PATENT EXAMINATION BOARD

SOUTH AFRICAN PATENT LAW AND PRACTICE – GROUP 1(b)

27 June 2023

Examiner: M Vatta

Moderator: T Mashabela

Time: 09:00 to 13:00

Total marks: 190

This paper consists of 11 pages (including this cover page and 2 annexures).

Instructions and notes:

- 1. Answer all questions (17 in total).
- 2. Write neatly and legibly.
- 3. All references to the Act are references to the South African Patents Act, No. 57 of 1978, as amended.
- 4. All references to the Regulations are references to the South African Patent Regulations, 1978, as amended.
- 5. Wherever possible, your answers should refer to the relevant case law, sections of the Act and/or Regulations, the content of the section and/or regulation should be set out and only then should you make a conclusion.

Provide a summary of your understanding of a patent and the purpose of a patent? (6 marks)

BACKGROUND INFORMATION FOR QUESTIONS 2 TO 7

Sarah and Scott have been in a romantic relationship for the past four years. Their relationship began after meeting at work where they were both employed as scientific officers at a company called PlantsRLife, whose business relates to plant breeding.

Whilst breeding the plants of *Siphonochilus aethiopicus*, a species indigenous to South Africa, Sarah noticed that her persistent skin rash had completely healed. She immediately informed Scott of her findings. They decided to set up a small laboratory in their garage to research the plant further. During their research, they realised that *S aethiopicus* naturally produces a phytochemical called siphonochilone, which is highly effective in the treatment of fungal infections. A quick literature search revealed that siphonochilone was previously used to treat asthma.

They decided to quit their jobs and began formulating an antifungal composition including siphonochilone. The composition is to be administered topically. After eleven months of working on their formulations, they file a patent application accompanied by a complete specification. The patent application number is 2022/01234.

Considering the above facts, answer the following questions.

QUESTION 2

ZA 2022/01234 includes the following claims:

- 2.1 A phytochemical, wherein the phytochemical is in the form of siphonochilone produced by a plant species named *Siphonochilus aethiopicus*. (3 marks)
- 2.2 Use of siphonochilone in the manufacture of a medicament for the treatment of fungal infections. (8 marks)

- 2.3 A method of treating a fungal infection, the method comprising applying an effective amount of siphonochilone on a subject's skin. (8 marks)
- 2.4 Siphonochilone for use in the treatment of fungal infections. (2 marks)

Comment on the patentability of each of the above claims. Where applicable, set out the relevant section(s) of the Act and discuss the relevant case law.

QUESTION 3

If Sarah and Scott filed a patent application accompanied by a complete specification in the first instance, and not a patent application accompanied by a provisional patent application, answer the following questions:

- 3.1 Under what circumstances would you advise a client to file a patent application accompanied by a provisional specification? (4 marks)
- 3.2 What rights are acquired by an applicant of a patent application accompanied by a provisional specification? (2 marks)

QUESTION 4

It has been five months since the filing of their patent application and Sarah and Scott inform you that they have made further developments. They have now formulated an antifungal composition including siphonochilone for oral administration. They would like to protect their new composition for oral administration.

Advise your clients on how they could protect their new composition for oral administration in each of the following scenarios.

4.1 The patent application, which has no claim to priority, is pending (advise in terms of section 31 of the Act). (2 marks)

- 4.2 The patent application is pending and claims priority from an earlier filed application that has a filing date four months prior to the filing date of ZA 2022/01234 (advise in terms of section 38). (4 marks)
- 4.3 The patent application is pending and claims priority from an earlier filed application, that has a filing date ten months prior to the filing date of ZA 2022/01234 (advise in terms of section 51(8)). (3 marks)
- 4.4 The patent has been granted (advise in terms of section 39 of the Act). (2 marks)

In the description of the specification for ZA 2022/01234, the antifungal composition includes substance X having a concentration in a range of 1 to 200mg/ml.

In the claims of the specification, the antifungal composition includes substance X having a concentration in a range of 1 to 50mg/ml.

Sarah and Scott realise that when substance X is at a concentration greater that 20mg/ml it has a toxic effect on a subject. They want to change the description and the claims to correctly refer to a concentration in the range of 1 to 20mg/ml seeing as a concentration greater than 20mg/ml renders their composition ineffective, and in fact, harmful to the person using it.

- 5.1 Referring to the relevant sections of the Act and Regulations, how would you go about effecting the change and what requirements need to be complied with if the acceptance of the application has not yet been published in the Patent Journal. Further, state whether this change would be allowable. (8 marks)
- 5.2 If it is possible to make the change, why is it advisable to effect the change before the publication of the acceptance in the Patent Journal takes place? (2 marks)

PlantsRLife, as the former employer of Sarah and Scott, believe that they are the rightful owner of the invention disclosed in the granted patent, ZA 2022/01234. They also allege that the work undertaken to develop the invention, was within the scope of Sarah and Scott's job specifications.

6.1 Set out the conditions in a contract of employment that shall be null and void.

(4 marks)

- 6.2 PlantsRLife wish to revoke the patent. Explain what ground would be the most suitable for PlantsRLife to rely on to ensure that they may have the patent granted to them. Explain why.
- 6.3 As the patent attorney for PlantsRLife, you reviewed a section of the official file for the patent, annexed hereto as Annexure 1 and Annexure 2. What ground(s) would you advise your client to rely on to revoke the patent? Explain your reasoning. (8 marks)
- 6.4 List two additional grounds that may possibly be relied on to revoke the patent (the invention is found to be patentable in all respects). (4 marks)

QUESTION 7

Sarah and Scott have ended their relationship after Sarah discovered that Scott was cheating on her with her best friend. Sarah wants nothing to do with Scott and feels that Scott should not be entitled to the granted patent. Sarah believes that she should be the sole patentee as she made the discovery that led to the inventive concept.

7.1 Advise Sarah and Scott regarding who is entitled to apply for a patent application.

(2 marks)

7.2 What restrictions are placed on joint patentees? (3 marks)

- 7.3 In terms of section 49, advise Sarah and Scott regarding the remedy to resolve their dispute as to the ownership of the patent. (4 marks)
- 7.4 Sarah concedes that Scott is an inventor and is indeed entitled to his share of ZA 2022/01234 but to part ways amicably, Scott agrees that Sarah may have his share of the right, title, and interest in and to the patent. What formal requirements must be complied with to ensure that Sarah is the sole patentee, that it is effective against third parties, and ideally by when? (3 marks)
- 7.5 Sarah and Scott reconcile their relationship, but Sarah believes that because she contributed to 75% of the development of the invention, she should be entitled to 75% of any profit accruing to her and Scott from sales of the patented invention. What would you advise Sarah? (2 marks)

With reference to section 25 of the Act, explain what constitutes "the state of the art" for the purposes of evaluating whether an invention is new and involves and inventive step.

(12 marks)

QUESTION 9

The registrar of patents is provided with statutory authority to refuse certain inventions. State the section of the Act and the inventions that the registrar may refuse. Give an example of each and advise conditions under which some of these inventions will be accepted. (8 marks)

QUESTION 10

You filed a provisional patent application for your client four months ago. However, your client has since made an improvement to the invention and now wishes to file a provisional patent application that will include the subject matter of the first filed provisional patent application, as well as the improvements to the subject matter. Your client informs you that they do not intend on claiming priority from the first filed provisional patent application when they file local

and foreign patent applications. They will instead only claim priority from the second filed provisional patent application.

What is essential for you to do to properly claim priority from the provisional patent application that you will file during the upcoming week and why? (8 marks)

QUESTION 11

When does the official file, in respect of an application for a patent, accompanied by a complete specification, first become open to public inspection where:

11.1	It claims priority from a convention application?	(2 marks)
11.2	It claims priority from a South African provisional patent application?	(2 marks)
11.3	It does not have any claim to priority?	(2 marks)
11.4	It claims priority from a South African complete application filed in the first respect of the invention?	instance in (2 marks)

11.5 It is a national phase patent application filed via the PCT, and claims priority from an application filed in a foreign country? (2 marks)

QUESTION 12

Your client has a patent. Although you advised the client that it would be prudent to conduct a subject matter/freedom to operate type of search through the records of the South African Patent Office before launching the patented product, the client launched the product without such investigation. Your client has now received a letter of demand and phones you confused as he was under the impression that his patent gives him the right to sell his product in South Africa. Referring to section 45(1), explain the type of right obtained under a patent and the effect of a patent. (9 marks)

- 13.1 The registrar of patents is authorised to allow certain corrections/amendments in terms of section 50 of the Act, one of which is the correction of a clerical error. Referring to case law, what is a clerical error? (6 marks)
- 13.2 What other types of corrections/amendments may be allowed by the registrar in terms of section 50 of the Act? (2 marks)

QUESTION 14

- 14.1 Who can institute and join an action for infringement of a patent? (2 marks)
- 14.2 Against whom can action proceedings be brought, and which court has jurisdiction to hear patent matters? (2 marks)
- 14.3 When can action proceedings be instituted and what exception is there? How do you overcome this exception? (4 marks)
- 14.4 What relief is there for the patentee, if during proceedings for infringement, it is found that some of the claims in the complete specification are valid, but others not? What are the potential consequences of such relief being granted and what does the court take into consideration? (5 marks)
- 14.5 With reference to the Act, what are the consequences of unjustly threatening a third party with infringement proceedings? Also, what advice would you give the patentee to avoid the possibility of these consequences? (5 marks)

QUESTION 15

You are contacted by a general attorney that enquires whether it is possible to obtain a licence if patent rights are allegedly being abused by a patentee.

Discuss who may bring an application for such a licence and to whom the application should be made. Also discuss what needs to be proven to obtain a licence and what restrictions there on the grant of such a licence. (12 marks)

QUESTION 16

In terms of section 80 of the Act, the Minister of Trade and Industry (formerly the Minister of Economic Affairs and Technology) has the authority to order the registrar of patents to keep inventions secret in certain circumstances.

- 16.1 What are those circumstances? (4 marks)
- 16.2 Discuss the remedy available to the proprietor of an invention if they have suffered loss or damage by reason of the invention being kept secret. (3 marks)

QUESTION 17

What conditions are deemed to be null and void in licence agreements? (10 marks)

ANNEXURE 1

FORM P.3.

REPUBLIC OF SOUTH AFRICA PATENTS ACT, 1978 DECLARATION AND POWER OF ATTORNEY

(Section 30 - Regulations 8, 22(i)(c) and 33)

(Section 30 - Regulations 8, 22(i)(c) and 3	3
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PATENT APPLICATION NO.				REFERENCE			LODGING DATE		
21	01	2022/01234			TAC-ZA				7 MARCH 2022
FULL NAME(S) OF APPLICANT(S)									
71	1.	SARAH							
	2.	SCOTT							
FULL NAME(S) OF INVENTOR(S)									
72	1. 2.	SARAH SCOTT							
EARLIEST PRIORITY CLAIMED NOTE: The country must be indicated by its International Abbreviation - see schedule 4 of the Regulations			33	COUNTRY	31	NUMBER 62/123,456		32	DATE 14 MAY 2019

TITLE OF INVENTION

54	TOPICAL ANTIFUNGAL	COMPOSITION

We, Sarah and Scott, hereby declare that:

- 1. We are the applicants mentioned above;
- 2. I/We have been authorised by the applicant to make this declaration and have knowledge of the facts herein stated

in the capacity of _______of the applicant;

- the inventors of the abovementioned invention are the persons named above and the applicant has acquired the right to apply by virtue of one or more assignment(s), through employment or otherwise by operation of law;
- 4. to the best of our knowledge and belief, if a patent is granted on the application, there will be no lawful ground for the revocation of the patent;
- 5. this is a convention application and the earliest application from which priority is claimed as set out above is the first application in a convention country in respect of the invention claimed in any of the claims; and
- 6. the partners and qualified staff of the firm of STUDENT IP, patent attorneys, are authorised, jointly and severally, with powers of substitution and revocation, to represent the applicant in this application and to be the address for service of the applicant while the application is pending and after a patent has been granted on the application.

SIGNED AT PRETORIA THIS 24TH DAY OF APRIL 2023

Signed /SARAH/ and /SCOTT

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ANNEXURE 2

FORM P.26

REPUBLIC OF SOUTH AFRICA PATENTS ACT, 1978 STATEMENT ON THE USE OF INDIGENOUS BIOLOGICAL RESOURCE, GENETIC RESOURCE TRADITIONAL KNOWLEDGE OR USE

(Section 30 (3A) - Regulations 22(1), 67B (4))

Patent application No.			Lod	ging date	Reference		
21	01	2022/01234	22	7 MARCH 2022	ABC-ZA		

Full n	ames of a	applicants					
71	1.	SARAH					
	2.	SCOTT					

Earliest priority claimed	Country		Number		Date	
	33	US	31	62/123,456	32	14 MAY 2019

NOTE: The country must be indicated by its International Abbreviation - see schedule 4 of the Regulations

Title c	Title of invention					
54	TOPICAL ANTIFUNGAL COMPOSITION					

We, Sarah and Scott, hereby declare that:

- 1. We are the applicants mentioned above;
- 2. I/We have been authorised by the applicant to make this declaration and have knowledge of the facts herein stated

in the capacity of _______of the applicant;

- 3. the invention for which protection is claimed
 - (a) is based on or is derived from an indigenous biological resource or a genetic resource; OR
 - (b) is not based on or is not derived from an indigenous biological resource or a genetic resource.
- 4. the invention for which protection is claimed
 - (a) is based on or derived from traditional knowledge or use; OR
 - (b) is not based on or is not derived from traditional knowledge or use.
- 5. where the invention for which protection is claimed is based on or derived from traditional knowledge or use, such invention
 - (a) is co-owned by the owners of the traditional knowledge or use; OR
 - (b) is not co-owned by the owners of the traditional knowledge or use.

SIGNED AT PRETORIA THIS 24TH DAY OF APRIL 2023

Signed /SARAH/ and /SCOTT
