Examiners' Report - Paper C 2021

Purpose and extent of the examiners' report

The purpose of the examiners' report is to enable candidates to prepare for future examinations (Regulation on the European qualifying examination for professional representatives, Article 6 (6)).

The examination of 2021 was different from previous years in several aspects, the most important of which is that it was held online and that it was split in two parts. Technical aspects regarding the shift to an online exam are not part of this report.

1. Introduction

This year's paper involved discussion of novelty, inventive step, added subject-matter, as well as some considerations regarding partial priorities.

Each part of the examination required dealing with the documents at hand within the allotted time.

In part 1 of the examination, the client's letter gives information regarding the available parts of Annex 1, the patent to be opposed, and how these parts are related to two priority documents. Part 1 also contains Annexes 2 to 6. Only claims 1 – 3 of Annex 1 are available. Independent claim 1 covers an underwater energy storage device. Dependent claim 2 defines restrictions to some features of claim 1. Dependent claim 3 regards a plurality of devices according to claim 1.

In part 2 of the examination, the client's letter gives information regarding the further available parts of Annex 1 and how these parts are related to the two priority documents and amendments during the examination procedure. The examination documents for part 2 contain the same Annexes 2 to 6. The client's letter also contains a statement related to specific commercial interests. Claims 4 – 6 of Annex 1 are newly provided in part 2 of the examination. Independent claim 4 covers an underwater energy storage device.

Dependent claim 5 defines restrictions to some features of claim 4. Claim 6 defines two alternatives, dependent on either claim 1 or claim 5.

2. General comments

All the information necessary to oppose the patent is found in the examination documents, which include Annex 1 and the client's letters. Candidates shall not use any special knowledge they may have of the technical field of the invention (Implementing provisions

to the Regulation on the European qualifying examination for professional representatives, Rule 22 (3)).

The examination documents comprise definitions of technical nature related to claim features, aspects of the related technical effects and objective technical problems as well as motivations and hints. Accordingly, marks were awarded for use of this information and argumentation based on it.

In candidate's answers, the use of information requires citation of the specific reference in the relevant document (e.g. paragraph, line, claim, figure, as appropriate). If prior art uses different terminology to the feature in a claim, a full reasoning requires an explanation why the meaning is the same, on the basis of the information provided in the Annexes.

For example, in this year's paper the equivalence of terms such as "vessel" or "tank" to the feature "reservoir" in the claims of Annex 1 was to be established based on the properties listed in [0002] of Annex 1 (walls, compartment, water can be pumped in and out).

For inventive step attacks the candidate's answers were given marks within the structure of the problem-solution approach (Guidelines G-VII.5), even if an answer did not follow it.

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 possible motivation for choosing Annex 3 as closest prior art against claim 2 is that its underwater energy storage device is suitable for use at depths greater than 200 m below sea level, i.e. mesopelagic depths ([0009] or [0011] of Annex 3, in view of Annex 2 p. 3 §1).

The argumentation against inventive step should clearly identify the distinguishing features of the claim compared to the closest prior art. The technical effect associated to this difference is an advantage which has to be identified in the patent to be opposed and the appropriate basis must be cited.

The *objective technical problem* to be solved has to be established based on the technical effect. However, the objective technical problem must not contain pointers towards the claimed solution, so, typically, the objective technical problem and the technical effect are not identical.

A comprehensive reasoning for lack of inventive step 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 6. A substantiated argument would be to cite aspects of Annex 6 that are related to increasing buckling resistance or permitting usage at lower depth (see [0011] of Annex 6).

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 Annex 4 and Annex 5 one arrives at claim 5." does not include an explanation of "how and why" the modification would be made.

Alternatively to the attacks set out in the "possible solution", marks were awarded depending on the argumentation provided, in particular for motivating why and how certain modifications would be made. Also, if an attack for an antecedent claim was based on the wrong documents, the continuation of that attack in a dependent claim was considered dependent upon the merits.

Marks for attacks on claims 1 - 3 were only awarded if the respective attack was made in part 1 of the examination.

3. Notice of opposition

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 has to be indicated. It should be borne in mind that the intended opponent is the company and not the person signing the client's letter. In previous exams a form to enter details regarding the opposition was available but this has been abolished (OJ EPO 2019, A66).

All relevant information, a statement of the extent to which the European patent is opposed, opposition grounds, evidence, facts and arguments have to be in the answers. Text submitted as part of a candidate's answer has to be clearly related to a line of argumentation to be awarded marks (this is usually not the case for feature tables or copied claim text pasted arbitrarily with a few features identified).

3.1. Effective dates of the claims and prior art (15 marks)

For part 1 of the exam the information provided in the first letter from the client was to be used to establish the effective dates of claims 1 - 3 as well as the status of Annexes 2 to 6 as prior art with respect to these claims.

For part 2 of the exam the information provided in the second letter from the client was to be used to establish the effective dates of claims 4 - 6 as well as the status of Annexes 2 to 6 as prior art with respect to these claims.

Claim 6, added during examination, contains the alternatives claim 6a (dependence on claim 1) and claim 6b (dependence on claim 5) which have to be assessed separately.

An analysis regarding the partial priorities (cf. G2/98 & G1/15) of claim 6b was expected in view of the last paragraph of the second letter from the client.

Although A2 is not prior art under Art. 54 (1), (2) EPC for claims 1 to 5, it can be used as evidence for general knowledge available before the priority date of the patent (relevant for the expected attacks against claims 2, 4 and 5).

3.2. Claim 1 (12 marks)

The second embodiment of Annex 3 has all features of claim 1 so a novelty attack based on this document was expected and considered sufficient. A complete reasoning as to lack of novelty requires discussion of the equivalence of terms.

3.3. Claim 2 (21 marks)

No document discloses all features of claim 2, therefore an argumentation against inventive step was expected. A full reasoning requires an argumentation why Annex 3 is chosen as the closest prior art against claim 2.

A full reasoning also requires an argumentation substantiating the justification of the partial problems approach allowing the combination with features coming from both Annex 6 and Annex 4.

3.4. Claim 3 (5 marks)

Annex 3, second embodiment, also has the features of claim 3, so it was sufficient to continue the argumentation against claim 1 regarding lack of novelty.

3.5. Claim 4 (14 marks)

Claim 4 is drawn to an underwater energy storage device but does not define features implying underwater *hydroelectric* energy storage. Annex 5 discloses an underwater energy storage device having all features of claim 4, therefore a novelty attack was expected.

Any inventive step attacks starting from Annex 4 in combination with Annex 5 were assessed in the context of dependent claim 5.

3.6. Claim 5 (16 marks)

No document discloses all features of claim 5, therefore an argumentation against inventive step was expected.

Claim 5 implies underwater *hydroelectric* energy storage because of the features of pump/motor/turbine/generator, therefore Annex 5 is not a suitable starting point (its tank is not built to resist forces arising from hydrostatic pressure (see [0010] of Annex 5) and thus not useable for storing electric energy). Annex 4 relates to an underwater *hydroelectric* energy storage device (see [0001] of Annex 4) and has the associated features (see [0006] of Annex 4), therefore Annex 4 is the closest prior art.

The teaching of Annex 5 was to be used to supplement the constructional aspects of Annex 4. The combination of Annex 4 with Annex 5 renders claim 5 non-inventive.

3.7. Claim 6 (17 marks)

Regarding the alternative of claim 6a (dependence on claim 1) an objection under Art. 100 c EPC was expected.

Regarding the alternative of claim 6b (dependence on claim 5) candidates were expected to understand that it is part of the content of the application as originally filed (claim 5 is linked to the substance of the second embodiment of Annex 1 as disclosed in paragraphs [0022] and [0023]).

The range of 17 to 35 wt-%RZCH is composed of two partial ranges having different priority rank (G1/15). Claim 6b(i), associated with the range of 17 to 23 wt-% RZCH, has the effective date of 10 June 2015 (2nd priority document). Claim 6b(ii), associated with the range of 23 to 35 wt-% RZCH, has as effective date the filing date of Annex 1, 5 March 2016.

Regarding claim 6b(i), it was sufficient to continue the inventive step attack against claim 5, since Annex 4 discloses 20 wt-% RZCH which is within the claimed range.

Regarding claim 6b(ii), candidates were expected to understand from the last paragraph in the second letter from the client that a separate attack was expected. Since the effective date of claim 6b(ii) is the filing date, Annex 2 is useable as a prior art document. A2 is the best starting point for mesopelagic depths (A2 p. 4 §1) which are implied if more than 23 wt-% of RZCH are used (see [0023] of Annex 1). The combination with Annex 6 renders this subject-matter non-inventive.

Possible solution - Paper C 2021

1. General (for part 1 of the exam)

Opposition is filed in the name of Waterhole Science Laboratories against EP3141592B1 (Annex 1). The opposition fee has been paid.

The patent is opposed at least on the grounds of Article 100(a) EPC for lack of novelty and lack of inventive step. The patent is opposed in its entirety (claims 1 - 3 of part 1 of the exam).

1.1. Effective Dates

Claim 1 (and paragraphs [0001]-[0011] of A1) is part of the priority document NO20150000333 (NO'33). The priority date is 11.3.2015 (PRD1).

Claims 2 and 3 (and paragraphs [0012]-[0017] of A1) are not part of NO'33 (so they do not have the priority date PRD1) but they are part of NO20150000355 (NO'55). Their priority date is therefore 10.6.2015 (PRD2).

1.2. Prior art

A3, A5, and A6, published before PRD1, are prior art under Art. 54 (2) EPC for claims 1 – 3.

A4 is an intermediate EP application with filing date 05.10.2014 (before PRD1) and published on 06.4.2015 (before PRD2). It is prior art under Art. 54 (2) EPC for claims 2 – 3 (and potentially prior art under Art. 54 (3) EPC for claim 1).

A2 was published on 6.8.2015, i.e. after the priority dates for claims 1 to 3. Therefore A2 does not form part of the state of the art for claims 1 to 3 under Art. 54 (2) EPC.

A2 is evidence about a public disclosure. Presently, not more is known than that the structures visible in figure 1 were visible to spectators on tourist barges in the harbour of Warnemouth at the end of May 2015, i.e. before PRD2. Additional evidence will be provided as soon as available.

A2 is also evidence of general technical knowledge before the priority dates of A1 (definitions of epipelagic/mesopelagic; PI-F/PI-R wire rope standard).

2. Claim 1 – Lack of novelty (A3)

A3 discloses as second embodiment an underwater energy storage device (A3[0003],[0009]) comprising:

- a reservoir (according to A3[0002]/[0003] the vessel 10 has walls, a compartment, and water can be pumped in and out, so it is a reservoir, see A1[0002]), and
- a structure providing buckling resistance (A3[0002]),
- anti-buoyancy means having a ballast body (the weight of pedestal 21 provides a downward force, A3[0005], so it is a ballast body, according to the definition given in A1[0005]/[0009])
- with holding means (rim sections 32 clamp down, see A3[0009]), and
- spacers (bumpers 36, A3[0008], which are spacers according to A5[0011]) made from an elastomer (A3[0010]).

The reservoir has a protrusion (A3[0002]: "bulge 12 [...] protruding") along its external surface. Furthermore:

- said spacers are arranged between the reservoir and the anti-buoyancy means (A3[0008]: "inside the straight sections", see also fig. 3), and
- said holding means releasably engage (A3[0009]: the straight sections 33 are movable (hinges 34) so the holding means as a whole can releasably engage)
- with the reservoir's protrusion so that the weight of the ballast body is conveyed to the reservoir (see A3[0007]).

A3[0007] states that the features of the 1st embodiment also apply to the 2nd embodiment.

Therefore claim 1 lacks novelty (Art. 54 (1), (2) EPC) in view of A3.

3. Claim 2 – Lack of inventive step (A3+A6+A4)

A3 is the closest prior art. A3 discloses an underwater energy storage device suitable for use at depths > 200 m below sea level, i.e. mesopelagic depths (see A3[0009] in view of A2 p. 3 §1).

A3 discloses the features of claim 1, suitability for use at depths > 200 m below sea level (see preceding paragraph) and also a wall and a compartment (see A3[0002], [0003]). Claim 2 differs in the following features:

- (a) the structure providing buckling resistance has a first reinforcing arrangement inside the reservoir's compartment which extends between opposing parts of the reservoir's wall
- (b) the anti-buoyancy means has a second reinforcing arrangement extending as a skeleton within the ballast body.

The opposed patent states in A1[0013] that the technical effect of difference (a) is the reduction of the net resulting mechanical stress on the reservoir's wall. This solves the objective technical problem of permitting usage at lower depths or increasing buckling resistance (cf. A1[0014]).

The opposed patent states in A1[0015] that the technical effect of difference (b) is that the ballast body is able to withstand bending strain. This solves the objective technical problem of safe deployment of the device in locations where it rests on an uneven surface or where the ground is uneven (cf. A1[0016]).

The effects regard two separate feature sets (reservoir vs. ballast body) and solve objective technical problems that are technically unrelated (extended operating range of depth vs. deployment on uneven ground). Therefore the two differences are not synergistically linked (Guidelines G-VII 5.2, 6) and the partial problem approach can be used.

3.1. Regarding difference (a)

A6 would be consulted by a skilled person aiming to improve A3 since A3[0011] suggests that model YT-1300 should be adapted to achieve buckling resistance for mesopelagic depths and A6 mentions a high buckling resistance, see A6[0011].

A6 discloses a reinforcing bundle of pipes and teaches adding it to a previously manufactured reservoir to improve its buckling resistance, see A6[0009] or A6[0010]. Such a reinforcing bundle of pipes is an internal scaffolding which establishes a direct mechanical connection between opposing sides of the reservoir, see A6[0005]. It therefore extends between opposing parts of the wall within the terms of the claim, see A1[0013]. A skilled person is prompted to apply this teaching of A6 to that of A3 since A3[0009] states that mesopelagic depths are desirable for high-energy storage capacity; this matches the recommendation in A6[0011].

Therefore, a skilled person would add the bundle of reinforcing pipes to the reservoir of A3 and thereby arrive at the features of difference (a).

3.2. Regarding difference (b)

A4 would be consulted by a skilled person aiming to improve A3 since A3[0006] mentions that additional means may be required to resist strain caused by resting on an uneven seabed and A4[0011] mentions the same objective problem.

A4[0010] discloses a ballast pad made of concrete reinforced with a stiff mesh of steel bars laid into the ballast pad's body. According to A1[0015] this is a skeleton extending within the ballast pad within the terms of the claim.

A skilled person is prompted to apply this teaching of A4 since A3[0009] states that mesopelagic depths are desirable for high-energy storage capacity; this matches the statement in A4[0010] regarding suitability.

Therefore, a skilled person would use a skeleton of steel bars as disclosed in A4 within the pedestal of A3 and thereby arrive at the features of difference (b).

It follows that claim 2 lacks inventive step (Art. 56 EPC) in view of A3+A6+A4.

4. Claim 3 – Lack of novelty (A3)

A3 discloses a plurality of devices having the features of claim 1 (see fig. 3 (cf. A3[0004]). A3[0006] discloses that several individual pedestals may be replaced by an enlarged pedestal (which is then a ballast means according to claim 1 for each device) for which the conduits of each vessel feed into a common hydroelectric energy conversion module. A hydroelectric energy conversion module "holds, for storing energy, a pump driven by an electric motor and, for releasing energy, a turbine driving a generator" (A3[0003]). The connection to a common hydroelectric energy conversion module therefore implies connection to a common pump and a common turbine as claimed in claim 3. A3[0007] states that the features of the 1st embodiment also apply to the 2nd embodiment.

Therefore claim 3 lacks novelty (Art. 54 (1), (2) EPC) in view of A3.

5. General (for part 2 of the exam)

The patent is opposed on the grounds of Article 100(a) EPC for lack of novelty and lack of inventive step as well as Article 100(c) EPC. The patent is opposed in its entirety.

5.1. Effective Dates

Claims 4 and 5 (and paragraphs [0012]-[0022] of A1) are not part of NO'33 (so they do not have the priority date PRD1) but they are part of NO'55. Their priority date is therefore PRD2.

Claim 6, added during examination, defines 2 alternatives: claim 6a (features of claims 1 and 6) and claim 6b (features of claims 4, 5 and 6).

The subject-matter of claim 6a does not need to be discussed regarding an effective date because it is not part of the content of the application as filed (see analysis below).

Claim 6b defines the range 17 to 35 wt-% RZCH which consists of the two partial ranges disclosed in A1[0022] and A1[0023]. Ranges can have partial priorities (G2/98 & G1/15, Guidelines F-VI 1.5).

Claim 6b(i) corresponds to the content of the 2nd embodiment in A1 with 17 to 23 wt-% RZCH (including the endpoints) according to A1[0022]. This content is part of NO'55 so the effective date for claim 6b(i) is PRD2.

Claim 6b(ii) corresponds to the content of the 2nd embodiment in A1 with 23 to 35 wt-% RZCH according to A1[0023]. This content is part of the original application documents for A1 but not part of any of the priority documents. The effective date for claim 6b(ii) (excluding the point 23 wt-%) is the filing date of A1 (05.3.2016).

5.2. Prior art

A3, A4, A5, and A6, published before PRD2, are prior art under Art. 54 (2) EPC for claims 4 – 6.

A2 is prior art under Art. 54 (2) EPC for claim 6b(ii) (23 to 35 wt-% RZCH).

6. Claim 4 – Lack of novelty (A5)

A5 discloses storage of petroleum products (A5[0003] or [0008]). Petroleum is a fossil energy carrier (see A5[0001] or A2, p. 3, §3). Therefore A5 discloses an underwater energy storage device.

The tank of A5 (see A5[0002] and [0008] or [0009]) has the properties mentioned in A1[0002], therefore it is a reservoir.

A5[0010] discloses that "the tank will not collapse, irrespective of the amount of water pushed away by the first fluid". This fulfils the definition in A1[0004] for a structure providing buckling resistance within the scope of the claim.

The tank's walls are not built to resist forces arising from hydrostatic pressure, but compensate for buoyancy (A5[0003]), so they are anti-buoyancy means.

The reservoir

- is formed by joining several midpiece reservoir sections and two end reservoir sections (see A5[0002],[0004]; pipe segments 11 and 12 are reservoir sections, see A1[0021]),
- said reservoir sections being provided with tensioning tubes through which wire ropes are strung (A5[0004]; boreholes are tensioning tubes, see A1[0019]),

- said wire ropes comprise strands of twisted metallic wires, the number of strands being 7 or less (A5[0005]: type PI-R implies 7 strands or less, see A2, p. 4, footnote).

Therefore claim 4 lacks novelty (Art. 54 (1), (2) EPC) in view of A5.

7. Claim 5 - IS: A4+A5

A4 and A5 both disclose an underwater energy storage device with a modular reservoir. However, claim 5 implies underwater *hydroelectric* energy storage because of the features of pump/motor/turbine/generator. A5 is not useable for storing electric energy (its tank is not built to resist forces arising from hydrostatic pressure, see A5[0010]), therefore A4 is the closest prior art.

A4 discloses the following features defined in antecedent claim 4:

- An underwater energy storage device (A4[0001] or [0006]) comprising
- a reservoir (e.g. A4[0002]),
- a structure providing buckling resistance thereto (A4[0003]), and
- anti-buoyancy means (A4[0009])
- the reservoir being formed by joining several midpiece reservoir sections and two ending reservoir sections ("pipe segments"/"end pipe segments" mentioned for instance in A4[0002]; pipe segments are reservoir sections, see A1[0021]),
- said reservoir sections being provided with tensioning tubes (A4[0003]: lengthwise cylindrical cavities; these are a possible implementation of tensioning tubes, cf. A1[0019]).

A4 discloses the following features defined in claim 5:

- the reservoir is connected to a pump driven by an electric motor and a turbine driving a generator (A4[0006]: "electromechanical components [...]" which are a pump driving an electric motor and a turbine driving a generator, see A1[0002] or A3[0003]),
- adjacent sections are joined with a sealing layer comprising an elastomer (A4[0004]: "gasket made from an elastomer"; A5[0006]: "gasket is a sealing layer").

Claim 5 therefore differs from A4 in that

- wire ropes are strung through the tensioning tubes, and
- said wire ropes comprise strands of twisted metallic wires, the number of strands being 7 or less.

The opposed patent states in A1[0019] that wire ropes strung though tensioning tubes have the technical effect of protection against outside damage, solving the technical problem of providing a long service period (cf. A1[0021]).

A5 would be consulted by a skilled person aiming to improve A4 since A5 also deals with the problem of providing a long service period (A5[0007]).

A5 discloses wire ropes 14 (A5[0004]) strung through lengthwise boreholes (boreholes are tensioning tubes, cf. A1[0019]). The wire assembly of A5 uses wires of type PI-R (A5[0005]), which are wires as claimed (see A2, p. 4, footnote).

A skilled person is prompted to apply this teaching of A5 to that of A4 since A5[0007] teaches to use a wire assembly instead of external tensioning screws and A4[0005] mentions disadvantages of external tensioning screws. Suitability for epipelagic depths is mentioned in A4[0008] and A5[0010], so the teachings are compatible.

It follows that a skilled person would modify the device of A4 using the teaching of A5 and thereby arrive at a device having the features of claim 5 without requiring an inventive step (Art. 56 EPC).

8. Claim 6 - Art. 100 c / IS: A4+A5 / IS: A2+A6

8.1. Claim 6a (=1+6) - added matter

Claim 6a, as added during examination, defines the combination of the features of claim 1 with the range 17 to 35 wt-% of RZCH in the elastomer for the spacer.

The features of claim 1 correspond to that of the 1st embodiment described in A1[0001]-[0011]. A1[0011] discloses RZCH in the range 13 to 47 wt-% for the spacer and the specific purpose of impact reduction. The range 17 to 35 wt-% is not the same as (narrower than) 13 to 47 wt-%.

RZCH in the range 17 to 35 wt-% is disclosed in A1[0022] and A1[0023] only in connection with the 2nd embodiment and the purpose of a provision of long term stability against deformation for the sealing layer. Since this narrower range is tied to a different part of the device and has a different purpose, it cannot be derived directly and unambiguously that this narrower range should also be used for the spacer in the 1st embodiment.

Thus, claiming the range of 17 to 35 wt-% of RZCH for a spacer extends beyond the content of the application as filed. Therefore claim 6a contravenes Art. 100 c.

8.2. Claim 6b = (claims 4+5+6)

8.2.1. Claim 6b(i) - partial range 17 to 23 wt-% of RZCH

A4 is the closest prior art for the same reasons as for claim 5.

A4 discloses, in addition to the features already listed regarding claim 5, that the elastomer may be 20 wt-% of RZCH (A4[0004]). This is within the range 17 to 23 wt-% of RZCH. The argumentation regarding claim 5 above applies mutatis mutandis; therefore claim 6b(i) lacks inventive step (Art. 56 EPC) in view of A4+A5.

8.2.2. Claim 6b(ii) - partial range 23 to 35 wt-% of RZCH

Mesopelagic depths are implied if more than 23 wt-% of RZCH are used (A1[0023]). A4 is unsuitable for such depths (A4[0008]). A2 discloses suitability (A2 p. 4 §1), therefore it is the closest prior art.

The underwater energy storage device of A2 comprises:

- a reservoir (p. 3 §4), a structure providing buckling resistance (p. 4 §1), antibuoyancy means (p. 4 §2)
- said reservoir being formed by joining several midpiece reservoir sections and two ending reservoir sections (p. 3 §3),
- adjacent reservoir sections are joined with a sealing layer (p. 3 §3), comprising an elastomer (p. 4 §3),

- said reservoir sections being provided with tensioning tubes (p. 4 §1: "duct channels" are tensioning tubes according to A1[0019]),
- through which wire ropes are strung (p. 3 §3),
- connection to a pump driven by an electric motor for storing energy and a turbine driving a generator for releasing energy (the "hydroelectric energy conversion module" of A2 p. 3 §4 has these properties according to A3[0003]).

The wire ropes comprise 7 or less strands of twisted metallic wires (A2 p. 4 §3 and footnote: PI-R).

Thus, claim 6b(ii) differs from A2 in that the elastomer contains 23 to 35 wt-% of RZCH (no amount disclosed in A2).

The opposed patent states in A1[0023] that the associated technical effect is the improvement of long term deformation stability. This solves the objective technical problem of prolonging the service period (cf. A1[0023]).

A6 would be consulted by a skilled person aiming to improve A2: A2 mentions the importance of long term deformation resistance for sealing layers (A2 p. 4 §3) and A6 mentions the objective technical problem, i.e. remain in service for longer (A6[0012]). A2 does not specify an amount for RZCH so a skilled person is prompted to make a choice. A6[0012] teaches that long term deformation stability can be improved by using 30 wt-% of RZCH in the elastomer for the sealing layer. Thus, the skilled person would readily choose 30 wt-% of RZCH which is within the claimed range.

Thus, the subject-matter of claim 6b(ii) is arrived at without requiring an inventive step (Art. 56 EPC) in view of A2+A6.

Examination Committee II: Paper C - Marking Details - Candidate No

Category		Max. possible	Marks Marker 1	Marker 2
General	General	15		
Claims	Claim 1	12		
Claims	Claim 2	21		
Claims	Claim 3	5		
Claims	Claim 4	14		
Claims	Claim 5	16		
Claims	Claim 6	17		
Total				