

Foundation Certificate

FC3 International Patent Law

Friday 18 October 2019 10:00 to 13:00

INSTRUCTIONS TO CANDIDATES

1. You should attempt **ALL** questions in Section A and any **three** questions in Section B.
2. The marks for each question in Section A are shown next to the question. Each question in Section B carries **20** marks.
3. If more than the required three questions are answered in Section B only the first three presented will be marked.
4. The total number of marks available for this paper is 100.
5. Start each question (but not each part of each question) on a new sheet of paper.
6. Enter the question number in the appropriate box at the top of each sheet of paper.
7. Do not state your name anywhere in the answers.
8. Write clearly, as examiners cannot award marks to answer scripts that cannot be read.
9. The scripts will be photocopied for marking purposes.
 - a) Use only **black ink**.
 - b) Write on one side of the paper only.
 - c) Write within the printed margins.
 - d) Do not use highlighter pens on your answer script.
10. Instructions on what to do at the end of the examination are on the Candidate Cover Sheet.
11. Any candidate script removed from the examination room will not be marked.
12. This question paper consists of **seven sheets**, including this sheet.

SECTION A

Question 1

Your client filed an Australian utility patent application on 4 May 2018 which did not claim priority.

Set out the key points of the Australian patent examination procedure as they apply to this patent application.

5 marks

Question 2

A new client asks you to manage a portfolio of two United States patent applications (US1 and US2) through US patent counsel.

a) A first, non-final office action dated 2 October 2019 has been issued in respect of US1. State the standard deadline for responding and any extensions that may be available.

3 marks

b) A notification of allowance dated 9 September 2019 has been issued in respect of US2. Identify what actions the applicant should take and by when.

2 marks

c) After the office action issued for US1, you are made aware of prior art that you consider is relevant to the novelty of the claims. You report this to your client. Explain what action should be taken and why, together with any relevant time limit.

3 marks

Total: 8 marks

Question 3

Your client has a PCT application with a priority date of 8 February 2018. The International Search Report and Written Opinion were issued on 6 September 2019.

a) Identify the deadline for filing a Chapter II demand for International Preliminary Examination providing reasons.

3 marks

b) The PCT application was filed at the UK Intellectual Property Office as Receiving Office. Where may the Chapter II demand be filed?

2 marks

c) Describe how the applicant may amend the content of the PCT specification after the demand has been filed, and indicate any time frame for ensuring that the amendments will be considered by the International Preliminary Examining Authorities (IPEA).

3 marks

Total: 8 marks

Question 4

The European Patent Office has issued an R71(3) communication in respect of your client's European patent application having a filing date of 14 January 2015. The R71(3) communication is dated 7 August 2019.

Assuming that your client wishes to validate the European patent in all EPC member states, what advice would you give in order to minimise renewal costs in 2020? Provide any relevant deadlines with your advice.

4 marks

Question 5

Your client filed a UK patent application (GB1) on 15 August 2018. GB1 was withdrawn leaving no rights outstanding on 18 August 2018 and refiled with no changes on 24 August 2018 as GB2.

You filed a PCT application (PCT3) on 23 August 2019 claiming priority from GB1. You later realise that you should have claimed priority from GB2.

Explain what steps you should now take to address this error and any associated deadlines.

5 marks

Question 6

Your client filed a PCT application on 4 April 2018 that claims priority from a US provisional patent application filed on 5 April 2017. National phase applications were validly filed in Japan, India, China, South Korea, Europe and Brazil.

What is the deadline for requesting examination in each country? Show your calculations.

6 marks

Question 7

List the minimum requirements for obtaining a filing date at the European Patent Office, and identify the time period for rectifying any deficiencies.

4 marks

SECTION A Total: 40 marks

SECTION B

Question 8

Your client, a manufacturer of camping equipment, attends your office to seek advice on the status of several patent families that it has recently acquired. Your client explains that one of its competitors fell into difficulty after its managing director passed away several months ago. As a result, the company was sold including the patent families. You check the patent databases and find three patent families proceeding with the acquired company as applicant.

Family 1 comprises a granted US patent (US1) only. The grant date was 14 July 2016.

Family 2 comprises a pending UK patent application (GB2) filed on 25 August 2018.

Family 3 consists of a pending PCT application (PCT3) claiming priority from a German patent application (DE4) filed on 4 June 2017.

Other than patent family 1, your client always files a PCT application within the priority period and then national phase applications in Europe, Canada, China and the United States.

In relation to each patent family, explain what deadlines will fall due in the next six months and describe any available extensions to such deadlines.

Total: 20 marks

Question 9

Amy is a director of a manufacturing company that manufactures a range of full-body scanning devices. Recently, in conjunction with a medical research organisation, your client has discovered a way of treating blood clots in the human body using its devices. By modulating a laser at a specific frequency and simultaneously applying a vibration of particular characteristics to the affected area of the human body, a blood clot can be broken up without the need for invasive surgery. In order to determine the modulating frequency of the laser and vibration characteristics, an algorithm is used. Amy explains that this is a completely new way of dealing with blood clots and could save many lives.

The devices have been on the market in Europe since 2007 and are described in detail in a series of earlier patents. Amy would now like to protect the algorithm that facilitates a new way of operating the devices and the method of treating blood clots. There are no changes to the devices other than in the operating software.

At the end of the meeting, Amy informs you that the medical research organisation is due to publish a paper on the method of treating blood clots on 1 November 2019.

- a) Prepare notes for a meeting with your client in which you explain any issues with obtaining patent protection for the two inventions in Europe.**

14 marks

A couple of days after your initial meeting, Amy calls you in a panic to inform you that the medical research organisation has already filed a European patent application to both inventions in its own name. The language of proceedings is German. The medical research organisation has, however, assigned the patent application to Amy's company by way of a valid assignment.

- b) Explain the requirements for making the assignment effective in front of the European Patent Office and whether there are any deadlines for doing so.**

6 marks

Total: 20 marks

Question 10

- a) Following a successful product launch in the Summer, Bob, the designer of a new range of unbreakable drill bits comes to your office. Bob explains that he has identified a number of cheap copies of his drill bit that have been advertised for sale in the United States. Bob filed a provisional US patent application (US1) on 14 November 2018 that included a detailed description of the drill bit and drawings but no claims. He explains that his investors are pressuring him to do something to stop sale of the copies of his drill bit in the United States.

Write a memo of advice to Bob which details what he needs to do in order to enforce his rights.

5 marks

- b) Bob also explains that his investors have asked whether a corresponding European patent (EP2) can be granted more quickly. EP2 was filed on 24 September 2018. Bob explains that this would make it more likely that the investors would invest further in Bob's business. Upon reviewing the file history, you note that the search report has not yet issued.

Explain how grant of the European patent application can be expedited.

10 marks

- c) Since the US1 and EP2 were filed, Bob has discovered that changing the percentage weight of bendinium in the material used to manufacture the drill bit from 4% to 5% results in reduced wear of the drill bit. US1 discloses that the percentage weight of bendinium falls within the range 2–5.5% and EP2 discloses that the percentage weight of bendinium falls within the range of 2–4.5%. Bob would now like to file a new European patent application that claims a 5% percentage weight of bendinium.

Assuming that neither US1 or EP2 have published, explain whether US1 and/or EP2 will have any effect on the patentability of EP3.

5 marks

Total: 20 marks

Question 11

Grey Rock Ltd is a company registered in England & Wales which develops and manufactures advanced weaponry as its primary business. Grey Rock has recently developed an assault rifle with attached explosive ordnance launcher that is able to fire grenades around corners without exposing a soldier carrying the weapon. The United States military has placed an order for 50,000 pieces and asked Grey Rock to file a patent application in the United States.

Separately, a secondary business division of Grey Rock has designed a new material that has many applications where weight reduction is advantageous. One such application is the reduction of the weight of heavy weaponry. Another application is the reduction of weight of automotive engine components. Early indications suggest that orders will be placed by automotive manufacturers in South Africa, Argentina, Taiwan, India and New Zealand. The first order will probably be shipped to a company in South Africa. The material is manufactured at locations in Germany and the United States.

Grey Rock has identified a competitor to its material business that has manufacturing facilities in Brazil.

Ideally, costs would be kept to a minimum in the next 12 months, but once orders are placed Grey Rock expects to have more budget available to spend on protecting its inventions.

Prepare a memo for your client explaining:

- a) **whether a patent application for the assault rifle with attached ordnance launcher can be first filed in the United States;**
5 marks
- b) **filing strategy options for the material invention based on the above facts;**
12 marks
- c) **the examination procedure in South Africa.**
3 marks

Total: 20 marks