

THE JOINT EXAMINATION BOARD

PAPER P2

PATENT AGENTS' PRACTICE

22ND APRIL, 1996

10.00 a.m. - 2.00 p.m.

Please read the following instructions carefully. This is a **FOUR HOUR** Paper.

1. You should attempt no more than 4 questions from Part A and no more than 2 questions from Part B.
2. The number of marks allotted to each question is placed in brackets at the end of the question.
3. Where a question permits of reasons being given for the conclusions reached, such reasons should be given.
4. Start each question (but not necessarily each part of each question) on a fresh sheet of paper. In the appropriate boxes at the top of each sheet please enter the designation of the paper, the question number and your Examination number. Write on **one side** of the paper only using **BLACK** ink. You must **NOT** staple pages together. You must **NOT** state your name anywhere in the answers.
5. Unless specifically requested answers are **NOT** required in letter form.
6. **NO** printed matter or other written material may be taken into the examination room.
7. Answers **MUST** be legible. If the examiners cannot read a candidate's answers no marks will be awarded.
8. Please put your answers in **QUESTION NUMBER ORDER** before placing in the envelope provided.

**PART A**

1. Your client is a private individual who has gone through a considerable period of financial problems. On 11 April 1996, he was able to borrow £1500 from a potential backer, in an attempt to revive his portfolio, and has now heard that he will have full financial backing from 31 August 1996. But, apart from the loan, until then he has only enough to pay his living expenses. He has a small portfolio of patents and patent applications. Despite strenuous efforts to obtain sufficient funds, he has been unable to do anything about the cases since June 1995. He says that one problem was that he left it too late to seek backing for his technology. Indeed, he had not taken any steps to disclose the technology to anybody until May 1994, other than by filing patent applications.

You have agreed to investigate his portfolio and you discover the following.

- a) A British Patent 2 999 999B filed on 2 September 1991, granted on 1 September 1994 and having a priority of 9 September 1990.
- b) A European Patent Application also filed on 2 September 1991. The Examiner issued an Official Letter on 22 August 1995, raising complex issues of novelty and inventive step, setting a period of response of 4 months. There is a communication from the European Patent Office saying that following a telephone conversation the period has been extended by two months.
- c) A PCT application filed on 1 February 1995 claiming priority from an earlier informal UK application filed on 1 February 1994. The application designates the European Patent Office and the United States. International Preliminary Examination was requested and a report issued on 15 January 1996 setting a two-month period for reply.

Prepare notes to form the basis of advice to your client on the status of his portfolio, any steps which should be taken, and the likely outcome.

(15 marks)

2. Your client "J" approaches you. J designs and normally hand makes relatively exclusive items of jewellery and the like in a workshop in London. In October 1990 J made a pair of earrings to a new design. A new customer C bought the earrings from J as a present for his wife. In February 1991 C asked J whether it would be possible to make a number of copies of the earrings, which C could sell through his own shop in Oxford. Although not his usual practice, J had a mould made and 60 pairs of the earrings were produced all of which were bought by C in March 1991.

In August 1995, C asked J to design a silver plated goblet. C wanted to show in relief on the surface of the goblet the outline of one of the Oxford Colleges. C had told J that his plan ultimately was to order a hundred goblets, which he would sell through

his shop to tourists as collectors' items: each goblet would be sold, boxed, with a numbered certificate. After seeing and approving of the goblet design, C asked J to produce 20.

The 20 goblets had sold out very quickly, and C apparently decided buy 500 further goblets, identical to the original but in pewter. J understood that the additional goblets would be mass-produced in Birmingham with first deliveries next month. The same Birmingham firm had also been producing the earlier earrings for sale by C in his shop for two years. C had said that he expected to sell considerable numbers of earrings over the next few years.

J complained to C about his supplies from Birmingham as C had not bought the hundred goblets originally promised. C replied that J was "not set up to mass produce cheaply and his prices were not competitive in the tourist market".

J says that he believes that there could be a good market for small numbers (up to 200 at a time) of the goblet in silver plate, particularly if it was offered with outlines of other famous buildings to enable collectors to build up a set. He is keen to ensure that he is properly recompensed for his original work for C but he fears that his ideas for the set of goblets might also be taken up by C using cheap materials and destroy his market.

Draw up a reasoned internal memorandum setting out J's legal position, what might J do about the existing goblets and earrings, and how the position in respect of the goblets might be strengthened.

(15 Marks)

3. Your client, a small firm H, a well known specialist supplier of coatings for the electronics and aerospace industries, had a UK patent granted in 1990. The patent, which is still in force, relates to anti-static coatings for computer and similar cabinets to prevent any build up of static electricity which might damage electronic equipment housed in the cabinet. A small amount of commercialisation took place.

The main claim in the patent recited a composition with a component mixed in a paint in a concentration of between 5 and 50 grams per litre. There were two examples of the use of the component, the first illustrating a concentration of between 5 and 10 grams per litre and the second of concentrations between 30 and 50 grams per litre. In practice, concentrations between 5 and 10 grams per litre were used to minimise cost.

Earlier this year, the firm had given further thought to the anti-static coating and decided to experiment further with the coating. Concentrations were tried which had not been tested before. It was discovered that a concentration of the component between 15 to 20 grams per litre, whilst only producing slightly better anti-static

results, significantly reduced electromagnetic reflections, to the extent that the coating could be used as a surface material where electromagnetic reflections were a problem, for example near aircraft control transmitters. However it was also apparent that it would also make a coated article very difficult to detect, which could be extremely advantageous in defence applications.

H believed there would be an enormous demand for the coating, and patents would be extremely useful. H said that it was a pity that there were not patents corresponding to their 1990 patent in other countries. H have not given publicity to the new discovery, but their chief chemist will be attending a coatings conference in China in about a month and the Company was proposing that he presented a paper there. This would be the only conference of its kind in China for some time, and H would like to market to potential customers then.

H state that for reasons of company policy they do not wish their product to be associated with supplying the defence market, and want to concentrate on the civilian applications of the coating.

Advise H on their position and what steps they could take.

(15 Marks)

4. In each of the following cases, explain briefly what type of protection may be available in the United Kingdom.

- (a) A whisky bottle shaped like a set of bagpipes.
- (b) A new variety of apple created by genetic engineering to have greater resistance to pests.
- (c) A computer program which uses a new mathematical technique to compress video images to facilitate their transmission over telephone lines.
- (d) The sap of a tropical tree which has been used previously by natives to treat cuts, but which has now been found to be useful in a composition for treating insect bites.
- (e) A tread pattern for an automobile tyre.

(15 marks)

5. Your client Parkeepers ("P") has a granted UK patent, based on an application filed in 1993, in respect of an intruder alarm. In claim 1, the only independent claim, it is stated that a detector includes a static infra-red sensor which detects the presence of a heat source (for example from a human body) in its field of view, an alarm being set off when such a heat source is detected. The application was filed with claims and was not amended before grant. No prior art was cited. Claim 2 relates to the alarm being set off a pre-set time after the initial detection to allow authorised users time to turn off the alarm. There are two further sub-claims relating to other features of the detector which are not directly related to the features of claims 1 or 2, and an omnibus claim.

Your client also has a pending European patent application filed in 1994 claiming priority from the UK patent application. As filed the application was identical to the UK patent application as filed save that the omnibus claim was omitted. The European patent application designates all possible states.

The European examiner issued a communication relating to substantive examination of the European patent application, in July 1995, rejecting claim 1 on the basis that the device is obvious in the light of known light detectors. The Examiner indicated that claim 2 contains patentable subject-matter. You submitted a response in December 1995, without any amendments, arguing that the prior art was in a different technical field and the Examiner has just replied maintaining his objection and giving a period of two months for reply.

P has just discovered that a major competitor in the UK has started to manufacture an intruder alarm which has all of the features of P's alarm, save that the detector is an infra-red video camera and the alarm is triggered when relative movement of the image is found between one scan and the next. P has also established that a less-important competitor in the UK intends to manufacture an intruder alarm which has all of the features of claim 1 but does not have the features of any other claim. Both of the competitors are likely to sell throughout Europe.

P advises you that it has not yet decided whether to take any action against the competitors, but asks you to ensure that "the patents are in the best possible shape to attack them at short notice".

Write a memorandum of the steps that you might take to comply with P's instructions.

(15 marks)

**PART B**

6. You are called to a meeting by a Professor Brown ("B") of the University of Middle England ("U"). In calling the meeting, B explains that he has developed a system for controlling a known chemical process.

Detectors monitor the reaction temperature and pressure thus feeding digital signals to the programme which calculates the optimum flow rate for the various reagents and generates signals to adjust valves in the process plant. B wrote software which has enabled total automation of the process control room replacing manual monitoring of the reaction conditions and consequential hand adjustments of the reagent flow rates. The new system enables very accurate control of the process and in consequence generally improves yields. In commercial applications, implementation would be by microprocessor chips, which B was currently designing, rather than software.

During his experiments, and much to his surprise, B found that at 175°C and a pressure of 2 Bar, the yield was 25% higher than anything reported previously.

B explained that his wish for a meeting was as a result of a complaint by Exothermic plc ("E") to U following an interview given by Dr Duck ("D"), a post-graduate research student, on Radio Middle England following cuts in U's funding. In the interview D discussed the work of the department and disclosed the results of the experiments. The gist of the interview was that excellent work of this kind would be hindered by funding restrictions. E had stated that as they had provided funds for the work of B's department, they owned the results, and D's disclosure had been a breach of confidence. B told you that he too was annoyed by D as he had not been consulted prior to the interview.

B informs you that the main chemical companies in this field are in USA and Japan and he would like to present a paper and talk to his contacts from those countries, when he meets them in the International Conference in San Diego next month. If possible, he would like his work protected in US and Japan straightaway, as he anticipated keen interest from potential licensees.

Prepare a note for the record setting out the points you would want to discuss at the meeting.

(20 marks).

7. Mr James, the Commercial Director of Actuators (Land's End) Ltd ("A") sends you a copy of a faxed letter from Highland Gliders plc. (H) dated today. In the letter H write:

"We enclose a copy of our UK Patent 2 800 000A, which you see was published on 4 February 1996, and covers the actuators which we asked you supply to us two years ago.

"We understand that your company has won an order in December 1994 to sell the actuators to our competitor Luft-Bayern GmbH ("L"). We take the strongest exception to your actions, and we will seek an immediate injunction to stop further supplies and punitive damages to cover our losses, idle capacity, damage to our business reputation and consequential loss. The level of damages sought will be an example to others not to indulge in flagrant acts of patent infringement.

"You can avoid this action if you confirm by return that you will stop immediately the supply of actuators to L, and destroy your remaining stocks, tools and drawings: in respect of any actuators already supplied you will make a payment equivalent to 20% of the selling price of L's gliders.

"In any event we also intend to take action against L under our European Patent 0 999 999A, which designates Germany, to stop them selling any more gliders containing your actuators."

Mr James says that he is horrified by the letter. A is a small private company and any injunction will force A into the hands of the Receiver. You are asked what can be done and given the following additional information:

- Outline drawings of the new actuators were apparently prepared in early 1993 by A's chief engineer, although these drawings did not indicate the exact date or have any other markings;
- As result of an approach from H, copies of the outline drawings were sent to H, under cover of a letter dated 10 October 1993 indicating that the drawings were provided in confidence for assessment purposes;
- On 13 April 1994, A signed a contract to supply actuators to H. H supplied drawings of the actuators required, the drawings were identical to those supplied earlier by A, but giving details of tolerances.

Both UK Publication No GB 2 800 000A and EP 0 999 999A, designating FR and DE, are entitled "Actuators for light aircraft and gliders" in the name of H. No examination request has been filed in either case. Both were filed on 2 July 1995, and claimed priority from UK patent application 67890/94 filed 3 July 1994. Both publications appear to contain drawings identical to those prepared by A's chief engineer.

You also find in the Official Journal (Patents) of May 1994 another UK application filed on 1 April 1994 in H's name also entitled "Actuators for light aircraft and gliders". A notice in the Official Journal (Patents) of December 1995 indicates that this application had lapsed as a result of failure to request a search (form 9/77) in time.

Write notes on the issues which arise and actions which might be taken by A to form the basis of your advice to Mr James.

(20 Marks)

8. You receive the following letter today from a Japanese associate:

"We have just taken over representation of Niigata Electron KK ("N") . PCT Application PCT/JP94/44444, relating to a solid state laser device, was filed on 25 August 1994 in the name of N.

"The PCT application was subject to a request for International Preliminary Examination. N had previously used an in-house attorney who had become ill during the summer of 1995 and who had consequently retired at the end of December. On 15 April 1996, we were asked by N to take over all the whole of their patent portfolio. As a result of a review of N's portfolio we have found this application, which designates GB, EP (for GB, DE, FR, and IT), US and JP. The PCT application was subject to International Preliminary Examination under Chapter 2 of the PCT.

"PCT JP94/44444 claims priority from Japanese application 333333/1993 filed 13 September 1993. Unfortunately, it was realised that the description and device claim 1 contained a transcription error in specifying the thickness of one of the layers in the device. This thickness is critical to the success of the device. The error does not affect the general description of the manufacturing process although process claim 2 includes the same erroneous layer thickness. The necessary corrections to the specification and claims were filed in the Japanese Patent Office on 1 November 1993, and it was a copy of the corrected application that was certified and filed with the Japanese Patent Office to establish the priority claim for the PCT application. The device itself was on shown in operation at a local electronics show in Niigata held during 11 to 14 October 1993.

"We also note that GB is designated for Europe and also separately for a national application.

"N is keen to secure protection in Hong Kong as soon as possible, it is our client's belief that Hong Kong is the most likely source of competition.

"Please advise us on the following, indicating where appropriate the documents you will need from us and the potential pitfalls."



- A. What must be done, and by when to enter the UK national phase of PCT application PCT/JP94/44444; would you foresee any difficulties?
- B. What must be done, and by when, to enter the European Regional phase of PCT application PCT/JP94/44444?
- C. What must be done, and by when to secure protection in Hong Kong for the invention of PCT application PCT/JP94/44444?
- D. Is there any need to proceed both with the GB national phase and with GB designation in the European regional phase of PCT PCT/JP94/44444, and please comment on the advantages and disadvantages of each possible course of action?
- E. What will happens if both a European Patent (UK) and UK national patent are granted for the regional and national phases of PCT/JP94/44444?
- F. Will any problems arise in the UK as a result of the correction of Japanese Application 333333/1993, and is there anything which can be done?

(20 Marks).