Examiners' Comments on Candidates' Performance in QE 2008 Paper B

Overall Performance

1. Paper B in 2008 presented the candidates with an appropriate challenge. The questions posed were not excessively difficult and a number of candidates performed very well. Nevertheless the overall pass rate is low.

2. Candidates failing did so because they made errors which may have serious consequences in a real case such as unnecessarily deleting embodiments of the client´s invention, proposing amended claims which were not novel or incorrectly identifying the subject-matter for which document D2 was prior art. This indicates a need for further training of the candidates before sitting this examination.

3. A significant number of candidates attempted to improve the claims linguistically. Such amendments always carry a risk of added subject-matter and generally are awarded no marks. The time taken making linguistic improvements to the claims can be better spent.

4. A significant number of candidates demonstrated a lack of basic understanding of priority claiming and therefore did not realise the relevancy of particular prior art. This led to failure by a number of candidates.

5. A number of candidates did not adequately formulate inventive step arguments, which led to the inability of the examiners to award marks.

6. Some candidates did not completely answer the examination paper in that they did not address Question 2 of the paper.

7. It was apparent to the examiners that a number of candidates were ill-prepared to sit Paper B, as demonstrated by their irrelevant answers and inability to identify fundamental patent law issues.

General Remarks

8. The first part of the question (Question 1) required candidates to analyse the invention as originally claimed and disclosed in the specification, and analyse the cited prior art and a Written Opinion (WO). Based on the results of the analyses, candidates were required to draft an amendment and response to the WO, as well as some brief notes to the client answering certain client questions and providing advice on how to respond to the WO.

9. The second part of the question (Question 2) required candidates to discuss what action they would take and how they would advise their client if the client's letter had been received after the deadline for responding to the WO, but before paying the grant fee.

10. The examination format differed somewhat from earlier years in that the pending application ('002) had disclosed claimed subject matter which had not been disclosed in the application from which priority had been claimed ('001). The relevant parts of this matter which had not been disclosed in '001 were clearly identified in bold text on the question paper. Accordingly, in view of the additional matter disclosed in '002 over '001, candidates were required to determine the effective priority date of the pending claims. This was a critical issue as candidates were required to consider whether cited document D2, which had been published after the priority date but before the filing date of the pending application, would qualify as prior art against particular claims.

11. The subject matter related to a side airbag system. The technology was not difficult to understand and could be easily understood by all candidates. The goal of directing the examination paper to an easy technology was that the candidates are not lost in, and therefore have to spend a lot of time with the understanding of the technology, but can rather concentrate on the substantial patentability issues involved.

12. The paper was not long in that the pending application was only five (5) pages and the two cited prior art documents were both less than one page. Accordingly, candidates should not have had any time difficulty in identifying the relevant issues and answering the paper in the allotted time.

13. Marks were awarded for three areas, claim amendments; a draft response to the WO (including prior art analysis and arguments); and a client advice letter.

14. Significant marks were lost if: (i) candidates made an amendment that would clearly have added new matter (and therefore have led to a ground to invalidate any patent granted from the application); (ii) the amendments did not cover any of the three embodiments described in the patent and (iii) candidates made an amendment which read on the prior art.

15. The overall performance of the candidates was not strong and it was clear to the examiners that some candidates were simply not ready to sit Paper B. The examiners did recognise that answers were being made under exam conditions and where possible did try to take this into consideration when awarding marks. However, significant marks could not be awarded when candidates made fundamental errors which were demonstrative of incompetent patent agent practice. In particular, candidates who did not realise that they needed to address the priority date issue of the claims, or who made amendments which were either unallowable or read on the admitted prior art, typically could not raise enough marks to pass the paper.

Comments on the Paper

16. This year's paper differs from most in that it relates to a simple control system. The examiners were pleased that this seemed not to put anyone off.

17. There are three unusual points in the paper:

- claims 2 and 3 are not entitled to the priority claim, so that both D1 and D2 are citable against them, whereas only D1 can be cited against claim 1. Most candidates got this right. A few did not realise that although claim 2 depends on claim 1, it is not entitled to the same priority date.

- the claims do not cover the applicant's new system because of the limitation to "nylon". This can be deleted from claim 1 in question 1 in response to the written opinion, but not after the examination report issues because it would mean that the claims are not related to the examined claims. Most candidates saw the first point, and about half of them saw the second.
- '001 is still pending, and has to be withdrawn before the grant fee is paid on '002 to avoid double patenting under Sec 30(3)(e)(i) because claim 1 is the same (unless "nylon" has been deleted, which is not possible after the examination report has issued). Few candidates noticed this, but fortunately there were only a few marks for it on the marking schedule.

18. Several candidates attempted to rewrite the claims significantly "to improve clarity". While there is certainly wording in the claim which is not ideal, realistically a judge would have no difficulty interpreting the existing claims and they contain no unambiguous errors (except "bag" for "bags"). Nor has the IPOS examiner raised clarity objections. Accordingly the examiners could not see any advantages in making major amendments which outweigh the risks always involved in making amendments (e.g. the risk of a later allegation that subject matter has been added), and no marks were available for such amendments, though no marks were removed either.

19. In the examiner's view, D2 is very close to the 3rd embodiment. The only real difference is that the embodiment uses a weight sensor instead of a seatbelt sensor, and accordingly this should be added to claims 2 and 3 (the examiners also accepted "a sensor located within the seat"). However, some candidates interpreted the line of D2 (line 15) that when "the seat is unoccupied, the ACU controls both of the capsules to fire even for a mild impact" as implying that there was no minimum threshold for the airbag to fire if the seat is unoccupied. The examiners consider that a more likely interpretation of D2 is that when no passenger is present the bag deploys for any impact *above a low threshold* (the system would be very unstable if the airbag is deployed even by a minimal impact on the car door; what if it rains?). However, even taking the candidate's interpretation, the examiners cannot see that there could be any inventive step in modifying D2 such that in the case of an unoccupied seat the airbag only fires for an impact above a threshold, since this is the standard way of deploying side airbags, as disclosed in the introduction to the '002 patent application.

20. In the introductory portion of the application, it is described (page 6, lines 11-13) that in known side airbags the upper edge of the bag moves "diagonally upward, so that the upper edge...comes to rest above the head of the car occupant". In the examiner's view, this means that the upper edge expands in the direction shown by the diagonal arrow in Fig. 3(b). In other words, the front edge of the bag moves both upwards and forwards (parallel to the door and towards the front of the car). We cannot see any implication that the top of the bag also moves in the orthogonal direction from one front car door towards the other, i.e. the "lateral" direction away from the car door in which the "roof" in the flyer extends. The word "above" in the description of Fig. 3(b) does not, in the examiner's view, suggest any movement in the direction away from the car door: the upper edge of the bag is "above" the user in the sense that your eyes are above your nose. Even if a contrary view is taken, it seems perverse to use this passage, which is a description of what is meant by a conventional side bag, as basis for an amendment to claim 1. Even if it can be argued that the "side air bag" of D2 might not have this feature, it can hardly be considered inventive over it.

21. The client has flagged up the issue of unity. Even if it is believed that claims 1 and 3 do lack unity, there are two ways this can be addressed. It is possible to take the view that, since no unity objection has been raised by the IPOS examiner, there is no bar to paying the grant fee since there is no "unresolved objection" of a lack of unity (Sec 30(3)), and lack unity cannot be raised post-grant (Sec 37). Alternatively, it is possible to argue that unity is one of the requirements for a patent to be in order for grant, so if the applicant considers that there is a lack of unity, he should take action before paying the grant fee, to be sure of not being held latter to have made "any misrepresentation" about the allowability of the patent. The examiners have their own views on the issue, but granted the available marks to either position, provided that, in the case that the advice is to delete an independent claim, it is made clear that a divisional application is required to protect all the embodiments.

22. There are likely to be few marks available for adding subclaims except for features which are important and unclaimed. There were no such features this year in the examiners' view, except the weight sensor, which is needed in claims 2 and 3. Adding dependent claims for standard side airbag features, or which read onto D2, earned no marks.

23. Approximately half of candidates amended the claims so that one or more of the three embodiments are not covered, despite the client's indication that "the three embodiments...continue to sell well". At least one candidate amended the claims not to cover the new product described by the flyer. It was hard to recover from such errors.

24. Finally, few if any candidates noted that the client referred in his flyer to his airbag designs as "patented". Since there is as yet no patent, this is an offense (Sec 99). Again, fortunately few marks were available for this point.

Detailed comments on Claim Amendments, Validity Arguments & Advice to client

25. Claim 1

26. Most candidates recognised that claim 1 was novel over D1. However, some candidates did not recognise that D2 was not prior art against claim 1. To an experienced and prepared candidate, the irrelevance of D2 as prior art to claim 1 should have been immediately evident and any candidate who did not recognise this basic issue would have had difficulty in gaining any marks for an amendment to claim 1 in view of D2.

27. Most candidates did recognise that "nylon" is inessential and hence needed to be deleted from claim 1. Most candidates who did recognise the need for this amendment to claim 1 also identified basis in the specification for the amendment and were able to pick up additional marks.

28. Claim 2

29. Some candidates did not recognise that the subject matter of claim 2 could not claim priority back to the priority date of '001 because the subject matter of this claim was first disclosed in '002 and not in '001. These candidates did not recognise that D2, being published after the filing date of '001 but before the filing date of '002 was relevant

prior art against claim 2. Again, a candidate who did not recognise this basic issue would have had difficulty in gaining any marks for failing to amend claim 2 on this basis.

30. Most of the candidates who passed Paper B, did recognise the prior art relevancy of D2 to claim 2. One approach taken by successful candidates was that a claim 2 could be distinguished from the teaching of D2 by specifying that the sensor in claim 2 is a weight sensor. Such and amendment clearly distinguished claim 2 from the teaching of D2.

31. A key difference between the teaching of D2 and that of an amended claim 2 to define a weight sensor is that measuring weight would be significantly more effective compared to the seat belt sensor taught in D2. A number of candidates argued that a disadvantage of the seat belt sensor in D2 is that it would be possible for a passenger to not wear his/her seatbelt which would result in the system of D2 determining that a passenger is not present. On the other hand, in an amended claim 2 defining a weight sensor, the presence of a person could always be guaranteed and therefore, the invention as defined by an amended claim 2 could overcome the disadvantage/drawback of D2. Candidates who argued along these lines were able to pick up a significant number of marks.

32. Successful candidates formulated their reasoning by applying or being consistent with the "*Windsurfer rules*" as laid out by the Court of Appeal in Windsurfing International Inc. v Tabur Marine (GB) Ltd. [1985] RPC 59.

33. There were candidates who, when arguing inventive step, simply argued that D2 did not teach a weight sensor and did not give a reasoned argument as to *why* the weight sensor of the amended claim made a technical difference or improvement over the seat belt sensor of D2. A lack of reasoning as to the technical effect of a weight sensor over the seat belt sensor of the prior art is insufficient to establish inventive step as such arguments are really novelty arguments. In such cases it was difficult for the examiners to award any marks on this point.

34. It was also necessary for candidates to consider the teaching of D1 and in particular, the teaching of D1 when combined with D2, given that all of the features of claim 2 were taught in the combination of D1 and D2. Some candidates argued that D1 could not be combined with D2 because the weight sensor in D1 was not being used to determine if a passenger was present but was being used for other reasons. Therefore, it can be argued that the technical problem of D1 is not relevant to the side airbags of D2 and the two documents should not be combined. The examiners thought that such an argument was sound and were able to award marks to those candidates who argued as such. However, marks were lost by those candidates who simply did not consider the issue of the combined teaching of D1 and D2.

35. <u>Claim 3</u>

36. Like claim 1, candidates should have identified that the "nylon" feature is inessential and hence, should be deleted from claim 3. Again, most candidates did recognise the need for such an amendment and some did identify basis in the specification for this amendment.

37. Claim 3 can not validly claim priority back to ‘001 as its subject matter was first disclosed in ‘002. Hence, its priority date is 30 June 2006, which means that D2 is relevant prior art against claim 3. Candidates that failed to recognise D2 as a prior art document lost significant marks.

38. Claim 3 can be distinguished from D1 on the basis that claim 3 defines a “side airbag” and because of the defined position of the impact sensor. However, if candidates did not suggest any amendments in view of D1, candidates were still required to make arguments as to the inventive step of claim 3 based on at least one of these two key differences. There were a few candidates who suggested no amendments to claim 3 and tried to make inventive step arguments based on the fact that claim 3 defined a side airbag. However such arguments were weak given that the application admits that many features of conventional airbags have been incorporated into side airbags. There were a few candidates who argued that problems taught in D1 were not relevant to side airbags and a few marks were awarded on this basis.

39. Some candidates did and were awarded marks if they suggested a possible distinguishing amendment to claim 3 by defining that the control unit was operative to selectively ignite either all or a subset of capsules according to the impact signal. However, candidates still needed to address the validity of such an amended claim 3 in view of D2.

40. Claim 3 lacked novelty over D2 and therefore, it was necessary for candidates to suggest some amendment of claim 3. A number of candidates suggested that the “passenger sensor” feature be amended to a “weight sensor”, which the examiners considered a sound distinguishing amendment over both D2 and D1.

41. Again, it was necessary for candidates to consider the inventive step of claim 3 in view of the teachings of both D1 and D2 and marks were awarded accordingly. However, a number of candidates were completely silent on this issue in their examination scripts.

42. <u>Claiming the prior art</u>

43. Some candidates did suggest that claim 2 or claim 3 or both be amended to define that the airbag when inflated is urged diagonally upward and comes to rest above the head of the car occupant and presses against the ceiling of the car. These candidates made arguments that this was inventive because it would remain inflated should the car over-turn. However, the feature of the airbag being urged diagonally upward to press against the ceiling of the car is described with respect to Fig. 3 and is mentioned in the patent as being a known side airbag. Hence, some candidates made the serious mistake of claiming the prior art.

44. <u>Claiming added matter</u>

45. A couple of candidates suggested claiming the “roofwinder” aspect of the invention as described in the client’s flyer and which the client expresses as being important. However, this aspect is not described in the application as filed and any such amendment constitutes added matter.

46. <u>Question 2</u>

47. A surprising number of candidates failed to answer Question 2, which required them to advise the client if the client's letter had been received after the deadline for responding to the WO but before paying the grant fee. Obviously no marks were awarded to candidates who did not address this issue.

48. It was noted by a few candidates that removal of "nylon" from claims 1 and 3 would not be possible otherwise the claim would not be related to an examined claim and the grant fee could not be paid.

49. Most candidates who did address Question 2 suggested filing of a divisional application and withdrawal of the present application in view of double patenting. Such a strategy was, in the examiners view, quite sound.

50. Another alternative might have been to go to grant with the present claims in their current form and file a divisional with claims without nylon. However, a potential problem with this strategy is that case law (at least from the UK) has not definitively decided on this point and it is possible that a double patenting issue may still exist. Candidates who made this recommendation but still identified the potential issue were awarded the same marks those who suggested filing a divisional and withdrawal of the application.

51. Double Patenting

52. Some marks were awarded to the very few candidates who suggested that the priority application ('001), be withdrawn to avoid double patenting in view of claim 1 in '002.

Range in Candidates

53. The overall performance of the candidates was mixed with about one quarter passing. Those candidates who passed demonstrated that they were able to identify the issues, analyse prior art and make sound inventive step arguments. However, about half of the candidates appeared to be ill-prepared in sitting Paper B due to their writing of irrelevant answers. The examiners urge candidates of Paper B to undertake at least four (preferably as many as possible) past papers under examination conditions before they contemplate sitting Paper B.