INTELLECTUAL PROPERTY OFFICE OF SINGAPORE
PATENT AGENTS QUALIFYING EXAMINATION 2017

PAPER D: KNOWLEDGE OF PATENT LAW AND PATENT PRACTICE IN SINGAPORE
27 October 2017, Friday
1330 – 1730 hrs

Maximum Time: 4 Hours (includes reading time) Maximum Marks: 100

INTELLECTUAL PROPERTY
OFFICE OF SINGAPORE

INSTRUCTIONS TO CANDIDATES

1. This Paper consists of 13 pages, including this cover page and 2 blank pages.

2. Type your answers in English. Answers in any other language will not be marked

3. One hardcopy of the question paper is provided, for your reading and for your use (optional) when answering the question(s) in the Answer Script/Answer Booklet(s). For candidates who opted out from laptop examination: You are given two hardcopies of the question paper.

4. Only your answers and/or drawings to the question(s) typed/written or indicated/glued in the Answer Script/Answer Booklet(s) provided by the Examination Secretariat will be considered. Candidates should not change the format of the Answer Script or type in the margin. For candidates who opted out from laptop examination: You are to write on one side of each sheet in the Answer Booklet(s).

5. In the following question(s) to this Paper, you are to assume that the dates mentioned (including the deadlines that are or would be due) are not excluded days. Where relevant, you are also advised to include in your answers supporting references, for example, the Patents Act & Rules and the Patent Cooperation Treaty (PCT) provisions.

End

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QUESTION 1

Tom filed his application for a patent in 2012. The patent concerns a process that applies a special coating to an ultrasound transducer probe, obviating the need to use any ultrasound gel. It would mean no more cold and sticky mess for patients undergoing an ultrasound.

Tom had other things to invent and so granted an exclusive licence of the patent application and the invention in writing to Andrew from 2013. Andrew had other ventures to focus on and did not do anything. The patent was published in 2015 and granted in 2017.

In 2016, Tobey started marketing a service where he offered to take possession of transducers for a day and when he returned it, the use of any ultrasound gel would not be needed. Tobey is very transparent about his price, he charges $5,000 per transducer and says that his cost is $2,500. After a slow start, he managed his first sale in 2017 and it quickly took off.

When Andrew's pregnant wife mentioned that in her recent appointment with her obstetrician, the ultrasound gel was not used, Andrew recalled the patent license. Andrew contacted Tom but Tom was not bothered.

Andrew took matters in his own hands and wrote a letter to Tobey saying that legal action would be taken if Tobey did not cough up royalties. Tobey did not respond.

a) Andrew wants to know whether he can sue Tobey and what can he get out of it.

(18 marks)

b) Tobey wants to know whether he can sue Andrew.

(2 marks)

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QUESTION 2

Samuel is a registered Singapore Patent Agent. Venture Pte. Ltd. ("Venture"), a Singapore company, has instructed him to file a patent application for a new and inventive palm oil derivative. According to Venture, it had been approached by a Malaysian inventor, Kung, to help to commercialize Kung's invention.

a) Samuel is informed that, after being approached by Kung, Venture's employees in their research and development team in Singapore collaborated with Kung to jointly improve the invention. The invention for which a patent application is sought includes such improvements. In relation to the improved invention, what are the consequences of ownership of the patent application / future granted patent for Venture, its customers and Venture's potential collaborators that may wish to make use of the invention independently to improve the invention further to develop future products?

(5 marks)

b) However, Kung is not interested in filing a patent application. What should Venture do in order to file the patent application in its own name (including any forms required to be filed)?

(5 marks)

c) Although Venture wants ultimately to file the patent application in Singapore, the main market for the invention would be Malaysia. It instructs Samuel to file a patent application in Malaysia on the same day they meet. As Samuel is also registered to practice as a patent agent in Malaysia, he can file the Malaysian patent application himself. He prepares a rough patent specification within 2 hours and files the patent application immediately in Malaysia online.

Discuss the potential liabilities of only Venture and Samuel under Singapore law. What should have been done to avoid such liabilities?

(5 marks)

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QUESTION 2

d) It is now 13 months later, and Venture decides that it is time to file a patent application in Singapore for the invention. During the intervening period, Venture had gone on a company road show with the technology, and it appeared to be popular with potential customers. What must Samuel provide to IPOS to ensure the validity of the Singapore patent application (including forms and fees, if any)?

(5 marks)

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QUESTION 3

Today, you have been contacted by a new client Glen whose company owns a patent portfolio of 5 Singapore patents and patent application(s) ("SG Patent" / "SG Application(s)"). His company's in-house IP coordinator has been out of office due to an emergency and their patent portfolio has been unattended to for several months now. Last week, Glen was approached by a potential investor who is keen on the company's patent portfolio. Not knowing what to do, Glen brings along the documents to your office and seeks your advice. You have reviewed documents from Glen and found the following:

(a) SG Patent 1 was granted on 1 October 2014 with a filing date of 1 June 2012 and priority date of 1 June 2011. You checked the Register and noted that no renewal fee has been paid.

(4 marks)

(b) SG Application 2 was issued with a search report stating that the search report was established for claims 1 to 5 and no search report was established for claims 6 to 10 due to lack of unity of invention in the two claim groups. SG Application 2 was filed on 2 February 2016 with no priority claim. You checked the Register and noted that the last register entry is the issuance of the search report on 2 June 2017.

(5 marks)

(c) SG Application 3 was issued with a Registry's letter dated 3 July 2017 enclosing a first Written Opinion with patentability rejections. SG Application 3 was filed on 3 March 2014 with no priority claim. You checked the register and noted that the last register entry is the issuance of the Written Opinion. You have also found granted UK, Korea and German patents which claim priority to SG Application 3.

(5 marks)

(d) SG Application 4 was filed on 4 April 2016 with no priority claim. A request for withdrawal of the application was filed on 4 May 2017 and you found a notification from IPOS confirming the withdrawal of the application.

(3 marks)

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QUESTION 3

(e) SG Application 5 was filed on 25 September 2017 and you found a handwritten note in the file indicating the filing fee was not paid at the time of filing.

(3 marks)

Please advise Glen on what he should do to maintain and preserve the entire portfolio of patent and patent applications and the next steps to be taken, and to pursue all patentable subject matter, where possible. Please state all possible options, if more than one option is available. You are not required to advise Glen on the Patents Forms and fees to be filed.

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QUESTION 4

You are a registered Singapore patent agent who serves both local and overseas clients. Your secretary has forwarded two emails to you today (i.e. Wednesday, 25 Oct 2017).

a) The first email relates to an international patent application that was filed in English with the EPO, having a priority date of 25 Oct 2015 and an international filing date of 25 Oct 2016. A European Patent Attorney who had filed the international patent application on behalf of the applicant tells you that the applicant has encountered some copycat products of the application in Germany, which likely come from Singapore. The European Patent Attorney also informs you that he has received an International Search Report (ISR) and a Written Opinion (WO) of the international application from EPO wherein an EPO examiner has objected to patentability of the independent claim 1, but acknowledged patentability of some remaining dependent claims. The European Patent Attorney had amended the claims after receiving the ISR and WO to take the objections raised by the EPO examiner into account, but did not file any Demand for an International Preliminary Examination. The European Patent Attorney has also informed you that the applicant would like to take action against the manufacturers of the copycat products in Singapore as soon as possible.

Please advise the European Patent Attorney on the possible steps to be taken in Singapore that would place the applicant of the international patent application in a position to potentially take action against manufacturers of the copycat products in Singapore. Where appropriate, references should be made to any necessary official forms and their corresponding fees.

(7 marks)

b) The second email comes from your former classmate who is a Malaysian citizen living in Penang, but meets you often in Singapore. Your classmate devised two inventions of different products, which are covered by two Malaysian priority patent applications filed by your classmate himself on 20 June 2016. Following the initial filings, he has received some potential customers' enquires on when products based on his two different inventions will be available for sale. Your former classmate expresses that he

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QUESTION 4

would appreciate it if you can help him by acting as his patent agent in Singapore subsequently. Moreover, your classmate tells you that he wishes to save money by filing a "single international patent application" covering his two different inventions.

i. Focussing on the procedural aspects of filing only, please advise your classmate on:

a) the problem of filing the "single international patent application"; and **(1 marks)**

b) the solution(s) to filing the "single international patent application". **(3 marks)**

ii. Assume that the "single international patent application" was lawfully filed on 25 October 2016 covering all your former classmate's inventions. Today, you have received an International Search Report and a Written Opinion that were mailed to you on 20 October 2017. The Written Opinion considers claims 1~10, which relate to the first invention, to be novel but not inventive. However, the Written Opinion has not examined remaining claims 11~20, which relate to the second invention. Please advise your former classmate on the subsequent steps or options available and their relevant dates at which those steps or options have to be performed in order to continue to pursue his inventions. **(9 marks)**

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QUESTION 5

Easyconnect Pte. Ltd. ('Easyconnect'), a Singapore company, is a supplier of electrical cables for data communications.

In June 2014, Easyconnect's in-house research team started developing a new type of electrical cable that connects between a computing server and a console to transfer data from the server to the console. Specifically, an end of the cable that connects to the server comprises a near field communication (NFC) chip and a novel arrangement of magnets that provides a self-attachment feature – the NFC chip at the end of the cable automatically aligns with respect to a server's NFC chip to effect a wireless data transfer as long as the cable end is positioned within a threshold distance (e.g. 5cm) from the server's NFC chip. No modification to existing servers was required.

Some months later, Easyconnect began trials with several potential customers operating in the server industry. The trials were met with great success and the new electrical cable was very well-received. On 1 June 2015, Easyconnect filed for a first time, a PCT patent application covering the new electrical cable. A wholly positive Written Opinion has issued on the PCT application.

Recently, Easyconnect was approached by another Singapore company, Smartconnect Pte. Ltd. ('Smartconnect'), drawing attention to their Singapore Patent SG'1B filed on 1 December 2015 and which claimed the priority of an earlier Singapore Patent SG'1A filed on 15 December 2014. Both SG'1A and SG'1B were filed in the name of Smartconnect.

SG'1B discloses an electrical cable whereby one of its ends comprises an NFC chip for reading data via NFC from a server without any coupling means to the server. This means that a user has to physically hold the electrical cable in place during data transfer.

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QUESTION 5

SG'1B comprises the following claims:

C1: An electrical cable having an end comprising an NFC chip for reading data from a server.

C2: An electrical cable of C1, further comprising:

a. a sensor connected to the NFC chip; and
b. an LED connected to the sensor, the LED being for indicating a status of data transfer from the server to the NFC chip.

In the publication of SG'1B published before grant, its claims section comprises only C1 although the description and drawing sections describe and show the features of a sensor and a lighting device, but does not mention or show any LED feature at all. Additionally SG'1A does not disclose the subject matter of C2 at all, only that relating to C1 and a claim identical to C1 in the claims section.

Easyconnect writes to you, "We want you to act as our patent attorneys. We are concerned that our position will be disrupted by Smartconnect. As we started our trials before the filing date of SG'1B, isn't the patent invalid? In any event, NFC technology was already widely used for data transfer back in 2014, although we were only aware of NFC chips being used in smartphones but not in electrical cables at that time. Moreover, during our trials, we also included an additional sensor and a lighting device in our electrical cables to indicate a status of data transfer from a server to the console – our potential customers like these features very much. Unfortunately, the subject matter relating to these features was not included in our PCT patent application, but we hope to obtain protection for these features, too."

Prepare notes for a meeting with Easyconnect setting out:

a) Additional information that you would require from Easyconnect in relation to determining if Easyconnect's trials constitute prior disclosure;

(3 marks)

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QUESTION 5

b)

i. Explain how novelty and inventiveness of C1 and C2 of Smartconnect's SG'1B patent may or may not be impacted by Easyconnect's trials, if the trials were conducted between January 2015 and June 2015; and

(8 marks)

ii. Explain how any other factors may compromise validity of Smartconnect's patents

(6 marks)

c) Explain whether Easyconnect is still able to protect the sensor and lighting features now either via their existing PCT application, or through a new patent application?

(3 marks)

END