2 §5-§8*), the damper comprises piezoelectric material (*A2 §7*) and an electronic component (*A2 §8*).

Therefore claim 1 contravenes Art. 54 (1), (2) EPC in view of A2(oral).

Claim 2 – Lack of inventive step ***(8/10)***

A3 is the closest prior art; it is the only valid prior art disclosing a unidirectional snowboard (*A3 §4, fig. 3*) which has the purpose of high speed/racing downhill (*A3 §1; A1 §6*).

A3 discloses, in the context of the second setup (*A3 §6, §9*), a sports article having the following features of claim 1. It includes an elongate body (*snowboards have an elongate body, A1 §1*), at least one damper (*A3 §6 "basic dampers"*) with an electronic component (*A3 §6*); the damper also comprises piezoelectric material (*A3 §4*).

Additionally, the features introduced with claim 2 are present: It is a unidirectional snowboard (*A3 §4, fig. 3*), comprising piezoelectric material formed into at least one flat piece (*A3 §4: the monolithic platelets comprise piezoelectric material; monolithic platelets are flat pieces, A1 §13*), the damper being arranged on the elongate body so as to dampen torsional oscillations of the sports article (*A3 §6*).

The snowboard of claim 2 differs from that in A3 in that it has a core with a longitudinally varying thickness. This has the effect that the snowboard is adapted better to the anatomy of a user's legs (*A1 §9*) and solves the objective technical problem of improving the ergonomics of the snowboard (*A1 §9*).

The skilled person would turn to A4 because it deals with the same problem, i.e. improving ergonomics in a sportsboard (*Title of A4*); A4 also mentions the same effect (*A4 §3: "the legs assume a better anatomical position"*). The documents are compatible, because both A3 and A4 mention use at high speed (*A3 §9, A4 §6*).

A4 discloses a core of varying thickness (*A4 §5 & fig. 2*) to obtain a curved upper surface.

This improves ergonomics, since the legs assume a better anatomical position (*A4 §3*). There is no hindrance to apply the teaching of A4 to that of A3 (*cf. A3 §9: "could be complemented by any other concept", A4 §8: "any sports article ridden in a standing position"*). A3 mentions that ergonomics should be improved for riding at higher speeds (*A3 §1*).

From the above it follows that the teaching in A4 leads a skilled person directly to modifying the snowboard of A3 to have a core of varying thickness. This subject-matter is within the scope of claim 2 and it is arrived at without requiring an inventive step.

Therefore claim 2 does not comply with Art. 56 EPC.

Claim 3 – Lack of inventive step ***(5/9)***

A2 (either of A2(oral) or A2(blog)) is the closest prior art; it is the only prior art disclosing a freestyle snowboard (*A2 §3*) which has the purpose of enabling bidirectional use (*A1 §6*).

The snowboard of A2 is a sports article having all features defined in claim 1 (cf. argumentation against claim 1 above). The snowboard of A2 is also a freestyle snowboard (*A2 §3*).

The snowboard of claim 3 differs from that in A2 in that the damper is defined to comprise a composite of a matrix and fibres of said piezoelectric material. This has the effect of reduced risk of breaking (*A1 §17*) and solves the objective technical problem of improving reliability of the damper (*A1 §15*).

A6 would be considered by the skilled person because A6 deals with damping using piezoelectric material (*A6 §1*). A6 also mentions applicability to snowboards (*A6 §8*).

The piezoelectric films of A6 have the features defined in claim 3, since they comprise a composite of a matrix (*A6 §3: polymer resin; this is a matrix, A1 §17*) and fibres of a piezoelectric material (*A6 §3*). These piezoelectric films may be used instead of monolithic platelets in dampers with piezoelectric material (A6 §9, 1st sentence). Such dampers are also more reliable (A6 §9, 2nd sentence), i.e. provide a solution to the technical problem posed.

When aiming to solve the objective technical problem a skilled person is thus prompted to replace the monolithic platelets in the patches of A2 with the piezoelectric films of A6.

This results in a sports article within the scope of claim 3 and it is arrived at without an inventive step. Therefore claim 3 does not comply with Art. 56 EPC.

Claim 4a – Lack of inventive step ***(1/4)***

Compared to claim 2, the only further feature is the specific piezoelectric material, P27.

A3 is the closest prior art for the same reasons as for claim 2. A3 §4 discloses P27. The argumentation as for claim 2 applies, meaning that no inventive step is required to arrive at the subject-matter of claim 4a.

Therefore claim 4a does not comply with Art. 56 EPC.

Claim 5 – Lack of inventive step ***(5/10)***

A5 is the closest prior art since it discloses a damper for the purpose of frequency-selective damping (*A5 §7*).

A5 discloses a damper (*A5 §5: "electronic system dampens"*) including flat pieces of piezoelectric material (*A5 §4, "monolithic platelets"; these are flat pieces, A1 §13*). The damper is suitable for frequency selective damping of oscillations in a sports article (*A5 §7*).

Of the plurality of monolithic platelets one may be used for sensing oscillation modes (*A5 §6: one of the monolithic platelets is the sensor which is for detecting unwanted oscillations, A5 §5*), while the others are for imparting damping (*A5 §5, last sentence: "deform or resist deformation in such a way that the electronic system dampens"; this means they are for imparting damping*).

A5 also discloses an integrated circuit (*A5 §6*) as an implementation of its control circuit. According to *A5 §4*, the control circuit is electrically connected to said flat pieces, which thus also applies for the integrated circuit. The integrated circuit may comprise a microcontroller (*A5 §8*) which may be frequency-selective (*A5 §7*).

The damper of claim 5 differs from that in A5 in that the specific frequency range is 30-80 Hz (and not 10-25 Hz as in A5). This has the effect of selective damping of unwanted oscillation modes in this frequency range (A1 §16), solving the objective technical problem of providing damping for other types of sports articles.

A skilled person reading A5 understands that the damper of A5 is not only usable for skis but may be used also for other types of sports equipment (*A5 §6: "may be attached to other types of sports equipment"*). Application for snowboards would be considered, because both are sports articles for winter sport (*A1 §1*) and suffer from chatter (*A1 §7, A5 §1*). A3 discloses that dampers may be used in snowboards to reduce torsional modes (*A3 title*).

Therefore no inventive step is required to consider using the damper of A5 to provide damping for snowboards.

A3 discloses that in snowboards the relevant frequency range for torsional modes is between 30 and 80 Hz (*A3 §2*). To provide damping for snowboards the skilled person is therefore prompted to modify the system of A5 to use this frequency range. A5 teaches that such a modification is possible (*A5 §7, last sentence*).

The resulting damper is within the scope of claim 5 and it is obtained without an inventive step. Therefore claim 5 does not comply with Art. 56 EPC.

Claim 6 – Lack of inventive step ***(5/9)***

A2 is the closest prior art; it discloses a method for finding a damper mounting position (A2 §6) in a sports article having a core of varying thickness, which is the same purpose as discussed in A1 §18.

A2 §3-§7 discloses a method for obtaining a sports article having an elongate body with a core of varying thickness and combining it with a damper comprising piezoelectric material and an electronic component (cf. the argumentation against claim 1 for the identification of the corresponding device features).

A2 also discloses that this method is for damping torsional modes (*A2 §5: "absorb the energy of periodic twisting motions"; twisting motions are torsional oscillations, A1 §8*).

A2 generically discloses a step of selecting a position for the damper (*A2 §6: "sweet spot … can be found by trial-and-error"*) and mounting the damper at said position (*A2 §7*).

The method of claim 6 therefore differs from that in A2 in that the step of selecting a position involves "measuring, without the mounted damper, the amplitude of a torsional mode of said elongate body at a plurality of locations" (claim 6 is unspecific regarding the whereabouts of ″position″ and ″locations″).

This has the effect that the damper does not have to be repeatedly mounted to find the right position (*A1 §18, last sentence*), thereby solving the objective technical problem of saving time (*A1 §18, last sentence*).

A3 would be considered by the skilled person because it also mentions a method for finding the right position for the damper on a snowboard (*A3 §6*). A3 discloses that a location of high mechanical stress can be approximated by measuring the amplitude of a torsional mode at a plurality of locations (*A3 §10: measuring along the edge implies a plurality of locations*). This step of A3 does not involve mounting a damper (*A3 §10 mentions measuring an "undamped" amplitude*). Locations of high mechanical stress are related to damping (*A3 §6*), irrespective of the incompatibility of the dampers of A3, 2nd setup.

The skilled person, knowing that the dampers of A2 only need to be placed ″near″ the ″sweet spot″ (*A2 §5, last sentence*), would therefore readily consider an approximation technique such as that of A3 §10 when selecting a position. Including this approximation technique of A3 in the method of A2 results in a method within the scope of claim 6, since claim 6 is not specific as to the properties of the position as such.

A skilled person is directly prompted to include this approximation technique of A3 in the method of A2 because A2 §6 mentions that using trial-and-error is time consuming and A3 §11 states that the approximation is ″quickly obtainable″, i.e. saves time.

The resulting method is obtained without an inventive step. Therefore claim 6 does not comply with Art. 56 EPC.

Total marks for "Use of Information" / Total marks for "Argumentation": (44/56)