Examiners' Report Paper C 2013

1. Introduction

This year's paper focused on novelty, inventive step argumentation and changes to applications in sequences of divisional applications.

The patent to be opposed (Annex 1) did not claim priority. However, the client's letter suggested potential problems relating to differences among divisional applications and their predecessors. Candidates therefore were expected to interpret the client's letter and apply it accordingly in the Notice of Opposition.

Annex 1 relates to an airbag module. Claim 1 is directed to an airbag module for a vehicle occupant. Claims 2 and 3 are dependent on claim 1 and present further features of the module relating to a cushion and a valve. Claim 4 is directed to a gas generator for an airbag module. Claim 5 is dependent on claim 4 and presents further features regarding the gas generating compositions.

2. General Comments

1. Marks are awarded for identifying relevant information, such as claim features, technical effects, problems and hints in the prior art, and using that information in an appropriate way. The specific reference in the relevant document (preferably paragraph, figure, reference number) has to be cited. All the information necessary to oppose the patent is to be found in the Annexes (including Annex 1). The candidate's own knowledge should not be used.

2. When comparing a claim with a prior art document, it may not be sufficient to simply repeat the wording of the claim and refer to the relevant passage in the prior art document. If a feature in the claim uses a different terminology, it should be explained why it has the same meaning, on the basis of the information provided in the annexes, where possible.

3. The problem-solution approach requires identification of the closest prior art for each inventive step attack. A reasoning for the choice of the closest prior art should include the identification of the purpose of the subject-matter to be attacked and of the selected document over and above the disclosure of the other documents. General statements such as "Annex X is the most promising springboard to the invention because it has the most features in common" or "Annex X relates to the same general purpose and therefore is the closest prior art" cannot be considered as a convincing reasoning for selecting the closest prior art.

4. The feature(s) distinguishing the claim from the closest prior art should be identified. The technical effect(s) associated with that/those feature(s) has/have to be identified from the patent to be opposed and the appropriate basis must be cited. This applies to independent and dependent claims. The objective technical problem to be solved has to be established based on the technical effect.
5. The mere identification of all required features in several documents is not a convincing argumentation why the corresponding combination of features has to be obvious.

6. To be awarded full marks, the specific reasons explaining why the skilled person would combine documents have to be identified and indicated, as derived from the Annexes. For example, why specific combinations of materials could be made or are compatible and specific comments on motivations. General statements repeated for each attack (i.e. “The skilled person would combine the teaching of the documents without any technical hindrance”) cannot be considered as a convincing reasoning for combining features of specific documents.

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

8. As set out in the instructions to candidates, it is advisable to use Form 2300 in order to make sure that all information needed for an admissible opposition is given. 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.

9. Candidates are reminded that the ground for opposition under Art. 100(b) EPC shall not be used as this violates R. 25(5) IPREE.

10. The Annexes provided should not be renumbered. When referring to the description, it is helpful to cite the paragraph numbers rather than page and line numbers.

3. Specific Comments

In this years paper no legal questions were asked. Thus, a letter to the client was not expected.

4. Notice of Opposition

Extension of subject-matter (Art. 100(c) EPC and Art. 76(1) EPC)

An objection of subject-matter extending beyond the content of the earlier application as filed on both paragraph [0017] and claim 5 was expected.

It was sometimes not recognized that the objection was not according to Art. 123(2) EPC but under Art. 76(1) EPC, because filing a divisional application does not constitute an amendment.

A complete reasoning required reference to the decision G1/05 or G1/06, because they construe the meaning of "earlier application" in Art. 76(1) EPC in a series of divisionals.

A discussion on the fact that the specific ratio of paragraph [0017] and claim 5 cannot be derived from paragraph 16 was often not given.
Claim 1

A novelty attack was expected based on Annex 5 referring to Annex 2. An explanation of the reference to Annex 2 and which features are incorporated from Annex 2 was expected. Sometimes a reference to F-III 8 (instead of G-IV 8) was cited incorrectly.

Claim 2

An inventive step attack was expected, based on the combination of Annex 3 and Annex 2.

Convincing arguments as to why Annex 3 was the closest prior art were expected (see General Comments, item 3).

Annex 5 was sometimes used as closest prior art in an inventive step attack combined with Annex 3. However, the valve of Annex 5 does not have an elastic membrane. In Annex 5 the ribbon is made of "non-stretchable PET material". Further, the combination with Annex 3 is not convincing, because the elastic membrane of Annex 3 is glued through a rubber adhesive which according to Annex 3 [0006] does not work well with PET, which is the bag material of Annex 5. The combination of Annex 5 and Annex 3 is thus not obvious for the skilled person.

Claim 3

An inventive step attack based on the combination of Annex 5 and Annex 2 was expected.

It was often overlooked that Annex 5 disclosed that the fabric cushion was made of polyester. This led to a less straightforward problem-solution approach.

Convincing arguments as to why Annex 5 was the closest prior art were expected (see General Comments, item 3).

Annex 3 was sometimes used as closest prior art. Annex 3 teaches away from using coatings in airbags.

Claim 4

An inventive step attack based on the combination of Annex 2 and Annex 4 was expected. The gas generating compositions were not disclosed in Annex 2 due to the "two-lists principle" as explained under G-VI, 8(i). A novelty attack based on Annex 2 was therefore not appropriate.

It was usually well recognized that claim 4 is an OR-claim and that two separate attacks were needed.

An attack based on partial problems is appropriate only when there are two distinguishing features having separate and unrelated technical effects. This was not the case here.
Claim 5

A supplementary attack based on the combination of Annex 2 and Annex 4 was not expected, since the objection under Art. 100(c) EPC cannot be overcome by any possible amendment.
Possible Solution - Paper C2013

Notice of opposition (in combination with Form 2300)
Total marks for Use of Information/Total marks for Argumentation: (43/57)

Administrative matters and effective dates of claims (2/3)

Opposition is being filed against the grant of EP 3 456 789 on behalf of Toleman Ind. The opposition fee is being paid via voucher or EPO Online services. Annex 1 is a divisional from EP 2 345 678 A1, which is itself a divisional application from EP 1 234 567 A1. All three applications have been validly filed and contain the same subject-matter concerning claims 1-4.

Claims 1- 4: no priority claimed under Art. 87 EPC. The effective date of these claims is the filing date of the grandparent application EP 1 234 567, i.e. 25.04.05.

Annexes 2 to 5 are published before the filing date and are therefore state of the art according to Art. 54(2) EPC.

Extension of subject-matter (1/7)

Paragraph [0017] and claim 5 were present originally in EP 1 234 567 (the grandparent application) but not in EP 2 345 678 (the parent application). Moreover, the specific ratio of [0017] and claim 5 cannot be derived from the more generic range of [0016].

According to G1/05 or G1/06, content which has been omitted on filing an application high up the sequence cannot be reintroduced in divisional applications lower down the sequence from it without contravening Art.76(1)EPC.

Therefore the subject-matter of claim 5 and paragraph [0017] does not meet the requirements of Art. 76(1) EPC and gives rise to an objection under Art.100(c) EPC.

Claim 1 (9/7)

a) Lack of novelty in view of Annex 5 referring to Annex 2

Annex 5 discloses an airbag module for protecting a vehicle occupant in a frontal collision ([0001]; airbag for protecting from head-on collision) comprising:

- a control unit (which is a safety processing unit 1 [0004], since the safety processing unit can be considered a control unit in the sense of Annex 1 [0009] as explained in Annex 5 [0004])

- a gas generator ([0003]; gas generator 2) comprising a housing ([0003] housing; Fig.1 housing; Annex 5 [0003] refers to "any suitable metal for die-cast containers" of Annex 2)

made of cuzinal (Annex 5 [0003] referring to Annex 2 [0002], which discloses cuzinal from a single list of materials; according to G-IV 8 (or T422/92, T153/85, T645/91, ...)
an explicit reference to another document providing more detailed information on the material housing. Therefore, Annex 5 incorporates the possible material housings of Annex 2 and therefore discloses a housing made of cuzinal)

- a fabric cushion ([0005]; fabric bag 10; Annex 1 [0002] discloses that an inflatable bag is a cushion)

comprising a pressure regulating valve ([0005] and [0006]; vent-hole 11 and ribbon 12); Annex 1 [0010] describes a valve as "a device that regulates the pressure inside the fabric cushion by regulating the flow of gas exiting the fabric cushion". Annex 5 discloses such a flow regulation mechanism as defined in Annex 1 and therefore can be seen as a valve

The subject-matter of claim 1 lacks novelty over Annex 5 (referring to Annex 2) under Art. 54(2) EPC.

Claim 2 dependent on claim 1 (12/10)

Lack of Inventive Step (Art. 56 EPC) over Annex 3 in combination with Annex 2

Annex 3 is the closest prior art because it discloses an airbag ([0002]) with an elastic valve for the same purpose ([0002] protecting the occupant from frontal collision). Moreover, Annex 3 is the only document which discloses a valve that can be attached by means of a rubber-adhesive.

Annex 3 discloses an airbag module for protecting a vehicle occupant in a frontal collision ([0002]) comprising:

- a control unit ([0003]; command unit);
- a gas generator comprising a housing ([0003]);
- a fabric cushion ([0003] or claim; cushion made of nylon fabric) comprising a pressure regulating valve ([0005]; synthetic rubber membrane)
- said valve comprises an elastic membrane ([0005]; elastic membrane 3) at least partially covering a vent-hole provided in said fabric cushion ([0006]; opening 5 in cushion is vent-hole),
- said membrane being connected to said cushion through a rubber adhesive ([0006]; silicone adhesive; according to [0005] silicone is rubber, hence silicone adhesive is a rubber adhesive).

The subject-matter of claim 2 differs from the disclosure in Annex 3 in that the housing is made of cuzinal. Annex 3 [0003] discloses aluminium or steel.

This has the effect of maintaining structural resistance at high temperatures (Annex 1 [0013]).

Accordingly, the objective technical problem to be solved would be to create a more resistant generator.
Annex 2 is a document which deals with the use of pyrotechnical generators in passive restraint systems such as seat belts and airbags and is therefore relevant for the skilled person.

Annex 2 [0003] discloses cuzinal as a material for a pyrotechnical generator providing the same effect. Further, Annex 2 [0003] states that cuzinal is better than aluminium or steel. The skilled person would therefore have an incentive to replace the material of the gas generator in Annex 3 (steel or aluminium) with cuzinal as suggested in Annex 2 and arrive at the subject-matter of claim 1.

Hence, the subject-matter of claim 2 lacks inventive step over the combination of Annex 3 with Annex 2 (Art. 56 EPC).

Claim 3 dependent on claim 1 (7/11)

Lack of Inventive Step (Art. 56 EPC) over Annex 5 referring to Annex 2 further in combination with Annex 2

Annex 5 is the closest prior art because it has the same purpose (protecting from frontal collision) and is the only disclosure of an airbag module comprising a cushion suitable to be coated.

Annex 5 referring to Annex 2 discloses all the features of claim 1 as discussed above and further discloses that the fabric cushion is made of polyester ([0005]; said fabric bag is made of non-stretchable PET fibre; Annex 3 [0006] discloses that PET is a polyester).

Therefore, the subject-matter of claim 3 differs from the disclosure of Annex 5 in that the fabric cushion is coated with a polyamide resin.

This has the effect of improving the heat resistance (Annex 1 [0012]). Accordingly, the objective technical problem to be solved would be to provide an airbag with a better heat resistance.

Annex 2 would be considered by the skilled person, since it refers to the heat problems in pyrotechnical systems.

Annex 2 [0008] solves the problem by using a nylon resin, which according to Annex 4 [0003] is a kind of polyamide. Moreover, Annex 2 [0008] discloses that the nylon resin does not affect adversely the deployment of airbags mounted in the dashboard, i.e. that it could be used in the airbag of Annex 5.

Hence, the subject-matter of claim 3 lacks inventive step over the combination of Annex 5 with Annex 2 (Art. 56 EPC).

Claim 4 (12/19)


Annex 2 is the closest prior art since it has the same purpose (generating gas) and is the only disclosure of an inductively activated gas generator for an airbag.
Annex 2 discloses a gas generator ([0002]; gas generator) for an airbag module according to claim 1 comprising:

- a housing made of cuzinal ([0002]; housing, "such as a die cast container made of cuzinal")

and having outlets ([0002]; exhaust openings with the same function as outlets in Annex 1 [0013]);

- an inductively-activated igniter comprising zirconium and potassium perchlorate ([0004]; the initiator in Annex 2 is lit by an induced current and is thus inductively-activated. It initiates the ignition of the powder and thus can be seen as an igniter)

- a gas generating composition inside said housing ([0004];"container contains a powder composition for generating gas").

The subject-matter of claim 4 differs from the disclosure of Annex 2 in that the composition comprises guanidine nitrate, ammonium perchlorate and sodium nitrate or potassium sulphate.

Two different alternative compositions are claimed, which will be dealt with separately.

1st alternative - guanidine nitrate, ammonium perchlorate and sodium nitrate

This composition has the effect of producing greater quantities of gas at a lower temperature (Annex 1 [0014]).

The objective technical problem to be solved would then be to produce large quantities of gas while reducing the risk of burning the occupant.

Annex 4 is a document which deals with the adaptation of pyrotechnical systems in seat belts and also in airbags (Annex 4 [0011]) in order to improve safety. It would therefore be taken into consideration by the skilled person.

Annex 4 [0008] discloses said composition providing the same effect of not heating a fabric in order not to burn an occupant in contact with said fabric.

In addition, Annex 2 [0007] discloses the individual components of said composition as possible components of said powder composition and confirms that this composition would be compatible with the system of Annex 2.

The skilled person would therefore have an incentive in Annex 4 to perform the selection from the lists in Annex 2 and arrive at the first composition claimed in claim 4.

2nd alternative - guanidine nitrate, ammonium perchlorate and potassium sulphate

This composition has the effect of producing greater quantities of gas and suppressing the flame during the reaction (Annex 1 [0015]).
The objective technical problem to be solved would then be to produce large quantities of gas while preventing the cushion fabric from catching fire.

Annex 4, which would be considered by the skilled person for the reasons stated above, discloses in [0009] said composition providing the effect of suppressing the flame and not burning the fabric.

Moreover, the fabric of the bag in Annex 2 is the same as the one proposed for the seat in Annex 4 [0008], i.e. polyester. The skilled person would thus combine Annex 4 with Annex 2 in order to avoid the ignition of the polyester.

In addition, Annex 2 [0007] discloses the individual components of said composition as possible components of the powder composition and confirms that this composition would be compatible with the system of Annex 2.

The skilled person would therefore have an incentive in Annex 4 to perform the selection from the lists in Annex 2 and arrive also at the second composition claimed in claim 4.

Hence, the subject-matter of claim 4 lacks inventive step over the combination of Annex 2 with Annex 4 (Art. 56 EPC).
Examining Committee II agrees on ....... marks and recommends the following grade to the Examination Board:

- **PASS**
  - (50-100)
- **COMPENSABLE FAIL**
  - (45-49)
- **FAIL**
  - (0-44)

27 June 2013

Chairman of Examination Committee II