

FC3 (P5) – International Patent Law
FINAL Mark Scheme 2019

SECTION A

Question 1

Your client filed an Australian utility patent application on 4th 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.

Total: 5 marks

Answer

Examination must be requested within 5 years of the filing date of AU1 (**0.5 marks**) so by 4 May 2023 (**0.5 marks**) or earlier if directed by AUSPAT (**1 mark**). An examination report will be issued which will provide an opportunity to respond to any objections raised (**0.5 marks**). Subsequent examination reports will be issued if not all issues are addressed or if new issues arise (**0.5 marks**) but all issues must be addressed within 12 months of the issuance date of the first examination report (**1 mark**) otherwise the patent application will lapse (**1 mark**).

OR

The innovation patent requires an innovative step rather than an inventive step (**1 mark**). An innovative step exists when the invention is different from what is known before and the difference makes a substantial contribution to the working of the invention (**1 mark**). The innovation patent protects an incremental advance on existing technology rather than being a ground breaking invention.

An innovation patent is usually granted within a month of filing the complete application (**1 month**). This is because there is no examination before it is granted (**1 month**).

Examination of an innovation patent will only occur if requested by the patentee, a third party or if the Commissioner of Patents decides to examine the patent (**1 mark**)

Total: 5 marks

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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

Answer

- a) The office action will set a three month deadline for response (**0.5 marks**), i.e. by 2nd January 2020 (**0.5 marks**). The deadline may be extended in one month increments (**0.5 marks**) up to a maximum of three months (**0.5 marks**) i.e. until 2 April 2020 (**0.5 marks**). A fee is payable in respect of each one month extension (**0.5 marks**). **3 marks**
- b) The applicant should pay the issue fees (**1 mark**) within 3 months of the date of the notice of allowance (**0.5 marks**), i.e. by 9 December 2019 (**0.5 marks**). **2 marks**
- c) Each person involved in prosecution of a United States patent application is bound by a duty of good faith* (**1 mark**). Your client must arrange for the prior art to be submitted to the United States Patent and Trademark Office (**1 mark**) through an Information Disclosure Statement prior to payment of the issue fee (**1 mark**).

***Duty of candour or disclosure will also be accepted.**

3 marks

Total: 8 marks

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Question 3

Your client has a PCT application with a priority date of 8 February 2018. The International Search Report and Written Opinion 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

Answer

- a) the deadline for filing a Chapter II demand for International Preliminary Examination is three months from the date of transmittal to the applicant of the international search report and the written opinion of the International Searching Authority (**1 mark**) or 22 months from the priority date (**1 mark**), whichever is later (**0.5 marks**), so by 8 December 2019 (**0.5 marks**).
3 marks
- b) The demand must be filed at a competent International Preliminary Examination Authority (**1 mark**). The only competent International Preliminary Examination Authority is the European Patent Office (**0.5 marks**). The demand must be filed at the European Patent Office (**0.5 marks**).
2 marks
- c) Amendments can be made to the claims, description or drawings (**1 mark**) at any time following filing of the demand (**1 mark**). However, the IPEA is under no obligation to consider any amendments submitted after the IPEA has started to draw up the International Preliminary Examination Report (**1 mark**)
3 marks

Total: 8 marks

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Question 4

The European Patent Office has issued a 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 7th 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

Answer

Deadline for responding to r71(3) communication is 17th December 2019 (10 days + 4 months) **[0.5 mark]**. If 71(3) response accepting text and attending to grant fees is timely filed, it is possible that EP will grant before 14 January 2020 **[0.5 marks]**. Thus renewals will be payable to all member states at a much higher cost than the central renewal fee and we need to delay grant **[1 marks]**. Can use further processing to delay **[1 mark]** or file an amended text with minor corrections (thus disapproving text without risk of re-opening proceedings) **[1 mark]**.

Total: 4 marks

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Question 5

Your client filed a UK patent application on 15 August 2018. GB1 was withdrawn leaving no rights outstanding on 18 August 2018 and re-filed 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

Answer

You should request a correction to the priority date (**1 mark**). The time limit for correcting a priority claim is the earlier of **[0.5 marks]**:

16 months from the original priority date – i.e. 15 December 2019 (**1 mark**) OR
16 months from the changed priority date – i.e. 24 December 2019 (**1 mark**)

But can be filed up to 4 months from the PCT filing date – i.e. by 23 December 2019 (**1 mark**)

So deadline is 23 December 2019 in this case [0.5 marks]

Total: 5 marks

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Question 6

Your client filed a PCT application on 4th April 2018 that claims priority from a US provisional patent application filed on 5th 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.

Total: 6 marks

Answer

1 mark per correct answer

Japan = 3 years from the PCT filing date (**0.5 marks**), i.e. 4th April 2021 (**0.5 marks**)

India = 48 months from the priority date (**0.5 marks**), i.e. 5th April 2021 (**0.5 marks**)

China = 3 years from the priority date (**0.5 marks**), i.e. 5th April 2020 (**0.5 marks**)

South Korea = 5 years from the priority date (**0.5 marks**), i.e. 5th April 2022 (**0.5 marks**)

Europe = 31 months from the priority date (**0.5 marks**), i.e. 5th November 2019 (**0.5 marks**)

Brazil = 36 months from the PCT filing date (**0.5 marks**), i.e. 4th April 2021 (**0.5 marks**)

Total: 6 marks

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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.

Total: 4 marks

Answer

- i) indication that a patent is sought
- ii) information identifying the applicant
- iii) a description or reference to an earlier filed application
- iv) deficiencies must be rectified within a two month period that is communicated to the applicant [**1 mark**].

Total: 4 marks

PART A Total: 40 marks

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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 14th July 2016.
Family 2 comprises a pending UK patent application (GB2) filed on 25th August 2018.
Family 3 consists of a pending PCT application (PCT3) claiming priority from a German patent application (DE4) filed on 4th 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

Answer

Family 1

The first renewal fee falls due 3.5 years after the grant date of a US patent (**0.5 marks**) so on 14th January 2020 (**0.5 marks**). The renewal fee can be paid up to six months after the deadline (**0.5 marks**) so by 14th July 2020 (**0.5 marks**).

2 marks

Family 2

The priority period expires 12 months from the date of filing of the UK patent application (**0.5 marks**) so by 25th August 2019 (**0.5 marks**). By this date, the applicant should have filed its PCT application (**1 mark**). As the deadline was missed, the applicant may file a PCT application within two months of the missed deadline (**1 mark**) and request restoration of priority (**1 mark**). Restoration of priority will not be accepted in China (**0.5 mark**) and Canada (**0.5 marks**) under any circumstances (**1 mark**) but may be accepted in Europe (**0.5 marks**) and the United States (**0.5 marks**) if it can be shown that failure to file the PCT application in due time was despite all due care being taken in the circumstances (**1 mark**).

Alternatively, if no publication of invention by competitor could consider abandoning and refiling [**1 mark**]

9 marks

Family 3

National phase applications are due to be filed in US, Canada and China 30 months from the priority date (**1.5 marks**), i.e. by 4th December 2019 (**0.5 marks**) and in EP 31 months (**0.5**

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marks) from the priority date, i.e. by 4th January 2020 (**0.5 marks**). A two month extension of time (**0.5 mark**) is available in China (**0.5 mark**) to file a national phase application. A 12 month extension of time (**0.5 mark**) is available in Canada (**0.5 mark**) to file a national phase application. Missing the 31 month deadline to pay the necessary fees in Europe will result in a notification of loss of rights (**1 mark**). Further processing can be requested within 2 months of the date of this notification (**1 mark**) together with completing the omitted act(s) (**0.5 marks**) and paying the further processing fee (**0.5 marks**). Failure to file a US national phase application within the 30 month deadline can be mitigated by requesting revival of the national phase within two months of the missed deadline (**0.5 marks**) again if it can be shown that the failure to enter the national phase was unintentional (**0.5 marks**).

9 marks

Total: 20 marks

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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 1st 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

Answer

- a) The algorithm / new way of operating the device resides in a software-related invention (**1 mark**). Software-related inventions are excluded from patentability (**0.5 marks**) to the extent to which a European patent application relates to such subject matter (**0.5 marks**). A software-related invention may be patentable if it involves a new (**0.5 marks**) and inventive (**0.5 marks**) technical contribution to the state of the art (**1 mark**). Here, we are told that the way in which the device is used is completely new and is thus novel (**1 mark**). The closest prior art is the device itself and the earlier patents (**1 mark**). The new way in which the device is used solves the problem of dealing with blood clots in the human body hence would likely be considered inventive (**1 mark**). Treatment of blood clots in the human body using a laser and vibration involves a technical solution to the problem of dealing with blood clots in the human body (**1 mark**). The algorithm / way of operating the

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device would not be excluded from patentability under the software-related invention exception (**1 mark**).

The method of treating blood clots in a human body would be considered “treatment of the human body” (**1 mark**). Claims covering treatment of the human body are excluded from patentability (**0.5 marks**) to the extent that the claims relate to such subject matter (**0.5 marks**). A claim to a method of treating blood clots in the human body using a modulated laser and vibration are likely to be excluded from patentability (**1 mark**).

Publication of the research paper by the medical research organisation would probably be an anticipatory disclosure (**1 mark**). You should advise your client to file its patent application prior to 1st November 2019 (**1 mark**).

14 marks

- b) Assignment of a European patent application must be recorded in the EPO to be effective (**1 mark**). To record assignment of a European patent application a request for recordal must be made (**1 mark**) in the language of proceedings, i.e. in German, (**1 mark**) by either Amy’s company (**0.5 marks**) or the medical research organisation (**0.5 marks**). A document satisfying the EPO that the assignment has taken place must be submitted (**1 mark**) and the required fee must be paid to the EPO (**1 mark**).

6 marks

Total: 20 marks

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Question 10

PART 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

PART 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

PART 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 disclose 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

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Answer

- a) As the current patent application is a provisional application it cannot proceed to grant (**1 mark**). Your client should file a full US patent application (**1 mark**) on or before 14th November 2019 (**1 mark**) taking care to file a full set of claims (**1 mark**) that read on to the copies of your client's drill bits (**1 mark**). Your client might wish to request accelerated/prioritised examination to expedite grant (**1 mark**).

5 marks

- b) The PACE procedure allows for acceleration of each of the search (**0.5 marks**) and examination (**0.5 marks**) stages of proceedings at the EPO. Bob should request acceleration of the search stage of proceedings now (**1 mark**). The EPO will aim to issue a search report within 6 months of the PACE request being made (**1 mark**). Once responsibility for the application has passed to the Examination Division, Bob should request acceleration of the examination stage of proceedings (**1 mark**). The EPO will aim to issue a first examination report within 3 months of the PACE request being made (**1 mark**) and any further examination reports within 3 months of a response being filed (**1 mark**). It is only possible to request acceleration through the PACE procedure once during each of the search and examination stages (**1 mark**) so if Bob requests an extension to respond to an official communication the application will be removed from the PACE procedure (**1 mark**) and PACE would not allowed to be re-instated (**1 mark**).

10 marks

- c) Under Article 54(3) EPC any European patent applications filed earlier than but published after the filing date of the subject European patent application are included in the state of the art (**1 mark**). Such earlier applications can only be used by the Examining Division when assessing novelty but not inventive step (**1 mark**). US1 will have no effect on patentability of EP3 as US1 cannot be used when assessing either novelty or inventive step (**1 mark**). EP2 will be considered part of the state art and can be used by the Examining Division when assessing novelty only; not inventive step (**1 mark**). EP3 would be considered novel over EP2 and thus EP2 would have no effect on the patentability of EP3 (**1 mark**).

5 marks

Total: 20 marks

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Question 11

Grey Rock Limited 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 likely 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

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Answer

- a) As the patent application relates to military technology, Grey Rock must first file a patent application at the UK Intellectual Property Office (**1 mark**) or seek permission to file abroad (**1 mark**). Only after expiry of 6 weeks from the date of filing the UK patent application, or after receiving permission, (**1 mark**) may Grey Rock file a patent application in the United States and only then if no notice under s22 of the UK Patents Act 1977 has been raised (**1 mark**) or if such a notice has been raised it is subsequently revoked (**1 mark**).

5 marks

- b) It is not necessary to file first in the United Kingdom as the patent application does not relate to military technology despite its subject matter having a potential military application (**1 mark**). The cheapest option for a priority patent application is likely to be to file in the United Kingdom (**0.5 marks**) as the official fees are low (**0.5 marks**). Another option is to file a provisional application in the United States (**0.5 marks**) A PCT application could be filed within 12 months of the priority date (**1 mark**). Alternatively, Grey Rock could file patent applications directly at this stage (**1 mark**) in each important territory (**0.5 marks**). It should also file in its competitor's manufacturing territories (**0.5 marks**) to block it from manufacturing the product there (**1 mark**). Grey Rock must file direct patent applications in Taiwan (**0.5 marks**) and Argentina (**0.5 marks**) at this stage as neither is part of the Patent Cooperation Treaty (**1 mark**). National phase applications would then be filed in Brazil (**0.5 marks**), the United States (**0.5 marks**) and Germany (**0.5 marks**) (or Europe within 31 months from the priority date (**0.5 marks**) and within 30 months from the priority date in South Africa (**0.5 marks**), India (**0.5 marks**) and New Zealand (**0.5 marks**) within 31 months of the priority date.

Marks will be awarded for other reasonable answers that are based on the facts provided.

12 marks

- c) Patents are not substantively examined in South Africa (**1 mark**) but are examined for form (**1 mark**). Amendments may be made to the claims prior to grant to take into account objections raised in other countries (**1 mark**)

3 marks

Total: 20 marks